

**LAKE WASHINGTON  
URBAN PARTNERSHIP PASS-THROUGH FUNDING AGREEMENT**

Between

**KING COUNTY**

And

**SOUND TRANSIT**

This Lake Washington Urban Partnership Pass-through Funding Agreement (the "Agreement") is made and entered into this \_\_\_\_ day of April, 2011 between King County, a home rule charter county of the State of Washington, through its Department of Transportation, Metro Transit Division (the "County" or "Metro Transit") and the Central Puget Sound Regional Transit Authority ("Sound Transit"), either of which entity may be referred to hereinafter individually as "Party" or collectively as the "Parties."

**Recitals**

A. The County, the Puget Sound Regional Council and the Washington State Department of Transportation ("WSDOT") entered into an agreement on or about September 23, 2009 titled "The Lake Washington Urban Partnership Agreement," which superseded the original Agreement between the same parties signed on August 13, 2007, to apply for funding from the Federal Transit Administration Section 5309 Bus and Bus-Related Facilities Discretionary Grant Program to Support Urban Partnerships" (hereinafter referred to as the "Urban Partnership Agreement" or "UPA"). The Urban Partnership Agreement is tied to the urgent need for replacement of the SR 520 Lake Washington floating bridge. The partnership proposed improving traffic flow for motorists by rigorously pursuing congestion reduction strategies across Lake Washington including the 4Ts: tolling (congestion pricing), transit, telecommuting/transportation demand management, and technology.

B. The Urban Partnership Agreement funds the infrastructure needed to collect tolls electronically, for additional coaches to increase transit service across Lake Washington, for improvements to passenger facilities including park and ride and for the installation of real-time information signs in the SR 520 corridor.

C. In 2007, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) awarded \$139 million for this proposal, of which \$41 million was for transit service improvements in FTA grant WA-04-0021-01. The Catalog of Federal Domestic Assistance ("CFDA") reference for these grant funds is CFDA No. 20.500.

D. A key element of the Urban Partnership Agreement is to provide enhanced transit services in the SR 520/Trans-Lake Washington corridor to supplement the other traffic flow improvement elements and reduce congestion. King County Metro and Sound Transit have secured the funding

necessary to expand service in the corridor. Sound Transit services are funded by Sound Transit 2. King County Metro service enhancements are funded by a property tax for transit, authorized by the Washington State Legislature in 2009 for counties with a population of 1.5 million or more and assessed by the King County Council in 2010. Under the UPA, transit service is to expand along SR-520 by adding 90 one-way peak period trips on core and other supporting bus routes.

E. The following specific transit improvements are planned for the Trans-Lake Washington corridor:

- Improve all-day and peak-period frequency of core routes;
- Provide additional capacity to serve more direct point-to-point commute travel to meet peak-period ridership demand;
- Add commuter parking and real-time arrival information technology components;
- Improve passenger transfer waiting environments.

F. Metro Transit and Sound Transit currently provide over 400 bus trips on the SR 520 corridor during peak periods of each weekday, for a total of more than 10,000 peak period passenger boarding's each weekday. The implementation of variable price tolling on SR520 will reduce congestion and help improve the speed and reliability of transit service and County vanpools across Lake Washington.

G. Transit ridership is expected to increase on SR 520 by a projected 15% to 35% and additional transit capacity is needed to accommodate those wishing to switch to transit when tolls are implemented.

H. To assist in meeting the objectives of the UPA, both Metro Transit and Sound Transit will increase peak period service in the SR 520 Trans-Lake Washington corridor. As of February 5, 2011 Sound Transit is providing forty-eight (48) additional one-way peak period trips in the corridor. In exchange for Sound Transit's commitment to increase service in the corridor, Metro Transit agrees to reimburse Sound Transit \$8,515,000 toward the cost of new buses needed for this additional service using FTA funds identified in King County Metro grant WA-04-0021-01 as provided for in this agreement.

I. Additionally, since 2007 Sound Transit and Metro together have added six (6) one-way peak period trips. As of February 2011, Metro is providing thirty-seven (37) additional one-way peak period trips on existing and new peak-period-only routes made possible through the fleet expansion. In total Metro and Sound Transit are providing a total of at least 90 additional one-way peak period trips, consistent with the objectives of the UPA to which the County is a party.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the sufficiency

of which is hereby acknowledged, the Parties hereto agree as follows:

## Agreement

### **1. PURPOSE OF AGREEMENT**

The purpose of this Agreement is to set forth the terms and conditions pursuant to which Sound Transit will make specified service level commitments for the SR 520 corridor that, together with the County's increased service level commitments for the Trans-Lake Washington corridor, are necessary for the County to fulfill the requirements of the UPA agreement, and by which the County will reimburse Sound Transit with federal grant funds for eligible costs incurred in the acquisition of additional buses.

### **2. SOUND TRANSIT'S OBLIGATIONS**

**2.1 Acquisition of Buses.** Sound Transit has purchased eleven (11) new hybrid diesel-electric transit buses. The buses were purchased under the terms of King County Contract MB06-2 with New Flyer Industries, Inc., which was competitively procured under FTA regulations for the provision of buses for both Metro Transit and Sound Transit. The eleven buses identified in this Agreement will be owned by Sound Transit but Metro Transit will have a reversionary interest if the buses are no longer used for the public transportation intent of the FTA grant no. WA-04-0021-01. It is the intent of this Agreement, but not a requirement, that buses purchased by the County will be used by the County and buses purchased by Sound Transit will be used by Sound Transit for the improvements to transit service outlined in Exhibit A (Schedule of Sound Transit Service Level Commitments for the SR 520 Corridor), which is attached hereto and incorporated herein by this reference. Delivery of the additional buses occurred between April 29, 2010 and July 1, 2010.

**2.2 Service Level Commitments.** Sound Transit will continue to provide 48 additional one-way peak period trips on Sound Transit Route Number 542 serving the SR-520 Trans-Lake Washington corridor. The 48 trips are in addition to the 121 one-way peak period trips already provided by other Sound Transit routes serving the corridor, for a total of 169 one-way peak period trips as of February 5, 2011. Sound Transit commits to providing the transit service levels in the SR 520 Trans-Lake Washington corridor outlined in the service commitment schedule set forth in Exhibit A. The peak period service levels may change by route as long as the total number of one-way peak trips provided by Sound Transit remains at 169. Sound Transit will maintain the transit service commitments set forth in Exhibit A until the expiration of this Agreement as provided in Section 5.

**2.3 Reporting Requirements.** Because of the County's use of federal funding, Sound Transit agrees to provide the County with quarterly progress reports and a project closeout report in substantially the formats set forth in Exhibits D and E to this Agreement, which are attached hereto and incorporated herein by this reference. The quarterly reports shall be supplied to the County no later than 20 days following the end of each calendar quarter. The close out report

shall be provided no later than 20 days following final delivery and acceptance of the buses and at reimbursement identified under Section 3.1.

### **3. METRO TRANSIT'S OBLIGATIONS**

**3.1 Reimbursement of Eligible Costs.** The County will reimburse Sound Transit an amount not to exceed \$8,515,000.00 (the "Reimbursement Cap") in FTA grant funds identified in grant WA-04-0021-01 for FTA-eligible costs (as described with more particularity in Subsection 3.2 of this Agreement) incurred by Sound Transit in completing the purchase of the additional buses referenced in Subsection 2.1 of this Agreement.

**3.2 Reimbursement from Federal Grant Funds.** Any reimbursements to Sound Transit provided for in Subsection 3.1 of this Agreement will be made from grant funds awarded to the County pursuant to Section 5309 of the Bus and Bus-Related Facilities Discretionary Grant Program to Support Urban Partnerships provided by the FTA. Pursuant to federal requirements, the FTA grant funds are to be used for the reimbursement of eligible costs. "Eligible costs" are those costs that are incurred pursuant to this Agreement and the project description in FTA grant number WA-04-0021-01, which is attached as Exhibit B and incorporated herein by this reference, and in accordance with OMB Circular A-87. Eligible costs on this project do not include overhead charges or indirect rates applied to direct charges. Fringe benefits will be invoiced as a percentage of direct charges. The percentage will be calculated annually according to federal guidelines.

### **4. BILLING AND DOCUMENTATION**

**4.1 Invoicing.** Sound Transit shall invoice the County for those FTA-eligible costs incurred pursuant to this Agreement so long as such costs do not exceed the Reimbursement Cap. As the County is reimbursing Sound Transit for costs incurred up to the Reimbursement Cap in section 3.1, one invoice can be submitted for the total amount including supporting documentation, or invoices can be submitted on a monthly basis, including supporting documentation as detailed in Subsection 4.2 of this Agreement. The invoices shall show the total amount expended during the billing period and will seek reimbursement from the County of 100% of the eligible costs up to but not exceeding the Reimbursement Cap.

**4.2 Required Documentation.** Sound Transit shall submit detailed documentation to support its invoices. Such documentation shall include project expense reports from Sound Transit's financial system and invoices from bus manufacturers documenting direct costs incurred by Sound Transit in purchasing buses as provided for in Subsection 2.1 of this Agreement. This documentation is required by the County as a basis for seeking reimbursement from the FTA for grant eligible expenses. The County will review Sound Transit's documentation and apply appropriate grant eligible expenses to the FTA grant. The County will promptly notify Sound Transit of any issues that arise with the documentation submitted by Sound Transit.

4.3 **Payment of Invoices.** Within 60 days of its approval of an invoice from Sound Transit, the County shall reimburse Sound Transit for all approved, eligible costs up to the limit established by the Reimbursement Cap.

5. **EFFECTIVE DATE AND DURATION.**

This Agreement shall take effect upon its signing by both Parties and will remain in effect through June 30, 2012 unless otherwise amended or earlier terminated pursuant to the terms of this Agreement.

6. **TERMINATION.**

6.1 **Termination for Default.** Either Party may terminate this Agreement in the event the other fails to perform a material obligation under this Agreement, and such failure has not been corrected to the reasonable satisfaction of the other in a timely manner after notice of breach has been provided to such other Party. Notice of termination of this Agreement shall be given by the Party terminating this Agreement to the other Party not less than thirty days (30) days prior to the effective date of termination.

6.2 **Reimbursement in Event of Material Breach.** Notwithstanding the foregoing and in addition to other remedies it may have at law or equity, if the County properly terminates this Agreement due to a failure of Sound Transit to perform a material obligation, Sound Transit shall reimburse the County any amounts due to the FTA as a result of such termination.

6.3 **Termination for Loss of Federal Grant Funding.** In addition to termination for default, the County may terminate this Agreement in the event of the loss of its federal grant funding.

7. **INDEMNIFICATION**

7.1 To the maximum extent permitted by law, Sound Transit agrees to defend, indemnify and hold harmless the County and its officers, employees and agents from and against all liabilities, claims, actions, lawsuits, damages, losses, costs and expenses (including reasonable attorneys' fees and court expenses) for all injuries to or death of any person, repayment of grant funds, infringement of any patent or copyright, and/or damage to any property occurring, directly or indirectly, from Sound Transit's performance or failure to perform under this Agreement, whether or not resulting from the negligence of Sound Transit, except to the extent such injuries, infringements or damages result from the County's negligence or willful misconduct. If (and only if) the provisions of RCW 4.24.115 apply to the work and services under this Agreement and any such damages and injuries to persons or property are caused by or result from the concurrent negligence of Sound Transit and the County or their respective contractor(s), employees, agents, or representatives, the indemnification of each Party applies only to the extent of the negligence of that Party, its contractor or employees, agents, or representatives. Sound Transit's obligations

under this Section shall include, but not be limited to, claims and actions against the County and its officers, employees and agents by a volunteer to or an employee or former employee of Sound Transit, and Sound Transit expressly waives, as respects the County only and only for the limited purpose stated herein, all immunity and limitation on liability under any industrial insurance act, including Title 51 RCW, other workers' compensation act, disability benefit act, or other employee benefit act of any jurisdiction which would otherwise be applicable in the case of such claims and actions.

7.2 To the maximum extent permitted by law, the County agrees to defend, indemnify and hold harmless Sound Transit and its officers, employees and agents from and against all liabilities, claims, actions, lawsuits, damages, losses, costs and expenses (including reasonable attorneys' fees and court expenses) for all injuries to or death of any person, repayment of grant funds, infringement of any patent or copyright, and/or damage to any property occurring, directly or indirectly, from the County's performance or failure to perform under this Agreement, whether or not resulting from the negligence of the County, except to the extent such injuries, infringements or damages result from Sound Transit's negligence or willful misconduct. If (and only if) the provisions of RCW 4.24.115 apply to the work and services under this Agreement and any such damages and injuries to persons or property are caused by or result from the concurrent negligence of the County and Sound Transit or their respective contractor(s), employees, agents, or representatives, the indemnification of each Party applies only to the extent of the negligence of that Party, its contractor or employees, agents, or representatives. The County's obligations under this Section shall include, but not be limited to, claims and actions against Sound Transit and its officers, employees and agents by a volunteer to or an employee or former employee of the County, and the County expressly waives, as respects Sound Transit only and only for the limited purpose stated herein, all immunity and limitation on liability under any industrial insurance act, including Title 51 RCW, other workers' compensation act, disability benefit act, or other employee benefit act of any jurisdiction which would otherwise be applicable in the case of such claims and actions.

7.3 **Survival.** The provisions of this Section 7 (Indemnification) shall survive and remain applicable to each of the Parties notwithstanding any termination or expiration of this Agreement.

## 8. **COMPLIANCE WITH LAWS**

The Parties shall comply with all applicable federal, state and local laws and regulations in performing under this Agreement.

## 9. **LEGAL RELATIONS**

9.1 **No Third Party Beneficiaries.** This Agreement is solely for the benefit of the Parties hereto and gives no right to any other person or entity.

9.2 **No Partnership or Joint Venture.** No joint venture, agent-principal relationship, or partnership is formed as a result of this Agreement. The employees of Sound Transit or individual providing paid or volunteer services to Sound Transit shall be considered the employees, volunteers, agents or representatives of Sound Transit and shall not be deemed, nor represent themselves, to be the employees, volunteers, agents or representatives of the County. Sound Transit shall be solely and completely responsible for all acts and omissions of its employees, volunteers and all other such persons acting on its behalf. Sound Transit acknowledges that the County shall have no responsibility for overseeing or monitoring the performance of such persons.

9.3 **Applicable Law, Jurisdiction and Venue.** This Agreement shall be interpreted in accordance with the laws of the State of Washington in effect on the date of execution of this Agreement. The Superior Court of King County, Washington, situated in Seattle, shall have exclusive jurisdiction and venue over any legal action arising under this Agreement between the County and Sound Transit.

9.4 **Waiver of Default.** Neither payment by the County nor performance by Sound Transit shall be construed as a waiver of either Party's rights or remedies against the other. Failure to require full and timely performance of any provision at any time shall not waive or reduce the right to insist upon complete and timely performance of such provision thereafter.

9.5 **Severability.** If any portion of this Agreement is ruled by a court of competent jurisdiction to be invalid, illegal or unenforceable, the remaining portions of this Agreement shall not be affected thereby and shall remain in full force and effect.

9.6 **Succession.** This Agreement, together with all exhibits now or hereafter made a part, shall be binding on the Parties and their respective heirs, executors, administrators, successors and assigns.

9.7 **Assignment.** Neither this Agreement nor any interest herein may be assigned by Sound Transit without the prior written consent of the County.

9.8 **Mutual Negotiation and Construction.** This Agreement and each of the terms and provisions hereof shall be deemed to have been explicitly negotiated between, and mutually drafted by both Parties.

9.9 **Survival.** The provisions of this Section 9 (Legal Relations) shall survive and remain applicable to each of the Parties notwithstanding any termination or expiration of this Agreement.

## 11. **AUDITS, INSPECTIONS AND RETENTION OF RECORDS**

11.1 **Access to Records.** Sound Transit shall keep accurate records of all activities and

expenditures conducted and incurred under this Agreement. The FTA, the County, the State Auditor, and any of their representatives shall have full access to and the right to examine, during normal business hours and as often as they deem necessary, all of Sound Transit's records with respect to all matters covered by this Agreement. Such representatives shall be permitted to audit, examine and make excerpts or transcripts from such records, and to make audits of all Agreements, invoices, materials, payrolls, and other matters covered by or related to this Agreement.

**11.2 Record Retention.** All documents, books, papers, accounting records, and other materials pertaining to this Agreement shall be retained by Sound Transit for six years from the date of termination or expiration of this Agreement, except in the event of litigation or settlement of claims arising from the performance of this Agreement, in which case Sound Transit agrees to maintain same until all such litigation, appeals, claims or exceptions are finally resolved.

## **12. FEDERAL REQUIREMENTS**

A. This Agreement is subject to a financial assistance agreement between the County and the FTA. Sound Transit shall comply with all applicable federal laws, regulations, policies, procedures and directives, including but not limited to the following, which are attached hereto and incorporated herein by this reference:

1. 49 CFR 18 Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments. The text is available at: [http://www.access.gpo.gov/nara/cfr/waisidx\\_06/49cfrv1\\_06.html#1000](http://www.access.gpo.gov/nara/cfr/waisidx_06/49cfrv1_06.html#1000);
2. OMB Circular A-87, Cost Principles for State, Local and Indian Tribal Governments. The text is available at: <http://www.whitehouse.gov/omb/circulars/a087/a087-all.html>;
3. The requirements and obligations imposed on a "Recipient" under the applicable provisions of the FTA Master Agreement (Exhibit F). Master Agreement language is also available at: <http://www.fta.dot.gov/documents/13-Master.doc>;
4. The requirements of FTA Circular 5010.1D Project Administration and Management (Exhibit G). The text is also available at: [http://www.fta.dot.gov/laws/circulars/leg\\_reg\\_8640.html](http://www.fta.dot.gov/laws/circulars/leg_reg_8640.html);
5. If Sound Transit contracts with a third party to provide all or a portion of the services described in this Agreement, then Sound Transit shall comply with FTA Circular 4220.1F (Exhibit H). Text is also available at: [http://www.fta.dot.gov/laws/circulars/leg\\_reg\\_8641.html](http://www.fta.dot.gov/laws/circulars/leg_reg_8641.html); and
6. The applicable Terms and Conditions of King County Contract MB06-2 for the provision of

buses. The Contract is attached to and incorporated into this Agreement by reference as (Exhibit I).

B. New federal laws, regulations, policies, procedures and directives may be adopted after the date this Agreement is established and may apply to this Agreement. Sound Transit agrees to accept and comply with all applicable laws, regulations, policies, procedures and directives as may be amended or promulgated from time to time during the term of this Agreement.

C. Sound Transit shall not perform any act, fail to perform any act, or refuse to comply with any requests by the County which would cause the County to be in violation of any federal law or FTA requirement. Sound Transit's failure to so comply with this Section shall constitute a material breach of this Agreement.

D. The County and Sound Transit acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of this Agreement, absent the express written consent by the Federal Government, the Federal Government is not a party to this Agreement and shall not be subject to any obligations or liabilities to the County, Sound Transit, or any other party (whether or not a party to this Agreement or any Agreement awarded pursuant thereto) pertaining to any matter resulting from this Agreement.

E. Sound Transit agrees to extend application of the federal requirements to its sub recipients or contractors, and their respective subcontractors, by including this Section and the related exhibits in each contract and subcontract Sound Transit awards under this Agreement financed in whole or in part with Federal assistance provided by FTA. It is further agreed that this Section shall not be modified, except to change the names of the parties to reflect the sub recipient or contractor which will be subject to its provisions.

F. Sound Transit acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. 3801, et seq., and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 CFR Part 31, apply to its actions pertaining to the work under this Agreement. Upon execution of this Agreement, Sound Transit certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to this Agreement or the FTA-assisted project for which this work is being performed. In addition to other penalties that may be applicable, Sound Transit further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on Sound Transit to the extent the Federal Government deems appropriate.

1. Sound Transit also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal

assistance originally awarded by FTA under the authority of 49 U.S.C. 5307, the Government reserves the right to impose the penalties of 18 U.S.C. 1001 and 49 U.S.C. 5307(n)(1) on Sound Transit, to the extent the Federal Government deems appropriate.

2. Sound Transit agrees to include the above two clauses in each contract and subcontract it awards under this Agreement financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the contractor or subcontractor who will be subject to the provisions.

G. Sound Transit agrees to sign Exhibit J to this Agreement, which is incorporated into this Agreement by reference, certifying that it is not currently suspended or debarred from receiving federal transportation funding, nor is it proposed for suspension or debarment in accordance with Executive Orders Nos. 12549 and 12689, "Debarment and Suspension," 31 U.S.C. Section 6101 note, and U.S. DOT regulations, "Government wide Debarment and Suspension (Non-procurement)," 49 C.F.R. Part 29. If Sound Transit is unable to provide a certification, it must submit a complete explanation attached to Exhibit J. If Sound Transit lets any contracts or subcontracts to perform work or purchase goods for the work covered by this Agreement, regardless of the amount of such contract or subcontract, Sound Transit agrees that it will include all applicable federal provisions in Exhibit I in that contract or subcontract, including Exhibit K to this Agreement, which the contractor or subcontractor must sign to certify they are not suspended or debarred from receiving federal funds.

### **13. NOTICE REQUIREMENTS**

Any notice given under this Agreement shall be in writing and given by sending such notice by registered mail, return receipt requested, with postage prepaid, addressed as follows, or at such other address as the Party to be notified shall have last directed in writing, or by serving said notice personally.

KING COUNTY: Transit General Manager  
Department of Transportation – KS-TR-0415  
King Street Center  
201 S. Jackson Street  
Seattle, WA 98104-3856

SOUND TRANSIT: Chief Executive Officer  
Sound Transit  
Union Station  
401 S. Jackson Street  
Seattle, WA 98104-2826

The effective date of notice shall be the date of personal service or the date of receipt as shown on

the return receipt, as applicable.

**14. AMENDMENT AND EXTENSION**

This Agreement and the exhibits now or hereafter a part of this Agreement shall not be deemed amended in any manner unless such amendment is in writing and signed by a duly authorized representative of each Party.

The parties' duly authorized representatives are signing this Agreement on the date stated in the introductory clause.

**SOUND TRANSIT**

**KING COUNTY**

\_\_\_\_\_  
Joni Earl  
Chief Executive Officer  
Sound Transit

\_\_\_\_\_  
Kevin Desmond  
General Manager  
King County Department of Transportation  
Metro Transit Division

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Approved as to form:

\_\_\_\_\_  
Sound Transit Legal Counsel

## List of Exhibits

<b>Exhibit</b>	<b>Title</b>
Exhibit A	Schedule of Sound Transit Service Level Commitments for the SR 520 Corridor
Exhibit B	Amended and Restated Urban Partnership Agreement by and between U.S. Department of Transportation and its Seattle-Area Urban Partner
Exhibit C	FTA grant WA-04-0021-01
Exhibit D	Quarterly progress report format
Exhibit E	Project closeout report format
Exhibit F	FTA Master Agreement
Exhibit G	FTA Circular 5010.1D Project Administration and Management
Exhibit H	FTA Circular 4220.1F
Exhibit I	King County Bus Procurement Contract MB06-2
Exhibit J	Certification for Suspension and Debarment, Primary Tier Transactions
Exhibit K	Certification for Suspension and Debarment – Lower Tier Transactions

**Lake Washington Urban Partnership  
Pass-Through Funding Agreement  
Between King County and Sound Transit**

**EXHIBIT A**

**Schedule of Sound Transit Service Level Commitments for the SR 520 Corridor**

<b>SOUND TRANSIT SR-520 ONE-WAY PEAK TRIPS SERVICE COMMITMENTS</b>				
<b>ST Route No.</b>	<b>Routing</b>	<b>Current No. of One-Way Peak Period Trips</b>	<b>Additional No. of One- Way Peak Period Trips Per Agreement</b>	<b>Total No. of One-Way Peak Period Trips</b>
<b>540</b>	Kirkland – University District	34	0	34
<b>542</b>	Redmond–Overlake– University District	0	48	48
<b>545</b>	Redmond-Overlake- Downtown Seattle	66	0	66
<b>555</b>	Northgate- Bellevue- Issaquah	10	0	10
<b>556</b>	Issaquah – Eastgate- Belleveue- Montlake- Northgate	11	0	11

Execution Copy

**Amended and Restated Urban Partnership Agreement**  
by and between  
**U.S. Department of Transportation**  
and its  
**Seattle-Area Urban Partner**

**Executive Summary**

This Amended and Restated Urban Partnership Agreement sets forth an agreement in principle between the U.S. Department of Transportation (the "Department") and the Department's Seattle-Area Urban Partner, comprised of the Washington State Department of Transportation ("WSDOT"), the Puget Sound Regional Council, and King County. Under this agreement, the Urban Partner agrees to (i) implement variable pricing on SR-520 between I-5 and I-405 and, to the extent necessary to maintain free flow traffic in the through-lanes, on all collectors and distributors for SR-520; (ii) use advanced technologies to employ "active traffic management" along SR-520 and the Lake Washington corridor; (iii) increase transit capacity along SR-520 by enhancing express bus service and constructing transit improvements, including bus facilities (stops/station/terminals) and expansions to existing park-n-ride lots; (iv) improve regional ferry boat service; (v) provide travelers with real-time multi-modal transportation information; and (vi) work to increase the use of telecommuting, flexible scheduling, and employer-based alternative commute programs within the region. In addition, the Urban Partner agrees that tolling, active traffic management and enhanced bus services on SR 520 will be in operation by no later than June 30, 2011. In exchange for these commitments, the Department intends to allocate \$154.5 million in Federal grant funding for projects (i) through (v) according to the terms of a grant agreement (or a series of grant agreements) to be negotiated by the Department and the Urban Partner. The Urban Partner will be responsible for funding the telecommuting, flexible scheduling, and employer-based alternative commute programs.

**THIS AMENDED AND RESTATED MEMORANDUM OF UNDERSTANDING** (this "MOU"), dated as of September 30, 2009, is made by and among the Secretary of Transportation (the "Secretary"), the Federal Highway Administration ("FHWA"), the Federal Transit Administration ("FTA"), the Research and Innovative Technology Administration ("RITA") (the Secretary, FHWA, FTA, RITA, collectively, the "Department"), and the undersigned State, county and/or municipal governmental entities, as the case may be (collectively, the "Urban Partner").

**Agreement in Principle**

**1. Agreement in Principle.** This MOU sets forth an agreement in principle among the undersigned concerning the terms and conditions of Federal assistance to be provided by the Department for the transportation projects described herein. This MOU represents solely the intent of the parties (including, without limitation, the intent of the Department to allocate funds as set forth in Section 4(a) below), and no party shall be legally bound hereby. Any agreement between the Department and the Urban Partner concerning funding of the transportation projects described herein shall be set forth in a grant agreement (or a series of grant agreements) (the "Grant Agreements") to be negotiated and executed by the parties to this MOU. The Department reserves the right, in its discretion, not to fund the transportation projects (or any part thereof) described in this MOU or otherwise set forth in the application filed by the Urban Partner to the Urban Partnership Program.

**2. Background.** Transportation system congestion is one of the greatest threats to our Nation's economic prosperity and way of life. Whether it takes the form of trucks stalled in traffic, cargo stuck at overwhelmed seaports, or airplanes stuck on the tarmac, congestion costs the Nation an estimated \$200 billion a year. The problem of traffic congestion in our major metropolitan areas in particular is severe and worsening. In 2003, traffic jams in the Nation's largest 85 urban areas cost Americans 3.7 billion hours and 2.3 billion

gallons of fuel. Congestion is also affecting the quality of life in America by robbing us of time that could be spent with families and friends and in participation in civic life.

The signatories to this MOU do not believe that gridlock is our inevitable fate. In May 2006, the Department announced a major initiative to reduce transportation system congestion. This plan, the *National Strategy to Reduce Congestion on America's Transportation Network* (the "Congestion Initiative"), provides a blueprint for Federal, State, and local officials to consider as they work together to reverse the alarming trends of congestion. One major component of the Congestion Initiative is the Urban Partnership Agreement (or "UPA"). As announced in the Department's solicitation for Urban Partners published in the Federal Register on December 8, 2006 (at 71 FR 71231 (2006)) (the "Federal Register Notice"), applicants designated by the Department as Urban Partners would adopt the "Four Ts:" tolling (congestion pricing), transit, telecommuting and technology – strategies believed to be effective on a combined basis in reducing traffic congestion. In return for such commitment, the Department, to the extent requested and appropriate, would support its Urban Partners' implementation of the Four Ts with financial resources, regulatory flexibility, and dedicated expertise and personnel.

**3. Designation as Urban Partner.** In accordance with the Federal Register Notice and for purposes of this MOU, the Department designates each of the following entities, collectively, as an "Urban Partner."

- (a) Washington State Department of Transportation ("WSDOT");
- (b) Puget Sound Regional Council; and
- (c) King County, WA.

**4. Grant Agreements.** The Department and the Urban Partner agree to negotiate a grant agreement (or a series of grant agreements) that would reflect the following terms and conditions:

- (a) **Federal Projects and Sources of Funding.** The Department shall provide funding for each of the following projects (the "Federal Projects") under the Federal programs and in the amounts provided below, in each case subject to the statutes, regulations and the implementing guidance of the Department governing such programs and subject to the Urban Partner's agreement to commence the Local Projects set forth in Section 4(b):

Project	Source of Funding	Amount of Funding
<i>Tolling (congestion pricing) projects</i>		
<ul style="list-style-type: none"> <li>• <b>Variable pricing on SR-520.</b> The Urban Partner will implement variable pricing (based on the level of demand) on all through lanes of SR-520 between I-5 and I-405 and, to the extent necessary to maintain free flow traffic in the through-lanes, on all collectors and distributors for SR-520 between I-5 and I-405. The Urban Partner will provide discounted or free access for vehicles with 3+ occupants.</li> </ul>	<ul style="list-style-type: none"> <li>• FHWA's Innovative Bridge Research and Deployment Program</li> </ul>	<ul style="list-style-type: none"> <li>✓• \$5.1 million in contract authority funds made available for obligation for Fiscal Year 2007</li> </ul>
	<ul style="list-style-type: none"> <li>• FHWA's Transportation, Community, and System Preservation Program (TCSP)</li> </ul>	<ul style="list-style-type: none"> <li>↔• \$24.0 million in contract authority funds made available for obligation for Fiscal Year 2007</li> </ul>
	<ul style="list-style-type: none"> <li>• FHWA's Value Pricing Pilot Program ("VPPP")</li> </ul>	<ul style="list-style-type: none"> <li>• \$10.0 million in contract authority funding shall be made available for obligation from either Fiscal Year 2007, 2008, or 2009; such funding will be made available no later than Fiscal Year 2009, subject to availability for obligation</li> </ul>

Project	Source of Funding	Amount of Funding
	<ul style="list-style-type: none"> <li>RITA's Intelligent Transportation Systems Operational Testing to Mitigate Congestion ("ITS-OTMC") Program</li> </ul>	<ul style="list-style-type: none"> <li>✓ \$23.9 million in funds appropriated when needed and available, but in any event no later than the end of Fiscal Year 2009; funding... subject to appropriation</li> </ul>
<b>Transit projects</b>		
<ul style="list-style-type: none"> <li><b>Enhanced bus service along SR-520.</b> The Urban Partner will expand transit capacity along SR-520 by adding 90 one-way peak period trips on core and other supporting bus routes operated by King County Metro and Sound Transit.</li> <li><b>New transit improvements along SR-520 corridor.</b> The Urban Partner will construct transit facilities to include stops/stations/terminals, expansion of existing park-n-ride lots, and the provision of real time information signs at transit stations to support the tolling of SR-520.</li> </ul>	<ul style="list-style-type: none"> <li>FTA's Bus and Bus-Related Facilities Discretionary Grant Program ("Section 5309")</li> </ul>	<ul style="list-style-type: none"> <li>\$41.0 million in funds appropriated for Fiscal Year 2006 or Fiscal Year 2007</li> </ul>
<ul style="list-style-type: none"> <li><b>Improvements to regional ferry service.</b> The Urban Partner will carry out a number of projects to improve regional ferry boat service, as described in applications filed for funding under FHWA's Ferry Boat Discretionary Program and as set forth on <u>Appendix A</u> attached hereto.</li> </ul>	<ul style="list-style-type: none"> <li>FHWA's Ferry Boat Discretionary Program</li> </ul>	<ul style="list-style-type: none"> <li>\$27.4 million in contract authority funds made available for obligation for Fiscal Year 2007</li> </ul>
<b>Technology projects</b>		
<ul style="list-style-type: none"> <li><b>Real-time multi-modal traveler information.</b> The Urban Partner will use intelligent transportation system ("ITS") technology to provide real-time traveler information (including current toll rates) for SR 520 and the Lake Washington corridor. Dynamic message signage prior to traveler decision points will provide opportunities for re-routing in order to access alternate travel routes (I-90, I-405, I-5).</li> <li><b>SR-520 active traffic management.</b> The Urban Partner will implement technology to provide active traffic management of the Lake Washington Corridor (SR 520, I-90, I-5 and I-405).</li> </ul>	<ul style="list-style-type: none"> <li>RITA's Intelligent Transportation Systems Operational Testing to Mitigate Congestion ("ITS-OTMC") Program</li> </ul>	<ul style="list-style-type: none"> <li>✓ \$23.1 million in funds appropriated when needed and available, but in any event no later than the end of Fiscal Year 2009; funding subject to appropriation</li> </ul>

(b) **Local Projects to be Implemented by Urban Partner.** In connection with the implementation of the Federal Projects, the Urban Partners shall agree to commence the following projects (the "Local Projects"):

- (i) The Urban Partner will work with large employers within the corridor area, local Transportation Management Associations, downtown associations, State and local governments, and residential neighborhoods to increase the use of telecommuting, flexible scheduling, and employer-based alternative commute programs. Examples

of such employer-based programs will include closely-coordinated work schedule/telecommuting promotions, targeted marketing, parking cash-out promotions, and employer-based incentives for commuting by transit, vanpool, carpool, walking, or biking.

- (c) **Completion of Projects.** Unless otherwise agreed by the Department and the Urban Partner, tolling, active traffic management, and enhanced bus services on SR 520 will be in operation by no later than June 30th, 2011. For all other projects, see Appendix C attached. In the event that the action(s) funded in connection with the Urban Partnership Agreement experience delay due to circumstances beyond the control of the Urban Partner, the Department may either negotiate an extended completion date or terminate the action(s).
- (d) **Other Terms and Conditions.** Each of the Grant Agreements shall additionally provide that:
- (i) The Urban Partner shall be entitled to draw down the funds set forth on Appendix B attached hereto immediately upon their obligation by the Department, so long as such funds shall be used for the purposes specified therein. No other funds obligated by the Grant Agreements may be drawn down unless and until there shall be duly enacted by the State of Washington the legal authority necessary to implement variable tolling on the SR 520 Bridge, which legal authority shall be enacted during the 2009 session of the Washington State Legislature.
  - (ii) No funds obligated by the Grant Agreements shall be drawn down by the recipient unless and until each member of the Urban Partner with the authority to toll has agreed to exempt privately operated over-the-road buses from tolls to the same extent it exempts (or proposes to exempt) public transportation from tolls in connection with the Federal Projects;
  - (iii) The Department reserves the right to de-obligate funds obligated under any of the Grant Agreements (or to require the return of such funds) in the event a recipient breaches or otherwise fails to perform under any of the Grant Agreements;
  - (iv) The recipient shall not assess congestion charges against any vehicles owned or operated by any foreign government or international organization or its representatives, officers, or employees if notified by the U.S. Department of State that, pursuant to U.S. international legal obligations, the vehicles are exempt from such charges;
  - (v) The recipient makes customary representations to the Department that the Federal Projects comply (or will comply) with all applicable Federal, State and local laws;
  - (vi) The recipient agrees to provide to the Department (and its designees) access to the Federal Projects and all data collected by the recipient, subject to applicable State law concerning the disclosure of personal information, with respect to the Federal Projects for purposes of the Department's oversight of the Federal Projects; and
  - (vii) To the extent requested by the Department, the recipient agrees to designate an independent third party to perform all program evaluations required by law or as

reasonably directed by the Department in order to assist in the evaluation of the Federal Projects.

- (e) **Actions Prior to Execution of Grant Agreements.** Prior to the execution of the Grant Agreements, the Department shall have received the following, in addition to usual and customary deliverables:
- (i) A new or amended application to each of the following grant programs, as required by the Department: FHWA Ferry Boat Discretionary Grant Program; and
  - (ii) An opinion of counsel, satisfactory in form and substance to the Department, concerning the Federal Projects.

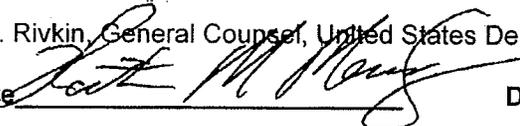
**5. Non-Disclosure.** Prior to the public announcement of the Urban Partner by the U.S. Secretary of Transportation, the undersigned agree not to disclose the contents hereof to any third party, except by written agreement of the Department or as required by law.

[Signatures appear on the following page.]

United States Department of Transportation

Signature \_\_\_\_\_ Date \_\_\_\_\_

Robert S. Rivkin, General Counsel, United States Department of Transportation

Signature  Date 9/30/09

Victor M. Mendez, Federal Highway Administrator

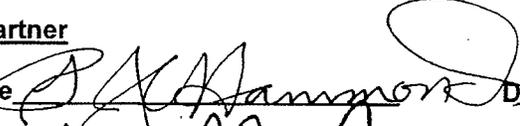
Signature \_\_\_\_\_ Date \_\_\_\_\_

Peter Rogoff, Federal Transit Administrator

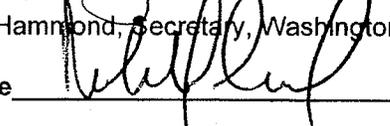
Signature \_\_\_\_\_ Date \_\_\_\_\_

Peter H. Appel Research and Innovative Technology Administrator

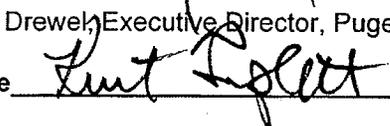
Urban Partner

Signature  Date 9/21/09

Paula J. Hammond, Secretary, Washington State Department of Transportation

Signature  Date 9/23/09

Robert J. Drewel, Executive Director, Puget Sound Regional Council

Signature  Date 9/23/09

Kurt Triplett, County Executive, King County, WA

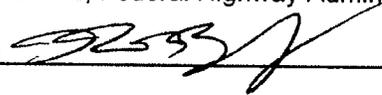
United States Department of Transportation

Signature \_\_\_\_\_ Date \_\_\_\_\_

Robert S. Rivkin, General Counsel, United States Department of Transportation

Signature \_\_\_\_\_ Date \_\_\_\_\_

Victor M. Mendez, Federal Highway Administrator

Signature  Date 9/30/09

Peter Rogoff, Federal Transit Administrator

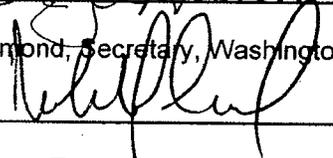
Signature \_\_\_\_\_ Date \_\_\_\_\_

Peter H. Appel Research and Innovative Technology Administrator

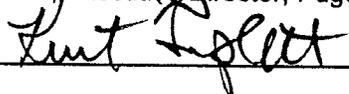
Urban Partner

Signature  Date 9/21/09

Paula J. Hammond, Secretary, Washington State Department of Transportation

Signature  Date 9/23/09

Robert J. Drewel, Executive Director, Puget Sound Regional Council

Signature  Date 9/23/09

Kurt Triplett, County Executive, King County, WA

United States Department of Transportation

Signature \_\_\_\_\_ Date \_\_\_\_\_

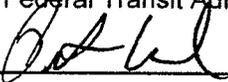
Robert S. Rivkin, General Counsel, United States Department of Transportation

Signature \_\_\_\_\_ Date \_\_\_\_\_

Victor M. Mendez, Federal Highway Administrator

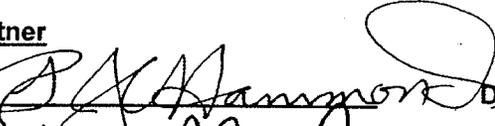
Signature \_\_\_\_\_ Date \_\_\_\_\_

Peter Rogoff, Federal Transit Administrator

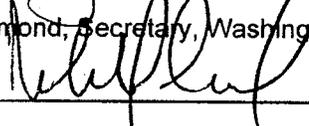
Signature  Date 9-29-09

Peter H. Appel Research and Innovative Technology Administrator

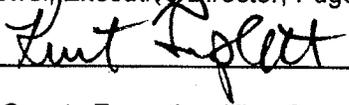
Urban Partner

Signature  Date 9/21/09

Paula J. Hammond, Secretary, Washington State Department of Transportation

Signature  Date 9/23/09

Robert J. Drewel, Executive Director, Puget Sound Regional Council

Signature  Date 9/23/09

Kurt Triplett, County Executive, King County, WA

**Appendix A**  
**List of Regional Ferry Service Improvements**

1. System-Wide Vessel Preservation (WSDOT)
2. New Vessel Construction (WSDOT)
3. Mukilteo Multimodal Terminal (WSDOT)
4. Small Passenger Only Vessels (Kitsap Transit)
5. Vashon Island Passenger Replacement Ferry: Ferry Acquisition (King County)
6. Kingston Seattle Passenger Only Ferry (Port of Kingston)
7. Steilacoom Ferry Landing Loading/Unloading Slip (Pierce County)
8. Guemes Island Ferry Dock Repair (Skagit County)

An application for such uses of funds shall be duly filed with the Department, if not already filed as of the date of this MOU.

**Appendix B**  
**Funds Immediately Available Upon Obligation**

- Of the \$27.4 million provided through FHWA's Ferry Boat Discretionary Program under paragraph 4(a) of the MOU, the amount of \$7.9 million (upon obligation thereof by the Department) shall be immediately available for draw down by WSDOT, and shall not be subject to the provisions of paragraph 4(c) or 4(d)(i) and (ii) of the MOU, provided such funds are used for projects specified in the UPA Agreement (and as set forth in an application by WSDOT to be filed with FHWA's Washington Division office or the FTA Regional office as appropriate); provided, further that WSDOT represents to FHWA or FTA in writing that WSDOT is ready to expend such funds on such projects.
- Of the \$10.0 million provided through FHWA's Value Pricing Pilot Program under paragraph 4(a) of the MOU, the amount of \$8.03 million (upon obligation thereof by the Department) shall be immediately available for draw down by WSDOT, and shall not be subject to the provisions of paragraph 4(c) or 4(d)(i) and (ii) of the MOU, provided such funds are used for critical tolling and "Active Traffic Management" design activities, as contemplated by the MOU; provided, further that WSDOT represents to FHWA or FTA in writing that WSDOT is ready to expend such funds for such purposes.
- Of the \$41.0 million provided through FTA's Bus and Bus-Related Facilities Discretionary Grant Program under paragraph 4(a) of the MOU, the amount of \$2,163,750 (upon obligation thereof by the Department) shall be immediately available for draw down by King County, State of Washington ("King County"), and shall not be subject to the provisions of paragraph 4(c) or 4(d)(i) and (ii) of the MOU, provided such funds are used for the design and/or construction of the Redmond, Washington, Park and Ride project; provided further that King County represents to FTA in writing that King County is ready to expend such funds for such purposes.

**Appendix C**  
**Schedule by Project**

<b>Projects</b>	<b>Operational Date (No Later Than)</b>
<b>Variable Pricing on SR 520</b>	June 30 2011
<b>Enhanced Bus Service on SR 520</b>	June 30 2011
<b>New transit improvements along SR-520 corridor</b>	June 30 2011
Redmond P&R Lot	June 30 <sup>th</sup> , 2009
Kirkland P&R Lot	October 15 <sup>th</sup> , 2014
Real Time Information Signs & Passenger Facilities	June 30 2011
<b>Improvements to Regional Ferry Service</b>	
System-Wide Vessel Preservation (WSDOT)	July 31 <sup>st</sup> , 2010
New Vessel Construction (WSDOT)	July 31 <sup>st</sup> , 2010
Mukilteo Multimodal Terminal (WSDOT)	July 31 <sup>st</sup> , 2009
Small Passenger Only Vessels (Kitsap Transit)	June 30 <sup>th</sup> , 2010
Vashon Island Passenger Replacement Ferry: Ferry Acquisition (King County)	January 31 <sup>st</sup> , 2012
Kingston Seattle Passenger Only Ferry (Port of Kingston)	September 30 <sup>th</sup> , 2010
Steilacoom Ferry Landing Loading/Unloading Slip (Pierce County)	December 31 <sup>st</sup> , 2015
Guemes Island Ferry Dock Repair (Skagit County)	December 31 <sup>st</sup> , 2010
<b>Real-time multi-modal traveler information</b>	June 30 2011
<b>SR-520 active traffic management</b>	
SR 520	June 30 2011
I-90	June 30 2011



EXHIBIT C

DOT



FTA

U.S. Department of Transportation

Federal Transit Administration

## Application

Recipient ID:	1731
Recipient Name:	KING COUNTY DEPARTMENT OF TRANSPORTATION
Project ID:	WA-04-0021-01
Budget Number:	3 - Budget Approved
Project Information:	FY06-07 URBAN PARTNERSHIP & Toll C

### Part 1: Recipient Information

Project Number:	WA-04-0021-01
Recipient ID:	1731
Recipient Name:	KING COUNTY DEPARTMENT OF TRANSPORTATION
Address:	201 SOUTH JACKSON STREET KSC-TR-0814, SEATTLE, WA 98104 3856
Telephone:	(206) 684-1026
Facsimile:	(206) 684-2111

### Union Information

Recipient ID:	1731
Union Name:	LOCAL 77 IBEW
Address 1:	1125 15TH STREET NW
Address 2:	
City:	WASHINGTON, DC 20005 0000
Contact Name:	DON GUILLOT
Telephone:	(206) 323-4505
Facsimile:	(206) 323-0186
E-mail:	ibew77@ibew77.com
Website:	www.ibew77.com

Recipient ID:	1731
Union Name:	LOCAL 17 IFPTE
Address 1:	2900 EASTLAKE AVENUE
Address 2:	SUITE 300

City:	SEATTLE, WA 98102 0000
Contact Name:	JOE MCGEE
Telephone:	(206) 328-7321
Facsimile:	(206) 328-7402
E-mail:	mcgee@ifpte17.org
Website:	www.ifpte17.org

Recipient ID:	1731
Union Name:	LOCAL 587- ATU
Address 1:	2700 FIRST AVENUE
Address 2:	SUITE 230
City:	SEATTLE, WA 98121 0000
Contact Name:	PAUL BACHTEL
Telephone:	(206) 448-8588
Facsimile:	(206) 448-4482
E-mail:	pbachtelpres@atu587.com
Website:	www.atu587.com

Recipient ID:	1731
Union Name:	TECHNICAL EMPLOYEES ASSOC (TEA)
Address 1:	P O BOX 4353
Address 2:	
City:	SEATTLE, WA 98194 0353
Contact Name:	ERIC MANDEL
Telephone:	(206) 684-1206
Facsimile:	(206) 684-1959
E-mail:	eric.mandel@metrokc.gov
Website:	www.metrokc.gov

## Part 2: Project Information

Project Type:	Grant	Gross Project Cost:	\$16,556,873
Project Number:	WA-04-0021-01	Adjustment Amt:	\$10,497,244
Project Description:	FY06-07 URBAN PARTNERSHIP & Toll C	Total Eligible Cost:	\$6,059,629
Recipient Type:	County Agency	Total FTA Amt:	\$6,059,629
FTA Project Mgr:	Pat Hendrix (206) 220-4465	Total State Amt:	\$0
Recipient Contact:	David Morrison (206) 684-2154	Total Local Amt:	\$0
New/Amendment:	Amendment	Other Federal Amt:	\$0

Amend Reason:	Increase Award	Special Cond Amt:	\$0
Fed Dom Asst. #:	20500	Special Condition:	None Specified
Sec. of Statute:	5309-2	S.C. Tgt. Date:	None Specified
State Appl. ID:	None Specified	S.C. Eff. Date:	None Specified
Start/End Date:	Apr. 30, 2007 - Dec. 31, 2012	Est. Oblig Date:	31-May-2008
Recvd. By State:	Apr. 24, 2008	Pre-Award Authority?:	Yes
EO 12372 Rev:	Not Applicable	Fed. Debt Authority?:	No
Review Date:	None Specified	Final Budget?:	No
Planning Grant?:	NO		
Program Date (STIP/UPWP/FTA Prm Plan) :	Jan. 16, 2008		
Program Page:	MET-161		
Application Type:	Electronic		
Supp. Agreement?:	No		
Debt. Delinq. Details:			

### Urbanized Areas

UZA ID	UZA Name
530170	SEATTLE, WA

### Congressional Districts

State ID	District Code	District Official
53	1	Jay Inslee
53	2	RichardRay Larsen
53	7	Jim McDermott
53	8	David G Reichert
53	9	Adam Smith

### Earmarks

#### Earmark Details

Earmark ID	Earmark Name	Orig. Balance	Amount Applied
D2007-BUSP-007	Seattle - Urban Partnership	\$16,106,749	\$6,059,629

Number of Earmarks: 1

Total Amount Applied: \$6,059,629

Date Sent for Release: 5/28/2008 12:32:51 PM

Date Released: 6/25/2008

### Security

**No information found.**

## Part 3: Budget

### Project Budget

	<u>Quantity</u>	<u>FTA Amount</u>	<u>Tot. Elig. Cost</u>
<u>SCOPE</u>			
<b>111-00</b> BUS - ROLLING STOCK	45	\$31,665,000.00	\$31,665,000.00
<u>ACTIVITY</u>			
<b>11.13.01</b> BUY 40FT HYBRID BUS FOR EXPAN (FY06,07 5309 DISC) (100:0)(00)	25	\$14,825,000.00	\$14,825,000.00
<b>11.13.06</b> BUY 60FT ARTIC BUS FOR EXPAN (FY06,07 5309 DISC)(100:0) (00)	20	\$16,840,000.00	\$16,840,000.00
<u>SCOPE</u>			
<b>113-00</b> REDMOND AND SOUTH KIRKLAND STRUCTURED PARKING	0	\$8,821,353.00	\$8,821,353.00
<u>ACTIVITY</u>			
<b>11.31.04</b> PE/ENVT S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC) (100:0)	0	\$1,000,000.00	\$1,000,000.00
<b>11.31.04</b> DESIGN S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC) (100:0)(01)	0	\$500,000.00	\$500,000.00
<b>11.33.04</b> CONST. S. KIRKLAND P&R GARAGE (FY06,07 DISC)(100:0)(01)	0	\$4,657,603.00	\$4,657,603.00
<b>11.33.04</b> CONST. REDMOND P&R GARAGE (FY06,07 5309 DISC) (100:0)(00)	0	\$1,858,484.00	\$1,858,484.00
<b>11.31.04</b> DESIGN REDMOND P&R GARAGE (FY06,07 5309 DISC) (100:0)(01)	0	\$305,266.00	\$305,266.00
<b>11.31.10</b> DESIGN SR-520 BUS SHELTERS (FY06,07 5309 DISC) (100:0)(01)	0	\$100,000.00	\$100,000.00
<b>11.33.10</b> CONSTRUCT SR-520 BUS SHELTERS (FY06,07 5309 DISC)	0	\$400,000.00	\$400,000.00

(100:0)(01)			
<u>SCOPE</u>			
<b>116-00</b> REAL TIME INFORMATION SYSTEM (BUS)	0	\$513,647.00	\$513,647.00
<u>ACTIVITY</u>			
<b>11.61.20</b> ENG/DES REAL TIME INFO SYST (FY06,07 SECT 5309 DISC) (100:0)	0	\$111,621.00	\$111,621.00
<b>11.62.20</b> EQUIP REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0) (01)	0	\$105,000.00	\$105,000.00
<b>11.63.20</b> CONST. REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0) (01)	0	\$297,026.00	\$297,026.00
<b>Estimated Total Eligible Cost:</b>			<b>\$41,000,000.00</b>
<b>Federal Share:</b>			<b>\$41,000,000.00</b>
<b>Local Share:</b>			<b>\$0.00</b>

OTHER (Scopes and Activities not included in Project Budget Totals)

	<u>Quantity</u>	<u>FTA Amount</u>	<u>Tot. Elig. Cost</u>
<u>SCOPE</u>			
995-00 TRAVELER INFORMATION	0	\$513,647.00	\$513,647.00
<u>ACTIVITY</u>			
11.61.20 ENG/DES. REAL TIME INFO SYS - ITS CODE	0	\$111,621.00	\$111,621.00
11.62.20 EQUIP REAL TIME INFO SYS - ITS CODE	0	\$105,000.00	\$105,000.00
11.63.20 CONSTRUCT REAL TIME INFO SYS - ITS CODE	0	\$297,026.00	\$297,026.00
<u>SCOPE</u>			
999-01 ITS REAL TIME INFORMATION CONTINGENCY	0	\$0.00	\$0.00
<u>ACTIVITY</u>			
11.62.20 EQUIPMENT REAL TIME INFO SYST (FY07 SECT 5309 DISC) (100:0)	0	\$0.00	\$0.00
11.63.20 CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC) (100:0)	0	\$0.00	\$0.00
<u>SCOPE</u>			

999-02 SHELTERS AND LIGHTING	0	\$0.00	\$0.00
<u>ACTIVITY</u>			
11.33.10 CONSTRUCT BUS SHELTERS (FY07 SECT 5309 DISC) (100:0)	0	\$0.00	\$0.00
<u>SCOPE</u>			
999-03 TOLL CREDITS	45	\$0.00	\$10,125,001.00
<u>ACTIVITY</u>			
11.13.01 BUY 40FT HYBRID BUS FOR EXPAN (FY07)(TC)(100:0)(00)	25	\$0.00	\$3,706,250.00
11.13.06 BUY 60FT ARTIC BUS FOR EXPAN (FY07)(TC)(100:0)(00)	20	\$0.00	\$4,210,000.00
11.31.04 PE/DESIGN S. KIRKLAND P&R GARAGE (FY07)(TC)(100:0)(00)	0	\$0.00	\$250,000.00
11.33.04 CONST. REDMOND P&R GARAGE (FY07)(TC)(100:0)(00)	0	\$0.00	\$540,938.00
11.61.20 ENG/DES REAL TIME INFO SYST (FY07)(TC)(100:0)(00)	0	\$0.00	\$27,905.00
11.62.20 EQUIPMENT REAL TIME INFO SYST (FY07)(TC)(100:0)	0	\$0.00	\$26,250.00
11.63.20 CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC) (100:0)	0	\$0.00	\$74,257.00
11.31.10 DESIGN BUS SHELTERS (FY07)(TC)(100:0)(01)	0	\$0.00	\$25,000.00
11.33.10 CONSTRUCT BUS SHELTERS (FY07 SECT 5309 DISC) (100:0)	0	\$0.00	\$100,000.00
11.33.04 CONST. S. KIRKLAND P&R GARAGE (FY07)(TC)(100:0)(01)	0	\$0.00	\$1,164,401.00

### SOURCES OF FEDERAL FINANCIAL ASSISTANCE

<u>UZA ID</u>	<u>Accounting Classification</u>	<u>FPC</u>	<u>FY</u>	<u>SEC</u>	<u>Previously Approved</u>	<u>Amendment Amount</u>	<u>Total</u>
530170	2006.25.04.UP.2	00	2008	04	\$24,893,251.00	\$0.00	\$24,893,251.00
530170	2007.25.04.UP.2	00	2008	04	\$10,047,120.00	\$6,059,629.00	\$16,106,749.00
<b>Total Previously Approved:</b>							<b>\$34,940,371.00</b>
<b>Total Amendment Amount:</b>							<b>\$6,059,629.00</b>
<b>Total from all Funding Sources:</b>							<b>\$41,000,000.00</b>

### Alternative Fuel Codes

11.13.01	BUY 40FT HYBRID BUS FOR EXPAN (FY06,07 5309 DISC)(100:0)(00)	Hybrid Electric
11.13.06	BUY 60FT ARTIC BUS FOR EXPAN (FY06,07 5309 DISC)(100:0)(00)	Hybrid Electric
11.13.01	BUY 40FT HYBRID BUS FOR EXPAN (FY07)(TC)(100:0)(00)	Hybrid Electric
11.13.06	BUY 60FT ARTIC BUS FOR EXPAN (FY07)(TC)(100:0)(00)	Hybrid Electric

### Extended Budget Descriptions

<b>11.13.01</b>	BUY 40FT HYBRID BUS FOR EXPAN (FY06,07 5309 DISC)(100:0)(00)	25	\$14,825,000.00	\$14,825,000.00
<p>(00) INITIAL APPLICATION, MET-161 FY07 SECTION 5309 BUS AND BUS FACILITIES FUNDS, STIP DATED 2/6/07.</p> <p>Purchase up to 25 approximately 40 Foot hybrid electric diesel buses. Per unit cost is \$593,000 per bus. The match ratio for this funding is 80:20; however, for this grant the ratio is 100:0 as toll credits aggregating \$3,706,250 are included as a non-add scope item in the budget.</p> <p>The contract to purchase these buses was awarded under a Letter of No Prejudice dated 4/30/07.</p> <p>In accordance with Bus Procurement Policy in FTA circular 9030, Chapter 5, Section 9(b)King County real property records for fleet roster and retirement schedule are on file.</p> <p>Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll credits in the amount of \$3,706,250 will be aggregated as match for this project.</p> <p>MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio. Amendment 07-08 approved 9/10/07</p>				
<b>11.13.06</b>	BUY 60FT ARTIC BUS FOR EXPAN (FY06,07 5309 DISC)(100:0)(00)	20	\$16,840,000.00	\$16,840,000.00
<p>(00) INITIAL APPLICATION, MET-161, FY07 SECTION 5309 BUS AND BUS FACILITIES FUNDS, STIP DATED 2/6/07.</p> <p>Purchase up to 19 approximately 60 Foot hybrid electric diesel buses. Per unit cost is \$842,000 per bus. The match ratio for this funding is 80:20; however, for this grant the ratio is 100:0 as toll credits aggregating \$4,210,000 are included as a non-add scope item in the budget.</p> <p>The contract to purchase these buses was awarded under a Letter of No Prejudice dated 4/30/07.</p> <p>In accordance with Bus Procurement Policy in FTA circular 9030, Chapter 5, Section 9(b)King County real property records for fleet roster and retirement schedule are on file.</p> <p>Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll credits in the amount of \$4,210,000 will be aggregated as match for this project.</p> <p>MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio. Amendment 07-08 approved 9/10/07</p>				
<b>11.31.04</b>	PE/ENVT S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC)(100:0)	0	\$1,000,000.00	\$1,000,000.00

(00) INITIAL APPLICATION, MET-161, FY07 SECTION 5309 BUS DISCRETIONARY FUNDING, STIP DATED 2/6/07.				
<p>Funding for the preliminary engineering and environmental work for a structured park and ride lot on the site of the current King County Metro South Kirkland park and ride at 108th NE and NE 38th Street in Kirkland, Washington. The structured park and ride will be part of a TOD development undertaken by a private developer. The structure will contain approximately 853 stalls.</p> <p>Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll credits in the amount of \$250,000 will be aggregated as match for this project.</p> <p>MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio. Amendment 07-08 approved 9/10/07</p>				
<b>11.31.04</b>	DESIGN S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC)(100:0)(01)	0	\$500,000.00	\$500,000.00
(01) FIRST AMENDMENT DATED 1/15/08, MET-161, FY07 SECTION 5309 BUS DISCRETIONARY FUNDING, STIP DATED 1/16/08.				
<p>Funding for design beyond 30% for a structured park and ride lot on the site of the current King County Metro South Kirkland park and ride at 108th NE and NE 38th Street in Kirkland, Washington. The structured park and ride will be part of a TOD development undertaken by a private developer. The structure will contain approximately 853 stalls.</p> <p>Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll credits in the amount of \$125,000 will be aggregated as match for this project.</p> <p>MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio. Amendment 07-08 approved 9/10/07, STIP approved 1/16/08.</p>				
<b>11.33.04</b>	CONST. S. KIRKLAND P&R GARAGE (FY06,07 DISC)(100:0)(01)	0	\$4,657,603.00	\$4,657,603.00
(01) FIRST AMENDMENT DATED 1/15/08, MET-161, FY07 SECTION 5309 BUS DISCRETIONARY FUNDING, STIP DATED 1/16/08.				
<p>Funding for construction of a structured park and ride lot on the site of the current King County Metro South Kirkland park and ride at 108th NE and NE 38th Street in Kirkland, Washington. The structured park and ride will be part of a TOD development undertaken by a private developer. The structure will contain approximately 853 stalls.</p> <p>Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll credits in the amount of \$1,164,401 will be aggregated as match for this project.</p> <p>MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio. Amendment 07-08 approved 9/10/07, STIP approved 1/16/08.</p>				
<b>11.33.04</b>	CONST. REDMOND P&R GARAGE (FY06,07 5309 DISC)(100:0)(00)	0	\$1,858,484.00	\$1,858,484.00
(01) AMENDMENT				
<p>Project control totals reflect adjustment for equity sales proceeds received for the sale of Redmond P&amp;R Lot in the amount of \$10,497,244. Sale Approved by FTA 12/20/2005. Proceeds of the sale are being used to build the new Redmond parking garage structure. Total project cost for Redmond P&amp;R parking garage \$13,500,000.</p>				

(00) INITIAL APPLICATION, MET-161, SECTION 5309 BUS DISCRETIONARY FUNDING, STIP DATED 2/6/07.

Project will provide construction funding for a structured park and ride on the site of King County Metro's current Redmond Park and Ride at 161st NE and NE Redmond Way in Redmond, Washington. The structured garage will replace all of the current 386 stalls at the site and will be built next to a TOD development undertaken by a private developer. The remaining amount required to construct the project will be drawn from the proceeds of the sale of a portion of the park and ride lot to the TOD developer.

Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll credits in the amount of \$540,938 will be aggregated as match for this project.

MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio.  
Amendment 07-08 approved 9/10/07, STIP approved 1/16/08.

<b>11.31.04</b>	DESIGN REDMOND P&R GARAGE (FY06,07 5309 DISC)(100:0)(01)	0	\$305,266.00	\$305,266.00
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(01)FIRST NO-COST BUDGET REVISION dated 8/28/08.

Shifting \$305,266 in FTA funds from ALI 113304 for the design of the Redmond Park and Ride garage per the provisions of the term sheet for the Urban Partnership agreement.

MET-161, Section 5309 Discretionary funding. Funding is at 100:00 federal to non-federal ratio with the matching funds supplied through toll credits from the WSDOT.

(01) AMENDMENT

Project control totals reflect adjustment for equity sales proceeds received for the sale of Redmond P&R Lot in the amount of \$10,497,244. Sale Approved by FTA 12/20/2005. Proceeds of the sale are being used to build the new Redmond parking garage structure. Total project cost for Redmond P&R parking garage \$13,500,000.

(00) INITIAL APPLICATION, MET-161, SECTION 5309 BUS DISCRETIONARY FUNDING, STIP DATED 2/6/07.

Project will provide construction funding for a structured park and ride on the site of King County Metro's current Redmond Park and Ride at 161st NE and NE Redmond Way in Redmond, Washington. The structured garage will replace all of the current 386 stalls at the site and will be built next to a TOD development undertaken by a private developer. The remaining amount required to construct the project will be drawn from the proceeds of the sale of a portion of the park and ride lot to the TOD developer.

Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll credits in the amount of \$540,938 will be aggregated as match for this project.

MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio.  
Amendment 07-08 approved 9/10/07, STIP approved 1/16/08.

<b>11.31.10</b>	DESIGN SR-520 BUS SHELTERS (FY06,07 5309 DISC)(100:0)(01)	0	\$100,000.00	\$100,000.00
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(01) FIRST AMENDMENT DATED 1/15/08. MET-161, STIP DATED 1/16/08.

Funding for the design of passenger shelters and amenities in the SR 520 corridor. Funds for this activity line item were moved from activity line item 11.33.10 in the contingency budget of this grant.

Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll

credits in the amount of \$25,000 will be aggregated as match for this project.

MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio.  
Amendment 07-08 approved 9/10/07, STIP approved 1/16/08.

<b>11.33.10</b>	CONSTRUCT SR-520 BUS SHELTERS (FY06,07 5309 DISC)(100:0)(01)	0	\$400,000.00	\$400,000.00
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(01) FIRST AMENDMENT DATED 1/15/08. MET-161, STIP DATED 1/16/08.

Funding for the acquisition and construction of passenger shelters and amenities in the SR 520 corridor. Funds for this activity line item were moved from activity line item 11.33.10 in the contingency budget of this grant.

Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll credits in the amount of \$100,000 will be aggregated as match for this project.

MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio.  
Amendment 07-08 approved 9/10/07, STIP approved 1/16/08.

<b>11.61.20</b>	ENG/DES REAL TIME INFO SYST (FY06,07 SECT 5309 DISC)(100:0)	0	\$111,621.00	\$111,621.00
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(00) INITIAL APPLICATION, MET-161, SECTION 5309 BUS DISCRETIONARY FUNDING, INITIAL STIP DATED 2/6/07.

Preliminary engineering and environmental work for a real time information system at bus stops in the SR 520 corridor.

Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll credits in the amount of \$27,905 will be aggregated as match for this project.

MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio.  
Amendment 07-08 approved 9/10/07

<b>11.62.20</b>	EQUIP REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01)	0	\$105,000.00	\$105,000.00
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(01) FIRST AMENDMENT DATED 1/15/08. MET-161, STIP DATED 1/16/08.

Funding for acquisition of equipment for a Real Time Information system at shelters and stops in the SR 520 corridor. Funds were moved out of contingency line item 11.62.20 of this grant.

Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll credits in the amount of \$26,250 will be aggregated as match for this project.

MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio.  
Amendment 07-08 approved 9/10/07, STIP approved 1/16/08.

<b>11.63.20</b>	CONST. REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01)	0	\$297,026.00	\$297,026.00
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(01) FIRST AMENDMENT DATED 1/15/08. MET-161, STIP DATED 2/6/07.

Funding for construction of a Real Time Information system at shelters and stops in the SR 520 corridor. Funds were moved out of contingency line item 11.63.20 of this grant.

Funding for this project is at an 80:20 federal to non-federal ratio; however, for this grant the match ratio is 100:0 as toll credits in the amount of \$74,257 will be aggregated as match for this project.

MET-161, Section 5309 (Bus Discretionary) funds at an 100:0 federal to non-federal ratio.  
Amendment 07-08 approved 9/10/07, STIP approved 1/16/08.

<b>11.61.20</b>	ENG/DES. REAL TIME INFO SYS - ITS CODE	0	\$111,621.00	\$111,621.00
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(01) Non-add scope for ITS architecture requirements.

<b>11.62.20</b>	EQUIP REAL TIME INFO SYS - ITS CODE	0	\$105,000.00	\$105,000.00
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(01) Non-add scope for ITS architecture requirements.

<b>11.63.20</b>	CONSTRUCT REAL TIME INFO SYS - ITS CODE	0	\$297,026.00	\$297,026.00
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(01) Non-add scope for ITS architecture requirements.

<b>11.62.20</b>	EQUIPMENT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	0	\$0.00	\$0.00
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(01) FIRST AMENDMENT DATED 1/15/08.

All funds moved from this line item to activity line item 11.62.20 in the active budget under scope 116-00 to fund the equipment purchase for the Real Time Information System in the SR-520 corridor.

MET-161, STIP DATED 1/16/08, AMENDMENT 07-08 DATED 9/10/07.

Contingency funding for acquisition of equipment for a Real Time Information system at shelters and stops in the SR 520 corridor. Toll credits will be used as match for this project.

<b>11.63.20</b>	CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	0	\$0.00	\$0.00
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01) FIRST AMENDMENT DATED 1/15/08.

All funds moved from this line item to activity line item 11.63.20 in the active budget under scope 116-00 to fund the construction of a Real Time Information System in the SR-520 corridor.

MET-161, STIP DATED 1/16/08, AMENDMENT 07-08 DATED 9/10/07.

Contingency funding for construction of a Real Time Information system at shelters and stops in the SR 520 corridor. Toll credits will be used as match for this project.

<b>11.33.10</b>	CONSTRUCT BUS SHELTERS (FY07 SECT 5309 DISC)(100:0)	0	\$0.00	\$0.00
(01) FIRST AMENDMENT DATED 1/15/08. Funds from this contingency line item were shifted to activity line items 11.31.10 and 11.33.10 in the active budget to fund the design, acquisition and construction of passenger shelters and amenities in the SR-520 corridor. MET-161, STIP DATED 1/16/08, AMENDMENT 07-08 DATED 9/10/07. Contingency funding for the design, acquisition and installation of passenger shelters and amenities in the SR 520 corridor. Toll credits will be used to match these funds.				
<b>11.13.01</b>	BUY 40FT HYBRID BUS FOR EXPAN (FY07)(TC) (100:0)(00)	25	\$0.00	\$3,706,250.00
Toll credits as match for 80:20 ratio.				
<b>11.13.06</b>	BUY 60FT ARTIC BUS FOR EXPAN (FY07)(TC) (100:0)(00)	20	\$0.00	\$4,210,000.00
Toll credits used as match for an 80:20 ratio.				
<b>11.31.04</b>	PE/DESIGN S. KIRKLAND P&R GARAGE (FY07) (TC)(100:0)(00)	0	\$0.00	\$250,000.00
Toll credits used as match for an 80:20 ratio				
<b>11.33.04</b>	CONST. REDMOND P&R GARAGE (FY07)(TC) (100:0)(00)	0	\$0.00	\$540,938.00
Toll credits used as match for an 80:20 ratio.				
<b>11.61.20</b>	ENG/DES REAL TIME INFO SYST (FY07)(TC) (100:0)(00)	0	\$0.00	\$27,905.00
Toll credits used as match for an 80:20 ratio.				
<b>11.62.20</b>	EQUIPMENT REAL TIME INFO SYST (FY07)(TC) (100:0)	0	\$0.00	\$26,250.00
Toll credits used as match for an 80:20 match ratio.				
<b>11.63.20</b>	CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	0	\$0.00	\$74,257.00

Toll credits used as match for an 80:20 match ratio.				
<b>11.31.10</b>	DESIGN BUS SHELTERS (FY07)(TC)(100:0)(01)	0	\$0.00	\$25,000.00
(01) FIRST AMENDMENT DATED 1/15/08. Toll credits used as match for an 80:20 ratio. Amount reflects split of activity in line item 11.33.10 into design and construction activities.				
<b>11.33.10</b>	CONSTRUCT BUS SHELTERS (FY07 SECT 5309 DISC)(100:0)	0	\$0.00	\$100,000.00
(01) FIRST AMENDMENT DATED 1/15/08. Amount in this line item was reduced from \$125,000 to \$100,000 to reflect split of activity into design and construction activities. Additional amount is included in activity line item 113110. Toll credits used as match for an 80:20 ratio.				

## Changes since the Prior Budget

### FTA Change Amounts

<u>Code</u>	<u>Description</u>	<u>Previous FTA Total</u>	<u>Change in FTA Total</u>	<u>Current FTA Total</u>
111-00	BUS - ROLLING STOCK	\$31,665,000	\$0	\$31,665,000
11.13.01	BUY 40FT HYBRID BUS FOR EXPAN (FY06,07 5309 DISC)(100:0)(00)	\$14,825,000	\$0	\$14,825,000
11.13.06	BUY 60FT ARTIC BUS FOR EXPAN (FY06,07 5309 DISC)(100:0)(00)	\$16,840,000	\$0	\$16,840,000
113-00	REDMOND AND SOUTH KIRKLAND STRUCTURED PARKING	\$8,821,353	\$0	\$8,821,353
11.31.04	PE/ENVT S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC)(100:0)	\$1,000,000	\$0	\$1,000,000
11.31.04	DESIGN S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC)(100:0)(01)	\$500,000	\$0	\$500,000
11.33.04	CONST. S. KIRKLAND P&R GARAGE (FY06,07 DISC)(100:0)(01)	\$4,657,603	\$0	\$4,657,603
11.33.04	CONST. REDMOND P&R GARAGE (FY06,07 5309 DISC)(100:0)(00)	\$2,163,750	-\$305,266	\$1,858,484
11.31.04	DESIGN REDMOND P&R GARAGE (FY06,07 5309 DISC)(100:0)(01)	\$0	\$305,266	\$305,266
11.31.10	DESIGN SR-520 BUS SHELTERS (FY06,07 5309 DISC)(100:0)(01)	\$100,000	\$0	\$100,000
11.33.10	CONSTRUCT SR-520 BUS SHELTERS (FY06,07 5309 DISC)(100:0)(01)	\$400,000	\$0	\$400,000

116-00	REAL TIME INFORMATION SYSTEM (BUS)	\$513,647	\$0	\$513,647
11.61.20	ENG/DES REAL TIME INFO SYST (FY06,07 SECT 5309 DISC)(100:0)	\$111,621	\$0	\$111,621
11.62.20	EQUIP REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01)	\$105,000	\$0	\$105,000
11.63.20	CONST. REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01)	\$297,026	\$0	\$297,026
995-00	TRAVELER INFORMATION	\$513,647	\$0	\$513,647
11.61.20	ENG/DES. REAL TIME INFO SYS - ITS CODE	\$111,621	\$0	\$111,621
11.62.20	EQUIP REAL TIME INFO SYS - ITS CODE	\$105,000	\$0	\$105,000
11.63.20	CONSTRUCT REAL TIME INFO SYS - ITS CODE	\$297,026	\$0	\$297,026
999-01	ITS REAL TIME INFORMATION CONTINGENCY	\$0	\$0	\$0
11.62.20	EQUIPMENT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	\$0	\$0	\$0
11.63.20	CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	\$0	\$0	\$0
999-02	SHELTERS AND LIGHTING	\$0	\$0	\$0
11.33.10	CONSTRUCT BUS SHELTERS (FY07 SECT 5309 DISC)(100:0)	\$0	\$0	\$0
999-03	TOLL CREDITS	\$0	\$0	\$0
11.13.01	BUY 40FT HYBRID BUS FOR EXPAN (FY07)(TC)(100:0)(00)	\$0	\$0	\$0
11.13.06	BUY 60FT ARTIC BUS FOR EXPAN (FY07)(TC)(100:0)(00)	\$0	\$0	\$0
11.31.04	PE/DESIGN S. KIRKLAND P&R GARAGE (FY07)(TC)(100:0)(00)	\$0	\$0	\$0
11.33.04	CONST. REDMOND P&R GARAGE (FY07)(TC)(100:0)(00)	\$0	\$0	\$0
11.61.20	ENG/DES REAL TIME INFO SYST (FY07)(TC)(100:0)(00)	\$0	\$0	\$0
11.62.20	EQUIPMENT REAL TIME INFO SYST (FY07)(TC)(100:0)	\$0	\$0	\$0
11.63.20	CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	\$0	\$0	\$0
11.31.10	DESIGN BUS SHELTERS (FY07)(TC) (100:0)(01)	\$0	\$0	\$0
11.33.10	CONSTRUCT BUS SHELTERS (FY07 SECT 5309 DISC)(100:0)	\$0	\$0	\$0
11.33.04	CONST. S. KIRKLAND P&R GARAGE (FY07)(TC)(100:0)(01)	\$0	\$0	\$0

### Eligible Change Amounts

<u>Code</u>	<u>Description</u>	<u>Previous Eligible</u>	<u>Change in Eligible</u>	<u>Current Eligible</u>
111-00	BUS - ROLLING STOCK	\$31,665,000	\$0	\$31,665,000
11.13.01	BUY 40FT HYBRID BUS FOR EXPAN (FY06,07 5309 DISC)(100:0)(00)	\$14,825,000	\$0	\$14,825,000
11.13.06	BUY 60FT ARTIC BUS FOR EXPAN (FY06,07 5309 DISC)(100:0)(00)	\$16,840,000	\$0	\$16,840,000
113-00	REDMOND AND SOUTH KIRKLAND STRUCTURED PARKING	\$8,821,353	\$0	\$8,821,353
11.31.04	PE/ENVT S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC)(100:0)	\$1,000,000	\$0	\$1,000,000
11.31.04	DESIGN S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC)(100:0)(01)	\$500,000	\$0	\$500,000
11.33.04	CONST. S. KIRKLAND P&R GARAGE (FY06,07 DISC)(100:0)(01)	\$4,657,603	\$0	\$4,657,603
11.33.04	CONST. REDMOND P&R GARAGE (FY06,07 5309 DISC)(100:0)(00)	\$2,163,750	-\$305,266	\$1,858,484
11.31.04	DESIGN REDMOND P&R GARAGE (FY06,07 5309 DISC)(100:0)(01)	\$0	\$305,266	\$305,266
11.31.10	DESIGN SR-520 BUS SHELTERS (FY06,07 5309 DISC)(100:0)(01)	\$100,000	\$0	\$100,000
11.33.10	CONSTRUCT SR-520 BUS SHELTERS (FY06,07 5309 DISC) (100:0)(01)	\$400,000	\$0	\$400,000
116-00	REAL TIME INFORMATION SYSTEM (BUS)	\$513,647	\$0	\$513,647
11.61.20	ENG/DES REAL TIME INFO SYST (FY06,07 SECT 5309 DISC)(100:0)	\$111,621	\$0	\$111,621
11.62.20	EQUIP REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01)	\$105,000	\$0	\$105,000
11.63.20	CONST. REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01)	\$297,026	\$0	\$297,026
995-00	TRAVELER INFORMATION	\$513,647	\$0	\$513,647
11.61.20	ENG/DES. REAL TIME INFO SYS - ITS CODE	\$111,621	\$0	\$111,621
11.62.20	EQUIP REAL TIME INFO SYS - ITS CODE	\$105,000	\$0	\$105,000
11.63.20	CONSTRUCT REAL TIME INFO SYS - ITS CODE	\$297,026	\$0	\$297,026
999-01	ITS REAL TIME INFORMATION CONTINGENCY	\$0	\$0	\$0
11.62.20	EQUIPMENT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	\$0	\$0	\$0
11.63.20	CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	\$0	\$0	\$0
999-02	SHELTERS AND LIGHTING	\$0	\$0	\$0
11.33.10	CONSTRUCT BUS SHELTERS (FY07	\$0	\$0	\$0

	SECT 5309 DISC)(100:0)			
999-03	TOLL CREDITS	\$10,125,001	\$0	\$10,125,001
11.13.01	BUY 40FT HYBRID BUS FOR EXPAN (FY07)(TC)(100:0)(00)	\$3,706,250	\$0	\$3,706,250
11.13.06	BUY 60FT ARTIC BUS FOR EXPAN (FY07)(TC)(100:0)(00)	\$4,210,000	\$0	\$4,210,000
11.31.04	PE/DESIGN S. KIRKLAND P&R GARAGE (FY07)(TC)(100:0)(00)	\$250,000	\$0	\$250,000
11.33.04	CONST. REDMOND P&R GARAGE (FY07)(TC)(100:0)(00)	\$540,938	\$0	\$540,938
11.61.20	ENG/DES REAL TIME INFO SYST (FY07)(TC)(100:0)(00)	\$27,905	\$0	\$27,905
11.62.20	EQUIPMENT REAL TIME INFO SYST (FY07)(TC)(100:0)	\$26,250	\$0	\$26,250
11.63.20	CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	\$74,257	\$0	\$74,257
11.31.10	DESIGN BUS SHELTERS (FY07)(TC) (100:0)(01)	\$25,000	\$0	\$25,000
11.33.10	CONSTRUCT BUS SHELTERS (FY07 SECT 5309 DISC)(100:0)	\$100,000	\$0	\$100,000
11.33.04	CONST. S. KIRKLAND P&R GARAGE (FY07)(TC)(100:0)(01)	\$1,164,401	\$0	\$1,164,401

### **Change in Quantity**

<u>Code</u>	<u>Description</u>	<u>Previous Quantity</u>	<u>Change in Quantity</u>	<u>Current Quantity</u>
111-00	BUS - ROLLING STOCK	45	0	45
11.13.01	BUY 40FT HYBRID BUS FOR EXPAN (FY06,07 5309 DISC)(100:0)(00)	25	0	25
11.13.06	BUY 60FT ARTIC BUS FOR EXPAN (FY06,07 5309 DISC)(100:0)(00)	20	0	20
113-00	REDMOND AND SOUTH KIRKLAND STRUCTURED PARKING	0	0	0
11.31.04	PE/ENVT S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC)(100:0)	0	0	0
11.31.04	DESIGN S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC)(100:0)(01)	0	0	0
11.33.04	CONST. S. KIRKLAND P&R GARAGE (FY06,07 DISC)(100:0)(01)	0	0	0
11.33.04	CONST. REDMOND P&R GARAGE (FY06,07 5309 DISC)(100:0)(00)	0	0	0
11.31.04	DESIGN REDMOND P&R GARAGE (FY06,07 5309 DISC)(100:0)(01)	0	0	0
11.31.10	DESIGN SR-520 BUS SHELTERS (FY06,07 5309 DISC)(100:0)(01)	0	0	0
	CONSTRUCT SR-520 BUS			

11.33.10	SHELTERS (FY06,07 5309 DISC) (100:0)(01)	0	0	0
116-00	REAL TIME INFORMATION SYSTEM (BUS)	0	0	0
11.61.20	ENG/DES REAL TIME INFO SYST (FY06,07 SECT 5309 DISC)(100:0)	0	0	0
11.62.20	EQUIP REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01)	0	0	0
11.63.20	CONST. REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01)	0	0	0
995-00	TRAVELER INFORMATION	0	0	0
11.61.20	ENG/DES. REAL TIME INFO SYS - ITS CODE	0	0	0
11.62.20	EQUIP REAL TIME INFO SYS - ITS CODE	0	0	0
11.63.20	CONSTRUCT REAL TIME INFO SYS - ITS CODE	0	0	0
999-01	ITS REAL TIME INFORMATION CONTINGENCY	0	0	0
11.62.20	EQUIPMENT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	0	0	0
11.63.20	CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	0	0	0
999-02	SHELTERS AND LIGHTING	0	0	0
11.33.10	CONSTRUCT BUS SHELTERS (FY07 SECT 5309 DISC)(100:0)	0	0	0
999-03	TOLL CREDITS	45	0	45
11.13.01	BUY 40FT HYBRID BUS FOR EXPAN (FY07)(TC)(100:0)(00)	25	0	25
11.13.06	BUY 60FT ARTIC BUS FOR EXPAN (FY07)(TC)(100:0)(00)	20	0	20
11.31.04	PE/DESIGN S. KIRKLAND P&R GARAGE (FY07)(TC)(100:0)(00)	0	0	0
11.33.04	CONST. REDMOND P&R GARAGE (FY07)(TC)(100:0)(00)	0	0	0
11.61.20	ENG/DES REAL TIME INFO SYST (FY07)(TC)(100:0)(00)	0	0	0
11.62.20	EQUIPMENT REAL TIME INFO SYST (FY07)(TC)(100:0)	0	0	0
11.63.20	CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0)	0	0	0
11.31.10	DESIGN BUS SHELTERS (FY07)(TC) (100:0)(01)	0	0	0
11.33.10	CONSTRUCT BUS SHELTERS (FY07 SECT 5309 DISC)(100:0)	0	0	0
11.33.04	CONST. S. KIRKLAND P&R GARAGE (FY07)(TC)(100:0)(01)	0	0	0

**Change in Amendment Control Totals**

<u>Description</u>	<u>Previous Amount</u>	<u>Change in Amount</u>	<u>Current Amount</u>
<b>Gross Project Cost:</b>	\$16,556,873	\$0	\$16,556,873
<b>Adjustment Amount:</b>	\$10,497,244	\$0	\$10,497,244
<b>Total Eligible Cost:</b>	\$6,059,629	\$0	\$6,059,629
<b>Total FTA Amount:</b>	\$6,059,629	\$0	\$6,059,629
<b>Total State Amount:</b>	\$0	\$0	\$0
<b>Total Local Amount:</b>	\$0	\$0	\$0
<b>Other Federal Amount:</b>	\$0	\$0	\$0
<b>Special Condition Amount:</b>	\$0	\$0	\$0

**Change in Project Control Totals**

<u>Description</u>	<u>Previous Amount</u>	<u>Change in Amount</u>	<u>Current Amount</u>
<b>Gross Project Cost:</b>	\$51,497,244	\$0	\$51,497,244
<b>Adjustment Amount:</b>	\$10,497,244	\$0	\$10,497,244
<b>Total Eligible Cost:</b>	\$41,000,000	\$0	\$41,000,000
<b>Total FTA Amount:</b>	\$0	\$0	\$41,000,000
<b>Total State Amount:</b>	\$0	\$0	\$0
<b>Total Local Amount:</b>	\$0	\$0	\$0
<b>Other Federal Amount:</b>	\$0	\$0	\$0
<b>Special Condition Amount:</b>	\$0	\$0	\$0

**Part 4. Milestones**

**11.13.01** BUY 40FT HYBRID BUS FOR EXPAN 25 \$14,825,000 \$14,825,000  
(FY06,07 5309 DISC)(100:0)(00)

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB OUT FOR BID	Dec. 30, 2007
2.	CONTRACT AWARDED	Jun. 15, 2008
3.	FIRST VEHICLE DELIVERED	Dec. 31, 2008
4.	ALL VEHICLES DELIVERED	Feb. 15, 2009
5.	CONTRACT COMPLETE	Jun. 30, 2009

**11.13.06** BUY 60FT ARTIC BUS FOR EXPAN 20 \$16,840,000 \$16,840,000  
(FY06,07 5309 DISC)(100:0)(00)

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	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB OUT FOR BID	Apr. 30, 2007
2.	CONTRACT AWARDED	Jun. 15, 2008
3.	FIRST VEHICLE DELIVERED	Dec. 31, 2008
4.	ALL VEHICLES DELIVERED	Feb. 15, 2009
5.	CONTRACT COMPLETE	Jun. 30, 2009

**11.31.04** PE/ENVT S. KIRKLAND P&R GARAGE 0 \$1,000,000 \$1,000,000  
(FY06,07 5309 DISC)(100:0)

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Nov. 01, 2007
2.	Contract Award	Jan. 15, 2008
3.	Contract Complete	Jun. 30, 2009

**11.31.04** DESIGN S. KIRKLAND P&R GARAGE 0 \$500,000 \$500,000  
(FY06,07 5309 DISC)(100:0)(01)

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Mar. 31, 2008
2.	Contract Award	Jun. 30, 2009
3.	Contract Complete	Dec. 31, 2010

**11.33.04** CONST. S. KIRKLAND P&R GARAGE 0 \$4,657,603 \$4,657,603  
(FY06,07 DISC)(100:0)(01)

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Jan. 15, 2010
2.	Contract Award	Apr. 30, 2010
3.	Contract Complete	Dec. 31, 2012

**11.33.04** CONST. REDMOND P&R GARAGE 0 \$1,858,484 \$1,858,484  
(FY06,07 5309 DISC)(100:0)(00)

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2007
2.	Contract Award	Jan. 15, 2008
3.	Contract Complete	Jun. 30, 2009

**11.31.04** DESIGN REDMOND P&R GARAGE (FY06,07 5309 DISC)(100:0)(01) 0 \$305,266 \$305,266

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	None Specified
2.	Contract Award	None Specified
3.	Contract Complete	None Specified

**11.31.10** DESIGN SR-520 BUS SHELTERS (FY06,07 5309 DISC)(100:0)(01) 0 \$100,000 \$100,000

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2008
2.	Contract Award	Feb. 28, 2009
3.	Contract Complete	Dec. 31, 2010

**11.33.10** CONSTRUCT SR-520 BUS SHELTERS (FY06,07 5309 DISC)(100:0)(01) 0 \$400,000 \$400,000

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Nov. 30, 2009
2.	Contract Award	Feb. 28, 2010
3.	Contract Complete	Jun. 30, 2011

**11.61.20** ENG/DES REAL TIME INFO SYST (FY06,07 SECT 5309 DISC)(100:0) 0 \$111,621 \$111,621

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Nov. 01, 2007
2.	Contract Award	Jan. 31, 2008
3.	Contract Complete	Sep. 01, 2009

**11.62.20** EQUIP REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01) 0 \$105,000 \$105,000

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2009
2.	Contract Award	Feb. 28, 2010

3.	Contract Complete	Jun. 30, 2011
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**11.63.20** CONST. REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01) 0 \$297,026 \$297,026

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2009
2.	Contract Award	Feb. 28, 2010
3.	Contract Complete	Jun. 30, 2011

**11.61.20** ENG/DES. REAL TIME INFO SYS - ITS CODE 0 \$111,621 \$111,621

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Nov. 01, 2007
2.	Contract Award	Jan. 31, 2008
3.	Contract Complete	Sep. 01, 2009

**11.62.20** EQUIP REAL TIME INFO SYS - ITS CODE 0 \$105,000 \$105,000

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2009
2.	Contract Award	Feb. 28, 2010
3.	Contract Complete	Jun. 30, 2011

**11.63.20** CONSTRUCT REAL TIME INFO SYS - ITS CODE 0 \$297,026 \$297,026

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2009
2.	Contract Award	Feb. 28, 2010
3.	Contract Complete	Jun. 30, 2011

**11.62.20** EQUIPMENT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0) 0 \$0 \$0

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2008

2.	Contract Award	Dec. 31, 2008
3.	Contract Complete	Sep. 01, 2009

**11.63.20** CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0) 0 \$0 \$0

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2008
2.	Contract Award	Dec. 31, 2008
3.	Contract Complete	Sep. 01, 2009

**11.33.10** CONSTRUCT BUS SHELTERS (FY07 SECT 5309 DISC)(100:0) 0 \$0 \$0

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2007
2.	Contract Award	Jan. 15, 2008
3.	Contract Complete	Jun. 30, 2009

**11.13.01** BUY 40FT HYBRID BUS FOR EXPAN (FY07)(TC)(100:0)(00) 25 \$0 \$3,706,250

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB OUT FOR BID	Dec. 30, 2007
2.	CONTRACT AWARDED	Jun. 15, 2008
3.	FIRST VEHICLE DELIVERED	Dec. 31, 2008
4.	ALL VEHICLES DELIVERED	Feb. 15, 2009
5.	CONTRACT COMPLETE	Jun. 30, 2009

**11.13.06** BUY 60FT ARTIC BUS FOR EXPAN (FY07) (TC)(100:0)(00) 20 \$0 \$4,210,000

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB OUT FOR BID	Apr. 30, 2007
2.	CONTRACT AWARDED	Jun. 15, 2008
3.	FIRST VEHICLE DELIVERED	Dec. 31, 2008
4.	ALL VEHICLES DELIVERED	Feb. 15, 2009
5.	CONTRACT COMPLETE	Jun. 30, 2009

**11.31.04** PE/DESIGN S. KIRKLAND P&R GARAGE (FY07)(TC)(100:0)(00) 0 \$0 \$250,000

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Nov. 01, 2007
2.	Contract Award	Jan. 15, 2008
3.	Contract Complete	Jun. 30, 2009

**11.33.04** CONST. REDMOND P&R GARAGE (FY07)(TC)(100:0)(00) 0 \$0 \$540,938

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2007
2.	Contract Award	Jan. 15, 2008
3.	Contract Complete	Jun. 30, 2009

**11.61.20** ENG/DES REAL TIME INFO SYST (FY07)(TC)(100:0)(00) 0 \$0 \$27,905

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Nov. 01, 2007
2.	Contract Award	Jan. 31, 2008
3.	Contract Complete	Sep. 01, 2009

**11.62.20** EQUIPMENT REAL TIME INFO SYST (FY07)(TC)(100:0) 0 \$0 \$26,250

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2008
2.	Contract Award	Dec. 31, 2008
3.	Contract Complete	Sep. 01, 2009

**11.63.20** CONSTRUCT REAL TIME INFO SYST (FY07 SECT 5309 DISC)(100:0) 0 \$0 \$74,257

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2008
2.	Contract Award	Dec. 31, 2008

3.	Contract Complete	Sep. 01, 2009
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**11.31.10** DESIGN BUS SHELTERS (FY07)(TC)(100:0) 0 \$0 \$25,000  
(01)

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Oct. 31, 2008
2.	Contract Award	Feb. 28, 2009
3.	Contract Complete	Dec. 31, 2010

**11.33.10** CONSTRUCT BUS SHELTERS (FY07 SECT 5309 DISC)(100:0) 0 \$0 \$100,000

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Nov. 30, 2009
2.	Contract Award	Feb. 28, 2010
3.	Contract Complete	Jun. 30, 2011

**11.33.04** CONST. S. KIRKLAND P&R GARAGE (FY07)(TC)(100:0)(01) 0 \$0 \$1,164,401

	<u>Milestone Description</u>	<u>Est. Comp. Date</u>
1.	RFP/IFB Issued	Jan. 15, 2010
2.	Contract Award	Apr. 30, 2010
3.	Contract Complete	Dec. 31, 2012

## Part 5. Environmental Findings

**111301** BUY 40FT HYBRID BUS FOR EXPAN (FY06,07 5309 DISC)(100:0)(00) 25 \$14,825,000 \$14,825,000

### Finding No. 1 - Class II(c)

#### **C17** - Purchase of vehicles

The purchase of vehicles by the applicant where the use of these vehicles can be accommodated by existing facilities or by new facilities which themselves are within a CE.

Finding Details: Under Letter of No Prejudice dated 4/30/07.

**111306** BUY 60FT ARTIC BUS FOR

EXPAN (FY06,07 5309 DISC)(100:0)(00)	20	\$16,840,000	\$16,840,000
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Finding No. 1 - Class II(c)**C17** - Purchase of vehicles

The purchase of vehicles by the applicant where the use of these vehicles can be accommodated by existing facilities or by new facilities which themselves are within a CE.

Finding Details: Under Letter of No Prejudice dated 4/30/07.

<b>113104</b> PE/ENVT S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC)(100:0)	0	\$1,000,000	\$1,000,000
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Finding No. 1 - Class II(c)**C01** - Engineering/Design/Planning/Tech.Studies

Activities which do not involve or lead directly to construction, such as planning and technical studies; projects for training and research programs; planning activities eligible for assistance listed in 23 U.S.C. 134, 135, and 307(c); planning activities related to approval of a unified work program and any findings required in the planning process pursuant to 23 C.F.R. Part 450, activities for state planning and research programs pursuant to 23 C.F.R. Part 420; engineering to define the elements of a proposed action or alternatives so that social, economic, and environmental effects can be assessed.\n\n

Finding Details: Automatic CE for this phase of the project.

<b>113304</b> CONST. REDMOND P&R GARAGE (FY06,07 5309 DISC)(100:0)(00)	0	\$1,858,484	\$1,858,484
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Finding No. 1 - Class II(d)**D04** - Transportation parking facilities

Transportation corridor fringe parking facilities.

Finding Details: CE approved by letter dated 5/3/07. A copy of the letter is attached to this grant.

The project is located at 8178 161st Ave NE, Redmond. It is 386 stall garage.

<b>116120</b> ENG/DES REAL TIME INFO SYST (FY06,07 SECT 5309 DISC)(100:0)	0	\$111,621	\$111,621
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Finding No. 1 - Class II(c)**C01** - Engineering/Design/Planning/Tech.Studies

Activities which do not involve or lead directly to construction, such as planning and technical studies; projects for training and research programs; planning activities eligible for assistance listed in 23 U.S.C. 134, 135, and 307(c); planning activities related to approval of a unified work program and any findings required in the planning process pursuant to 23 C.F.R. Part 450, activities for state planning and research programs pursuant to 23 C.F.R. Part 420;

engineering to define the elements of a proposed action or alternatives so that social, economic, and environmental effects can be assessed.\n\n

Finding Details: Automatic CE for this phase of the project.

<b>113104</b> DESIGN S. KIRKLAND P&R GARAGE (FY06,07 5309 DISC)(100:0)(01)	0	\$500,000	\$500,000
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#### Finding No. 1 - Class II(d)

**D04** - Transportation parking facilities  
Transportation corridor fringe parking facilities.

Finding Details: Per FTA request.

<b>113304</b> CONST. S. KIRKLAND P&R GARAGE (FY06,07 DISC)(100:0)(01)	0	\$4,657,603	\$4,657,603
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#### Finding No. 1 - Class II(d)

**D04** - Transportation parking facilities  
Transportation corridor fringe parking facilities.

Finding Details: Per FTA request.

<b>113110</b> DESIGN SR-520 BUS SHELTERS (FY06,07 5309 DISC)(100:0)(01)	0	\$100,000	\$100,000
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#### Finding No. 1 - Class II(c)

**C08** - Install Shelters, fencing, & Amenities  
Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur.

Finding Details: Per FTA request.

<b>113310</b> CONSTRUCT SR-520 BUS SHELTERS (FY06,07 5309 DISC)(100:0)(01)	0	\$400,000	\$400,000
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#### Finding No. 1 - Class II(c)

**C08** - Install Shelters, fencing, & Amenities  
Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur.

Finding Details: Per FTA request

<b>116220</b> EQUIP REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01)	0	\$105,000	\$105,000
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Finding No. 1 - Class II(c)

**C08** - Install Shelters, fencing, & Amenities

Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur.

Finding Details: Per FTA request.

<b>116320</b> CONST. REAL TIME INFO SYST (FY06,07 5309 DISC)(100:0)(01)	0	\$297,026	\$297,026
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Finding No. 1 - Class II(c)

**C08** - Install Shelters, fencing, & Amenities

Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur.

Finding Details: Per FTA request

**FTA Quarterly Project Milestone Progress Report (MPR)**  
**First Quarter, Federal Fiscal Year 2011 (October 1 - December 31, 2010)**

**EXHIBIT D**

<b>Project Manager:</b>		<b>Phone:</b> (206) <b>M.S.:</b>	<b>KCDOT Division/Section:</b>
<b>Project Name:</b>		<b>FTA Grant#:</b>	
<b>Fund Source:</b>	<b>FTA Scope#:</b>	<b>BLI#:</b>	<b>IBIS Grant#:</b>
	<b>STIP#:</b>	<b>CIP#:</b>	<b>IBIS Project#:</b>
	<b>STIP Approval Date:</b>		

**Project Description:**

Milestones	Estimated Completion Date	Revised Completion Date	ACTUAL Completion Date
1. RFP/IFB Out For Bid			
2. Contract Awarded			
3. First Vehicle Delivered			
4. All Vehicles Delivered			
5. Contract Complete			
6. Closeout			

\*For completion date, use date when last segment will be finished.

**First Quarter 2011 Information**

**1. Describe the Current Quarter Activities. Relate activities to project milestones. Provide a narrative description of status, any resolutions of protest, contract awards (including contract numbers), partners.**

[Redacted]

**2. What are the Planned Activities for the Upcoming Quarter? Relate activities to milestones.**

[Redacted]

**3. Discuss Any Significant Changes to the project, including explanation for revised completion dates, schedule, scope, cost. If applicable, list all outstanding claims & charge orders exceeding \$100,000 & any claims settled during this Quarter.**

[Redacted]

**4. Discuss your Force Account Activities.**

[Redacted]

**5. Project Cost Summary by Phase:**

Phase	Initial Total Project Cost by Phase	Revised Total Project Cost by Phase	Total Grant Eligible Project Cost by Phase
PE/Environmental			
Design			
ROW			
Construction/Implementation			
Contingency			
<b>Total</b>	\$ -	\$ -	\$ -

**6. Are there Sub-Awards/Sub-Grants Entities with pass-through grant funding associated with this project? Subrecipients receiving \$25,000 or more AND awarded funds on/after Oct. 1, 2010 are required to complete a FFATA Report.**

[Redacted]

If yes, please list the subrecipients:

Subrecipients	Role in the Project	Grant Amount	Match	Agreement End Date

**5. Project Cost Summary by Phase:**

Phase	Initial Total Project Cost by Phase	Revised Total Project Cost by Phase	Total Grant Eligible Project Cost by Phase
PE/Environmental			
Design			
ROW			
Construction/Implementation			
Contingency			
Total	\$ -	\$ -	\$ -



**King County**  
King County  
Department of Transportation

EXHIBIT E

## FTA Project Closeout Letter

<DATE>

### Grant Project Information

- ◆ Project Name:
- ◆ IBIS Grant and Project Numbers:
- ◆ FTA Grant Award Number(s):
- ◆ Project Manager(s):
- ◆ Budget Analyst:

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**Describe in detail how the project goals and objectives were met. Describe the milestones completed and key accomplishments.**

**Discuss any report, study, or printed material that the project has generated. Attach a copy of any grant funded materials with the signed closeout letter. Please note below what is being submitted to be placed in the Grant Section's official project file.**



List all fixed assets and equipment(s) (i.e., computer, furniture, etc.) purchased with FTA grant funds. Describe how equipment(s) was used in the project.

Note if any funds were unused, and explain why.

\_\_\_\_\_  
Project Manager Signature

\_\_\_\_\_  
Signature of PM's Supervisor

\_\_\_\_\_  
Budget Analyst Signature

Email the completed closeout letter (word format without signature is best) to:  
Dawn.Nguyen@kingcounty.gov

-AND-

Send the signed original with attachments to: Dawn Nguyen  
KCDOT - ORTP Grants Section  
KSC-TR-0814

**UNITED STATES OF AMERICA  
DEPARTMENT OF TRANSPORTATION  
FEDERAL TRANSIT ADMINISTRATION**

**MASTER AGREEMENT**

**For Federal Transit Administration Agreements authorized by  
49 U.S.C. chapter 53, Title 23, United States Code (Highways),  
the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users,  
as amended by the SAFETEA-LU Technical Corrections Act, 2008,  
the Transportation Equity Act for the 21<sup>st</sup> Century, as amended,  
the National Capital Transportation Act of 1969, as amended,  
the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5,  
February 17, 2009, or other Federal laws that FTA administers.**

**FTA MA(17)  
October 1, 2010**

<http://www.fta.dot.gov/documents/17-Master.pdf>

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**UNITED STATES DEPARTMENT OF TRANSPORTATION  
FEDERAL TRANSIT ADMINISTRATION**

**MASTER AGREEMENT**

This is the official Federal Transit Administration Master Agreement that contains the standard terms and conditions governing the administration of a Project supported with Federal assistance awarded by the Federal Transit Administration (FTA) through a Grant Agreement or Cooperative Agreement with the Recipient, or supported by FTA through a Transportation Infrastructure Loan, Loan Guarantee, or Line of Credit with the Recipient. This Master Agreement applies to Federal assistance authorized by Federal public transportation laws at 49 U.S.C. chapter 53; Title 23, United States Code (Highways); the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-59, August 10, 2005, as amended by the SAFETEA-LU Technical Corrections Act, 2008, Pub. L. 110-244, June 6, 2008; the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), Pub. L. 105-178, June 9, 1998, as amended; the National Capital Transportation Act of 1969; the D.C. Official Code, §§ 9-1111.01 *et seq.*; the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, February 17, 2009 (“Recovery Act”), or other Federal legislation FTA administers to the extent FTA so determines.

FTA and the Recipient understand and agree that not every provision of this Master Agreement will apply to every Recipient or every Project for which FTA provides Federal assistance through a Grant Agreement or Cooperative Agreement. The type of Project, the Federal laws and regulations authorizing Federal assistance for the Project, and the legal status of the Recipient as a “State,” “local government,” “private non-profit” entity, or “private for-profit” entity will determine which Federal laws, regulations, and directives apply. Federal laws, regulations, and directives that do not apply will not be enforced. Nevertheless, the Recipient understands and agrees that it must comply with all applicable Federal laws and regulations, and follow applicable Federal directives, except to the extent that FTA determines otherwise in writing. Any violation of a Federal law or regulation, or failure to follow a Federal directive applicable to the Recipient or its Project may result in penalties to the violating party.

This Master Agreement does not have an Expiration Date. The provisions of this Master Agreement will continue to apply to the Project unless or until modified or superseded by Federal laws, regulations, or directives effective at a later date, or Grant Agreements, Cooperative Agreements, or Master Agreements issued at a later date.

Thus, in consideration of the mutual covenants, promises, and representations herein, FTA and the Recipient agree as follows:

**Section 1. Definitions.**

a. Application means the signed and dated request for Federal assistance, including any amendment thereto, with all explanatory, supporting, and supplementary documents filed with FTA by or on behalf of the Recipient and accepted or approved by FTA.

b. Approval, Authorization, Concurrence, Waiver means a deliberate written statement (transmitted in typewritten hard copy or electronic format or medium) of a Federal Government official authorized to permit the Recipient to take or omit the action required by the Grant Agreement or Cooperative Agreement for the Project, or this Master Agreement, which action may not be taken or omitted without that permission. Except to the extent that FTA determines otherwise in writing, that approval, authorization, concurrence, or waiver permitting the performance or omission of a specific action does not constitute permission to perform or omit other similar actions. An oral permission or interpretation has no legal force, authority, or effect.

c. Approved Project Budget means the most recent statement of the costs of the Project, the maximum amount of Federal assistance for which the Recipient is currently eligible, the specific tasks (including specific contingencies) covered, and the estimated cost of each task that has been approved by FTA. As used in the "Approved Project Budget," the term "Scopes" means categories and the term "Scope Level Codes" means category codes. Although "Scopes" and "Scope Level Codes" generally indicate the type of activities encompassed by the Project, the data listed under "Scopes" and "Scope Level Codes" (for example), do not necessarily reflect, and are not intended to be treated as, prima facie evidence of the precise limits or boundaries of a Project, except to the extent that FTA determines otherwise in writing. FTA reserves the right to consider other information in determining what constitutes the "Scope of the Project" when that term is used for legal purposes.

d. Cooperative Agreement means an instrument by which FTA awards Federal assistance to a specific Recipient to support a particular Project in which FTA takes an active role or retains substantial control, as provided in 31 U.S.C. § 6305. The Cooperative Agreement consists of the FTA Award establishing the specific parameters of the Project, an Execution statement signed by the Recipient, and may include additional Special Conditions, Special Requirements, or Special Provisions. The latest applicable Master Agreement is incorporated by reference and made part of the Cooperative Agreement, except to the extent FTA determines otherwise in writing.

e. Federal Directive, for purposes of this Master Agreement, includes any Executive Order of the President of the United States, and any Federal document, irrespective of whether it is a published policy, administrative practice, circular, guideline, guidance, or letter signed by the head of a Federal agency or his or her designee, that provides instructions or official advice about a Federal program, including application processing procedures, program management, or other similar matters. The term "Federal Directive" encompasses "FTA Directives," "U.S. DOT Directives," and a similar document issued by another Federal department or agency.

f. Federal Government means the United States of America and any executive department or agency thereof.

g. Federal Transit Administration designates the former Urban Mass Transportation Administration. Any reference in any law, map, regulation, document, paper, or other record of the United States to the Urban Mass Transportation Administration is deemed a reference to the Federal Transit Administration.

- h. Federal Transit Administrator designates the former Urban Mass Transportation Administrator. Any reference in any law, map, regulation, document, paper, or other record of the United States to the Urban Mass Transportation Administrator is deemed a reference to the Federal Transit Administrator.
- i. FTA is the acronym for the Federal Transit Administration, an operating administration of the U.S. Department of Transportation (U.S. DOT). “FTA” replaces the acronym “UMTA.”
- j. Grant Agreement means the instrument by which FTA awards Federal assistance to a specific Recipient to support a particular Project in which FTA does not take an active role or retain substantial control, as provided in 31 U.S.C. § 6304. The Grant Agreement consists of the FTA Award establishing the specific parameters of the Project, an Execution statement signed by the Recipient, and may include additional Special Conditions, Special Requirements, or Special Provisions. The latest applicable Master Agreement is incorporated by reference and made part of the Grant Agreement, except to the extent FTA determines otherwise in writing.
- k. Local Government includes a public transportation authority, as well as a county, municipality, city, town, township, special district, council of governments, public corporation, board, or commission established under the laws of a State (whether or not incorporated as a private nonprofit organization under State law), regional or interstate government entity, Indian tribal government, or any agency or instrumentality thereof.
- l. Project means the activity or activities (task or tasks) listed in Project Description, the Approved Project Budget, and any modifications set forth in the Conditions of Award in the Grant Agreement or Cooperative Agreement for the Project, and any other Special Conditions, Special Requirements, or Special Provisions applicable to the Project. To the extent that a Recipient is required by any provision of 49 U.S.C. chapter 53 to prepare a “Program of Projects,” for purposes of this Master Agreement, the term “Project” encompasses both “Program” and “each Project within the Program,” as the context may require. For a Loan, Loan Guarantee, or Line of Credit financed with Federal assistance authorized under the Transportation Infrastructure Finance and Innovation Act of 1998, as amended, 23 U.S.C. §§ 601 through 609, “Project” means the transportation activities financed by that Loan, Loan Guarantee, or Line of Credit. For purposes of legal interpretations and other matters, FTA reserves the right to consider information apart from the data listed in FTA’s electronic management system under “Scopes” and “Scope Level Codes” of the “Approved Project Budget” to determine what constitutes the Scope of the Project or eligible project activities.
- m. Public Transportation means transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include schoolbus, charter, sightseeing, or intercity bus transportation or intercity passenger rail transportation provided by the entity described in 49 U.S.C. chapter 243 (Amtrak or a successor to Amtrak). The term “public transportation” also includes “mass transportation” and “transit.”
- n. Recipient means the entity that receives Federal assistance directly from FTA to support the Project. The term “Recipient” includes each “Grant Recipient” or “Grantee” that receives Federal assistance directly from FTA through a Grant and each Recipient that receives Federal

assistance directly from FTA through a Cooperative Agreement. Even if a single organization within a legal entity is designated the Recipient in the Grant Agreement or Cooperative Agreement, the entire legal entity is the Recipient, except to the extent that FTA has determined otherwise in writing. Thus, unless FTA has determined otherwise in writing, if the Recipient is a consortium, partnership, joint venture, team, or other multi-party entity, each participant in, member of, or party to that consortium, partnership, joint venture, team, or multi-party entity is deemed a “Recipient” for purposes of compliance with applicable requirements of the Grant Agreement or Cooperative Agreement for its Project.

o. Subagreement means an agreement through which a Recipient awards Federal assistance derived from FTA to a subrecipient as defined below. The term “subagreement” also includes the term “subgrant,” but does not include the term “third party subcontract.”

p. Subrecipient means any entity that receives Federal assistance awarded by an FTA Recipient, rather than by FTA directly. The term “subrecipient” also includes the term, “subgrantee,” but does not include “third party contractor” or “third party subcontractor.”

q. Third Party Contract means a contract or purchase order awarded by the Recipient or subrecipient to a contractor or vendor, financed in whole or in part with Federal assistance awarded by FTA.

r. Third Party Subcontract means a subcontract at any tier financed in whole or in part with Federal assistance originally derived from FTA that is entered into by the third party contractor or third party subcontractor.

s. U.S. DOT is the acronym for the United States Department of Transportation, including its operating administrations.

## **Section 2. Project Implementation.**

a. General. The Recipient agrees to carry out the Project as follows:

(1) Project Description. Because the “Project Description” in the FTA Award section of the Grant Agreement or Cooperative Agreement provides only a brief description of the Project or Projects to be funded, the Recipient agrees to perform the work as described in the “Project Description” and in its Application that is incorporated by reference in the approved Grant Agreement or Cooperative Agreement for the Project, and justifies the specific Federal assistance awarded for the Project.

(2) Effective Date. The effective date of the Grant Agreement, Cooperative Agreement, or Amendment thereto is the date on which the FTA Authorized Official awards Federal assistance as shown on the Grant Agreement, Cooperative Agreement, or Amendment thereto. The Recipient agrees to undertake Project work promptly after receiving notice that FTA has awarded Federal assistance for the Project.

(3) Recipient's Capacity. The Recipient agrees to maintain or acquire sufficient legal, financial, technical, and managerial capacity to: (a) plan, manage, and complete the Project and provide for the use of Project property; (b) carry out the safety and security aspects of the Project and (c) comply with the terms of its Grant Agreement or Cooperative Agreement for the Project, this Master Agreement, the Approved Project Budget, Project schedules, its annual Certifications and Assurances to FTA, and all applicable Federal laws and regulations, and follow Federal directives applicable to the Project and Recipient, except to the extent that FTA determines otherwise in writing.

(4) Completion Dates. The Recipient agrees to complete the Project in a timely manner. Nevertheless, except in the case of a Full Funding Grant Agreement or as otherwise specified, FTA and the Recipient agree that milestone dates and other Project completion dates are to be treated as good faith estimates rather than precise and firm legal requirements.

b. U.S. DOT Administrative Requirements. The Recipient agrees to comply with the Federal administrative requirements that apply to the category in which it belongs:

(1) State, Local Government, or Indian Tribal Government. U.S. DOT regulations, "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments," 49 C.F.R. Part 18, apply to a Recipient that is a State, local government, or Indian tribal government.

(2) Institution of Higher Education or Nonprofit Organization. U.S. DOT regulations, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations," 49 C.F.R. Part 19, apply to a Recipient that is an institution of higher education or a nonprofit organization.

(3) Private For-Profit Organization. Except to the extent that FTA determines otherwise in writing, U.S. DOT regulations, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations," 49 C.F.R. Part 19, apply to a Recipient that is a private for-profit organization.

c. Application of Federal, State, and Local Laws, Regulations, and Directives.

(1) Federal Laws, Regulations, and Directives. The Recipient agrees that Federal laws and regulations control Project award and implementation. The Recipient also agrees that Federal directives, as defined in this Master Agreement, provide Federal guidance applicable to the Project, except to the extent that FTA determines otherwise in writing. Thus, FTA strongly encourages adherence to applicable Federal directives. The Recipient understands and agrees that unless the recipient requests FTA approval in writing, the Recipient may incur a violation of Federal laws or regulations, its Grant Agreement or Cooperative Agreement, or this Master Agreement if it implements an alternative procedure or course of action not approved by FTA.

The Recipient understands and agrees that Federal laws, regulations, and directives applicable to the Project and to the Recipient on the date on which the FTA Authorized Official awards Federal assistance for the Project may be modified from time to time. In particular, new Federal

laws, regulations, and directives may become effective after the date on which the Recipient executes the Grant Agreement or Cooperative Agreement for the Project, and might apply to that Grant Agreement or Cooperative Agreement. The Recipient agrees that the most recent of such Federal laws, regulations, and directives will apply to the administration of the Project at any particular time, except to the extent that FTA determines otherwise in writing.

FTA's written determination may take the form of a Special Condition, Special Requirement, Special Provision, or Condition of Award within the Grant Agreement or Cooperative Agreement for the Project, a change to an FTA directive, or a letter to the Recipient signed by the Federal Transit Administrator or his or her duly authorized designee, the text of which modifies or conditions a specific provision of the Grant Agreement or Cooperative Agreement for the Project or this Master Agreement. To accommodate changing Federal requirements, the Recipient agrees to include in each agreement with each subrecipient, each lease, each third party contract, and other similar document implementing the Project notice that Federal laws, regulations, and directives may change and that the changed provisions will apply to the Project, except to the extent that FTA determines otherwise in writing. All standards or limits in the Grant Agreement or Cooperative Agreement for the Project, and in this Master Agreement are minimum requirements, unless modified by FTA.

(2) State, Territorial, and Local Law. Should a Federal law pre-empt a State, territorial, or local law, regulation, or ordinance, the Recipient must comply with the Federal law and implementing regulations. Nevertheless, no provision of the Grant Agreement or Cooperative Agreement for the Project, or this Master Agreement requires the Recipient to observe or enforce compliance with any provision, perform any other act, or do any other thing in contravention of State, territorial, or local law, regulation, or ordinance. Thus if compliance with any provision of the Grant Agreement or Cooperative Agreement for the Project, or this Master Agreement violates or would require the Recipient to violate any State, territorial, or local law, regulation, or ordinance, the Recipient agrees to notify FTA immediately in writing. Should this occur, FTA and the Recipient agree that they will make appropriate arrangements to proceed with or, if necessary, terminate the Project expeditiously.

d. Recipient's Primary Responsibility to Comply with Federal Requirements. Irrespective of involvement by any other entity in the Project, the Recipient agrees that it, rather than any other entity, is ultimately responsible for compliance with all applicable Federal laws and regulations, the Grant Agreement or Cooperative Agreement for the Project, and this Master Agreement, in accordance with applicable Federal directives, except to the extent that FTA determines otherwise in writing.

(1) Significant Participation by a Subrecipient. Although the Recipient may delegate any or almost all Project responsibilities to one or more subrecipients, the Recipient agrees that it, rather than any subrecipient, is ultimately responsible for compliance with all applicable Federal laws, and regulations, in accordance with applicable Federal directives, except to the extent that FTA determines otherwise in writing.

(2) Significant Participation by a Lessee of a Recipient. Although the Recipient may lease Project property and delegate some or many Project responsibilities to one or more lessees, the

Recipient agrees that it, rather than any lessee, is ultimately responsible for compliance with all applicable Federal laws and regulations, in accordance with applicable Federal directives, except to the extent that FTA determines otherwise in writing.

(3) Significant Participation by a Third Party Contractor. Although the Recipient may enter into a third party contract in which the third party contractor agrees to provide property or services in support of the Project, or even carry out Project activities normally performed by the Recipient (such as in a turnkey contract), the Recipient agrees that it, rather than the third party contractor, is ultimately responsible to FTA for compliance with all applicable Federal laws and regulations, in accordance with applicable Federal directives, except to the extent that FTA determines otherwise in writing.

(4) Exceptions. The Recipient, however, is relieved of the requirement to comply with Federal requirements in the following two circumstances:

(a) When the Designated Recipient of Urbanized Area Formula Program assistance as defined at 49 U.S.C. § 5307(a)(2) has entered into a Supplemental Agreement with FTA and a Grant Recipient or Grantee covering the Project, the Designated Recipient is not responsible for compliance with Federal requirements in connection with the Project, or

(b) When the Federal Government, through appropriate official action, relieves the Recipient of a portion of or all responsibility to the Federal Government.

e. Recipient's Responsibility to Extend Federal Requirements to Other Entities.

(1) Entities Affected. Only entities that are signatories to the Grant Agreement or Cooperative Agreement for the Project are parties to that Grant Agreement or Cooperative Agreement. To achieve compliance with certain Federal laws and regulations, in accordance with applicable Federal directives, however, other entities participating in the Project through their involvement with the Recipient, (such as a subrecipient, lessee, third party contractor, or other participant) will necessarily be affected. Accordingly, the Recipient agrees to take appropriate measures necessary to ensure that all Project participants comply with all applicable Federal laws and regulations, and follow applicable Federal directives affecting Project implementation, except to the extent FTA determines otherwise in writing. In addition, if an entity other than the Recipient is expected to fulfill any responsibilities typically performed by the Recipient, the Recipient agrees to assure that the entity carries out the Recipient's responsibilities as set forth in the Grant Agreement or Cooperative Agreement for the Project or this Master Agreement.

(2) Documents Affected. The applicability provisions of Federal laws, regulations, and directives determine the extent to which those provisions affect an entity (such as a subrecipient, lessee, third party contractor, or other participant) participating in the Project through the Recipient. Thus, the Recipient agrees to use a written document to ensure that each entity participating in the Project complies with applicable Federal laws and regulations, and follows applicable Federal directives, except to the extent that FTA determines otherwise in writing.

(a) Required Clauses. The Recipient agrees to use a written document (such as a subagreement, lease, third party contract, or other similar document) including all appropriate clauses stating the entity's (subrecipient, lessee, third party contractor, or other participant) responsibilities under applicable Federal laws and regulations, in accordance with applicable Federal directives, except to the extent that FTA determines otherwise in writing.

(b) Flowdown. The Recipient agrees to include in each document (subagreement, lease, third party contract, or other similar document) any necessary provisions requiring the Project participant (subrecipient, lessee, third party contractor, or other participant) to impose applicable Federal requirements and directives on its subrecipients, lessees, third party contractors and other participants in the Project at the lowest tier necessary, except to the extent that FTA determines otherwise in writing.

(c) Performance of Recipient's Responsibilities. When the document (subagreement, lease, third party contract, or other similar document) requires the Project participant (subrecipient, lessee, third party contractor, or other participant) to undertake responsibilities for the Project usually performed by the Recipient, the Recipient agrees also to include in that document (subagreement, lease, third party contract or other similar document) appropriate provisions that would be applicable to the Recipient as set forth in the Grant Agreement or Cooperative Agreement for the Project or this Master Agreement, and extend those provisions to the subrecipients, lessees, third party contractors, and other Project participants to the lowest tier necessary, except to the extent as FTA determines otherwise in writing.

f. No Federal Government Obligations to Third Parties. In connection with the Project, the Recipient agrees that, absent the Federal Government's express written consent, the Federal Government shall not be subject to any obligations or liabilities to any subrecipient, lessee, third party contractor, or other participant at any tier of the Project, or other person or entity that is not a party to the Grant Agreement or Cooperative Agreement for the Project. Notwithstanding that the Federal Government may have concurred in or approved any solicitation, subagreement, lease, third party contract, or arrangement at any tier, the Federal Government has no obligations or liabilities to any entity other than the Recipient, including any subrecipient, lessee, third party contractor, or other participant at any tier of the Project.

g. Changes in Project Performance (i.e., Disputes, Breaches, Defaults, or Litigation). The Recipient agrees to notify FTA immediately, in writing, of any change in local law, conditions (including its legal, financial, or technical capacity), or any other event that may adversely affect the Recipient's ability to perform the Project in accordance with the terms of the Grant Agreement or Cooperative Agreement for the Project and this Master Agreement. The Recipient also agrees to notify FTA immediately, in writing, of any current or prospective major dispute, breach, default, or litigation that may adversely affect the Federal Government's interests in the Project or the Federal Government's administration or enforcement of Federal laws or regulations; and agrees to inform FTA, also in writing, before naming the Federal Government as a party to litigation for any reason, in any forum. At a minimum, the Recipient agrees to provide each notice to FTA required by this subsection of this Master Agreement to the FTA Regional Counsel for the Region in which the Recipient operates its public transportation system or implements the Project.

### **Section 3. Ethics.**

a. Code of Conduct/Standards of Conduct. The Recipient agrees to maintain a written code of conduct or standards of conduct that shall govern the actions of its officers, employees, board members, or agents engaged in the award or administration of subagreements, leases, third party contracts, or other arrangements supported with Federal assistance. The Recipient agrees that its code of conduct or standards of conduct shall specify that its officers, employees, board members, or agents may neither solicit nor accept gratuities, favors, or anything of monetary value from any present or potential subrecipient, lessee, third party contractor, or other participant at any tier of the Project, or agent thereof. Such a conflict would arise when an employee, officer, board member, or agent, including any member of his or her immediate family, partner, or organization that employs, or intends to employ, any of the parties identified herein has a financial interest in the entity selected for award. The Recipient may set *de minimis* rules where the financial interest is not substantial, or the gift is an unsolicited item of nominal intrinsic value. The Recipient agrees that its code of conduct or standards of conduct shall also prohibit its officers, employees, board members, or agents from using their respective positions in a manner that presents a real or apparent personal or organizational conflict of interest or personal gain. As permitted by State or local law or regulations, the Recipient agrees that its code of conduct or standards of conduct shall include penalties, sanctions, or other disciplinary actions for violations of its code or standards by its officers, employees, board members, or their agents, or the Recipient's subrecipients, lessees, third party contractors, other participants, or their agents.

(1) Personal Conflicts of Interest. The Recipient agrees that its code of conduct or standards of conduct shall prohibit the Recipient's employees, officers, board members, or agents from participating in the selection, award, or administration of any subagreement, lease, third party contract, or other arrangement at any tier, supported by Federal assistance if a real or apparent conflict of interest would be involved. Such a conflict would arise when an employee, officer, board member, or agent, including any member of his or her immediate family, partner, or organization that employs, or intends to employ, any of the parties listed herein has a financial interest in the entity selected for award.

(2) Organizational Conflicts of Interest. The Recipient agrees that its code of conduct or standards of conduct shall include procedures for identifying and preventing real and apparent organizational conflicts of interest. An organizational conflict of interest exists when the nature of the work to be performed under a proposed subagreement, lease, third party contract, or other arrangement at any tier may, without some restrictions on future activities, result in an unfair competitive advantage to the subrecipient, lessee, third party contractor, or other participant at any tier of the Project or impair its objectivity in performing the contract work.

b. Debarment and Suspension. The Recipient agrees to comply with applicable provisions of Executive Orders Nos. 12549 and 12689, "Debarment and Suspension," 31 U.S.C. § 6101 note, and U.S. DOT regulations, "Nonprocurement Suspension and Debarment," 2 C.F.R. Part 1200, which adopt and supplement the provisions of U.S. Office of Management and Budget

(U.S. OMB) ,“Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement),” 2 C.F.R. Part 180. To the extent required by these U.S. DOT regulations and U.S. OMB guidance, the Recipient agrees to review the “Excluded Parties Listing System” at <http://epls.gov/> and to include a similar term or condition in each lower tier covered transaction, assuring that, to the extent required by the U.S. DOT regulations and U.S. OMB guidance, each subrecipient, lessee, third party contractor, and other participant at a lower tier of the Project, will review the “Excluded Parties Listing System” at <http://epls.gov/>, and will include a similar term or condition in each of its lower tier covered transactions.

c. Bonus or Commission. The Recipient affirms that it has not paid, and agrees not to pay, any bonus or commission to obtain approval of its Federal assistance application for the Project.

d. Lobbying Restrictions. The Recipient agrees that:

(1) In compliance with 31 U.S.C. § 1352(a), it will not use Federal assistance to pay the costs of influencing any officer or employee of a Federal agency, Member of Congress, officer of Congress or employee of a member of Congress, in connection with making or extending the Grant Agreement or Cooperative Agreement;

(2) In addition, it will comply with other applicable Federal laws and regulations prohibiting the use of Federal assistance for activities designed to influence Congress or a State legislature with respect to legislation or appropriations, except through proper, official channels; and

(3) It will comply, and will assure the compliance of each subrecipient, lessee, third party contractor, or other participant at any tier of the Project with U.S. DOT regulations, “New Restrictions on Lobbying,” 49 C.F.R. Part 20, modified as necessary by 31 U.S.C. § 1352, as amended.

e. Employee Political Activity. To the extent applicable, the Recipient agrees to comply with the provisions of the Hatch Act, 5 U.S.C. §§ 1501 through 1508, and 7324 through 7326, and U.S. Office of Personnel Management regulations, “Political Activity of State or Local Officers or Employees,” 5 C.F.R. Part 151. The Hatch Act limits the political activities of State and local agencies and their officers and employees, whose principal employment activities are financed in whole or part with Federal funds including a Federal grant, cooperative agreement, or loan. Nevertheless, in accordance with 49 U.S.C. § 5307(k)(2)(B) and 23 U.S.C. § 142(g), the Hatch Act does not apply to a nonsupervisory employee of a public transportation system (or of any other agency or entity performing related functions) receiving FTA assistance to whom the Hatch Act would not otherwise apply.

f. False or Fraudulent Statements or Claims. The Recipient acknowledges and agrees that:

(1) Civil Fraud. The Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. §§ 3801 *et seq.*, and U.S. DOT regulations, “Program Fraud Civil Remedies,” 49 C.F.R. Part 31, apply to the Recipient’s activities in connection with the Project. By executing the Grant Agreement or Cooperative Agreement for the Project, the Recipient certifies or affirms the truthfulness and accuracy of each statement it has made, it makes, or it may make in connection

with the Project. In addition to other penalties that may apply, the Recipient also acknowledges that if it makes a false, fictitious, or fraudulent claim, statement, submission, certification, assurance, or representation to the Federal Government, the Federal Government reserves the right to impose on the Recipient the penalties of the Program Fraud Civil Remedies Act of 1986, as amended, to the extent the Federal Government deems appropriate.

(2) Criminal Fraud. If the Recipient makes a false, fictitious, or fraudulent claim, statement, submission, certification, assurance, or representation to the Federal Government or includes a false, fictitious, or fraudulent statement or representation in any agreement with the Federal Government in connection with a Project authorized under 49 U.S.C. chapter 53 or any other Federal law, the Federal Government reserves the right to impose on the Recipient the penalties of 49 U.S.C. § 5323(l), 18 U.S.C. § 1001, or other applicable Federal law to the extent the Federal Government deems appropriate.

g. Trafficking in Persons. To the extent applicable, the Recipient agrees to comply with, and assures the compliance of each subrecipient with, the requirements of the subsection 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended, 22 U.S.C. § 7104(g), and the provisions of this Subsection 3.g of this Master Agreement consistent with U.S. OMB guidance, “Trafficking in Persons: Grants and Cooperative Agreements,” 2 C.F.R. Part 175:

(1) Definitions. For purposes of this Subsection 3.g, the Recipient agrees that:

(a) Employee means either:

1 An individual who is employed by the Recipient or a subrecipient, and who is participating in the Grant Agreement or Cooperative Agreement for the Project; or

2 Another person who is participating in the Grant Agreement or Cooperative Agreement for the Project and who is not compensated by the Recipient including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements of the Grant Agreement or Cooperative Agreement and this Master Agreement.

(b) Forced labor means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subsection to involuntary servitude, peonage, debt bondage, or slavery.

(c) Private entity:

1 Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 C.F.R. § 175.25.

2 Includes a for-profit organization, and also a nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 C.F.R. § 175.25(b).

(d) Severe forms of trafficking in persons has the meaning given at section 103 of the TVPA, as amended, 22 U.S.C. § 7102.

(e) Commercial sex act has the meaning given at section 103 of the TVPA, as amended, 22 U.S.C. § 7102.

(f) Coercion has the meaning given at section 103 of the TVPA, as amended, 22 U.S.C. § 7102.

(2) Provisions Applicable to Each Recipient. The Recipient agrees:

(a) To inform FTA immediately of any information it receives from any source alleging a violation of a prohibition in Subparagraph 3.g(3)(a) of this Master Agreement below.

(b) That FTA may unilaterally terminate its Federal assistance for the Grant Agreement or Cooperative Agreement for the Project as provided in Subparagraph 3.g(3)(b) or Paragraph 3.g(4) of this Master Agreement. FTA's right to terminate unilaterally:

1 Implements subsection 106(g) of the TVPA, as amended, 22 U.S.C. § 7104(g),  
and

2 Is in addition to all other remedies for noncompliance that are available to the Federal Government under this Master Agreement.

(c) To include the requirements of Subparagraph 3.g(3)(a) of this Master Agreement in any subagreement it enters into with a private entity, as defined in Subparagraph 3.g(1)(c) of this Master Agreement.

(3) Provisions Applicable to a Recipient that is a Private Entity. A Recipient that is a private entity as defined in Subparagraph 3.g(1)(c) of this Master Agreement agrees that:

(a) It, its employees, its subrecipients and its subrecipients' employees that participate in the Grant Agreement or Cooperative Agreement for the Project, may not--

1 Engage in severe forms of trafficking in persons during the period of time that the Grant Agreement or Cooperative Agreement for the Project is in effect;

2 Procure a commercial sex act during the period of time that the Grant Agreement or Cooperative Agreement for the Project is in effect; or

3 Use forced labor in the performance of the Grant Agreement or Cooperative Agreement or subagreements for the Project.

(b) FTA may unilaterally terminate the Grant Agreement or Cooperative Agreement for the Project, without penalty to the Federal Government, if the Recipient or a subrecipient that is a private entity--

1 Is determined to have violated a prohibition in Subparagraph 3.g(3)(a) of this Master Agreement, or

2 Has an employee whose conduct is determined by an FTA official authorized to terminate the Grant Agreement or Cooperative Agreement for the Project to have violated a prohibition in Subparagraph 3.g(3)(a) of this Master Agreement because that employee's conduct is either--

a Associated with his or her participation in the Grant Agreement or Cooperative Agreement for the Project; or

b Imputed to the Recipient or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in the U.S. OMB "Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," 2 C.F.R. Part 180, as implemented by U.S. DOT regulations, "Nonprocurement Suspension and Debarment," 2 C.F.R. Part 1200.

(4) Provision Applicable to a Recipient Other Than a Private Entity. FTA may unilaterally terminate the Grant Agreement or Cooperative Agreement for the Project, without penalty to the Federal Government, if a subrecipient that is a private entity--

(a) Is determined to have violated an applicable prohibition in Subparagraph 3.g(3)(a) of this Master Agreement; or

(b) Has an employee whose conduct is determined by an FTA official authorized to terminate the Grant Agreement or Cooperative Agreement for the Project to have violated an applicable prohibition in Subparagraph 3.g(3)(a) of this Master Agreement because that employee's conduct is either--

1 Associated with his or her participation in the Grant Agreement or Cooperative Agreement for the Project, or

2 Imputed to the subrecipient using the standards and due process of U.S. OMB "Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," 2 C.F.R. Part 180, as implemented by U.S. DOT regulations, "Nonprocurement Suspension and Debarment," 2 C.F.R. Part 1200, for imputing the conduct of an individual to an organization.

#### **Section 4. Federal Assistance.**

The Recipient agrees that FTA will provide Federal assistance for the Project equal to the smallest of the following amounts: (a) the maximum amount permitted by Federal law or

regulations, (b) the “Maximum FTA Amount Awarded,” as stated on the Grant Agreement or Cooperative Agreement for the Project, or (c) the amount calculated on the basis of the “Maximum Percentage(s) of FTA Participation,” as may be modified by the Conditions of Award, Special Conditions, Special Requirements, or Special Provisions of the Grant Agreement or Cooperative Agreement for the Project. FTA’s responsibility to make Federal assistance payments under the Grant Agreement or Cooperative Agreement for the Project is limited to the amounts listed in the Approved Project Budget for the Project. The “Estimated Total Eligible Cost” in the Grant Agreement or Cooperative Agreement for the Project is the amount that forms the basis on which FTA determines the “Maximum FTA Amount Awarded” for the Project.

a. “Net Project Cost.” For any Project required by Federal law or by FTA to be financed on the basis of its “Net Project Cost” as defined at 49 U.S.C. § 5302(a)(8), FTA intends to provide Federal assistance to the Recipient for that portion of the Project cost that cannot reasonably be financed from the Recipient’s revenues, *i.e.*, “Net Project Cost” of the Project. Therefore, the amount stated as the “Estimated Total Eligible Cost” on the Grant Agreement or Cooperative Agreement for the Project is the “Estimated Net Project Cost” and is the amount that forms the basis on which FTA will calculate the amount of Federal assistance awarded for the Project.

b. Other Basis for FTA Participation. For any Project not required by Federal law or FTA to be financed on the basis of its “Net Project Cost” as defined by 49 U.S.C. § 5302(a)(8), FTA intends to provide Federal assistance to the Recipient for all or part of the total Project cost that is eligible for Federal assistance. Therefore, the amount stated as the “Estimated Total Eligible Cost” on the Grant Agreement or Cooperative Agreement for the Project is the amount that forms the basis on which FTA will calculate the amount of Federal assistance awarded for the Project.

## **Section 5. Local Share.**

A Recipient that is required to provide a local share for the Project agrees as follows:

a. Restrictions on the Source of the Local Share. The Recipient agrees to provide sufficient funds or approved in-kind resources, together with the Federal assistance awarded, that will assure payment of the actual cost of each Project activity covered by the Grant Agreement or Cooperative Agreement for the Project. The Recipient agrees that no local share funds provided will be derived from receipts from the use of Project facilities or equipment, revenues of the public transportation system in which such facilities or equipment are used, or other Federal funds, except as permitted by Federal law or regulation, or if FTA determines otherwise in writing.

b. Duty to Obtain the Local Share. The Recipient agrees to complete all proceedings necessary to provide the local share of the Project costs at or before the time the local share is needed for Project costs, except to the extent that FTA determines otherwise in writing. The Recipient agrees to notify the Government of any change in circumstances or commitments that adversely affect its commitment to finance the project costs necessary to complete the Project. In its notification, the Recipient agrees to advise the Government of what actions it has taken or plans

to take to ensure adequate local share resources and shall reaffirm its commitment to the Government as set forth in Subsection 5.a of this Master Agreement.

c. Prompt Payment of the Local Share. The Recipient agrees to provide the proportionate amount of the local share promptly as it incurs Project costs or Project costs become due, except to the extent that the FTA determines otherwise in writing.

d. Reduction of the Local Share. The Recipient agrees that no refund or reduction of the local share may be made unless, at the same time, a refund of the proportional amount of the Federal assistance provided is made to the Federal Government, except to the extent that FTA determines otherwise in writing.

## **Section 6. Approved Project Budget.**

Except to the extent that FTA determines otherwise in writing, the Recipient agrees as follows: The Recipient will prepare a Project budget which, upon approval by FTA, is designated the "Approved Project Budget." The Recipient will incur obligations and make disbursements of Project funds only as authorized by the latest Approved Project Budget, which will be incorporated by reference and made part of the underlying Grant Agreement or Cooperative Agreement for the Project. The Recipient agrees that an amendment to the Approved Project Budget requires the issuance of a formal amendment to the underlying Grant Agreement or Cooperative Agreement, except that re-allocation of funds among budget items or fiscal years that does not increase the total amount of the Federal assistance awarded for the Project may be made consistent with applicable Federal laws and regulations, in accordance with the most recent applicable Federal directives and FTA guidance. The Recipient agrees to obtain prior FTA approval before making transfers of funds not expressly authorized in FTA circulars or other directives. The Recipient also agrees to obtain prior written approval for any budget revision that would result in the need for additional Federal assistance. An award of additional Federal assistance will require a new Approved Project Budget. If the Recipient estimates that it will have unobligated funds remaining after the end of the performance period of the Project, the Recipient agrees to report this to FTA at the earliest possible time and ask for disposition instructions.

## **Section 7. Accounting Records.**

In compliance with applicable Federal laws and regulations, in accordance with applicable Federal directives, and except to the extent that FTA determines otherwise in writing, the Recipient agrees as follows:

a. Project Accounts. The Recipient agrees to establish and maintain for the Project either a separate set of accounts or separate accounts within the framework of an established accounting system that can be identified with the Project. The Recipient also agrees to maintain all checks, payrolls, invoices, contracts, vouchers, orders, or other accounting documents related in whole or in part to the Project so that they may be clearly identified, readily accessible, and available to

FTA upon request and, to the extent feasible, kept separate from documents not related to the Project.

b. Funds Received or Made Available for the Project. The Recipient agrees to deposit in a financial institution all advance Project payments it receives from the Federal Government and to record in the Project Account all amounts provided by the Federal Government for the Project and all other funds provided for, accruing to, or otherwise received on account of the Project (Project funds) in compliance with Federal laws and regulations and in accordance with applicable Federal directives, except to the extent that FTA determines otherwise in writing. FTA encourages the use of financial institutions owned at least fifty (50) percent by minority group members.

c. Documentation of Project Costs and Program Income. Except to the extent that FTA determines otherwise in writing, the Recipient agrees to support all costs charged to the Project, including any approved services or property contributed by the Recipient or others, with properly executed payrolls, time records, invoices, contracts, vouchers, or other appropriate records describing in detail the nature and propriety of the charges, including adequate records to support the costs the Recipient has incurred underlying any payment FTA has agreed to participate in based on a “payable” milestone. The Recipient also agrees to maintain accurate records of all program income derived from Project implementation, except certain income FTA determines to be exempt from Federal program income requirements.

d. Checks, Orders, and Vouchers. The Recipient agrees that it will not draw checks, drafts, or orders for property or services to be charged against the Project Account until it has received and filed a properly signed voucher or other appropriate record describing in proper detail the purpose for the expenditure.

## **Section 8. Reporting, Record Retention, and Access.**

a. Types of Reports. Except when directed to submit reports to another destination, the Recipient agrees to submit to FTA all reports required by Federal laws and regulations, in accordance with Federal directives, the Grant Agreement or Cooperative Agreement for the Project, this Master Agreement, and any other reports FTA may specify, except to the extent that FTA determines otherwise in writing.

b. U.S. Office of Management and Budget (U.S. OMB) Special Reporting Provisions. In compliance with the Federal Funding Accountability and Transparency Act of 2006, as amended by the section 6202 of the Department of Defense Appropriations Act for Fiscal Year 2008, Public Law 110-252, June 30, 2008, and further amended by section 872 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, Pub. L. 110-417, U.S. OMB has issued regulatory guidance in Title 2, Code of Federal Regulations, instructing Federal agencies to include special “award terms” in their Federal assistance awards as follows:

(1) Universal Identifier and Central Contractor Registration. In compliance with U.S. OMB guidance, “Universal Identifier and Central Contractor Registration,” 2 C.F.R. Part 25, [75 Fed.

Reg. 55675, September 14, 2010], FTA is including the following award term in this Master Agreement excerpted from “Appendix A” of that guidance:

(a) Requirement for Central Contractor Registration (CCR). Unless exempted from the Central Contractor Registration Requirement (CCR) as provided by 2 C.F.R. § 25.110, the Recipient agrees to maintain the currency of its information in the CCR until it submits its final financial report required under the Grant Agreement or Cooperative Agreement for the Project or receives the final payment under the Project, whichever is later. The Recipient understands and agrees that it must review and update its information in the CCR at least annually after the initial registration, and more frequently if required by changes in its information or another provision of a Federal or federally assisted agreement, law, regulation, or regulatory guidance that U.S. OMB might issue.

(b) Requirement for Data Universal Numbering System (DUNS) Numbers. The Recipient agrees that if it is authorized to make subawards under this award, the Recipient

1 Must notify potential subrecipients that no entity (see definition in Paragraph 8.c(3)(c)3 of this Master Agreement) may receive a subaward under the Grant Agreement or Cooperative Agreement for the Project unless the entity has provided its DUNS number to the Recipient of that Grant Agreement or Cooperative Agreement for the Project.

2 Make no subaward to an entity unless the entity has provided its DUNS number to the Recipient of that Grant Agreement or Cooperative Agreement for the Project.

(c) Definitions. For purposes of the provisions of Subsection 8.b(1) of this Master Agreement, the Recipient agrees that the following definitions apply:

1 Central Contractor Registration (CCR) means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the CCR Internet site (currently at <http://www.ccr.gov>).

2 Data Universal Numbering System (DUNS) number means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently at 866-705-5711) or the Internet (currently at <http://fedgov.dnb.com/webform>).

3 Entity, as it is used in this Subsection 8.b(1) of this Master Agreement, means all of the following, as defined at 2 C.F.R. Part 25, Subpart C:

a A Governmental organization that is a State, local government, or Indian Tribe;

b A foreign public entity;

c A domestic or foreign nonprofit organization;

d A domestic or foreign for-profit organization; and

e A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

4 Subaward, as it is used in this Paragraph 8.b(1) of the Master Agreement:

a Means a legal instrument to provide support for the performance of any portion of the substantive Project or Program for which the Recipient received Federal assistance under the Grant Agreement or Cooperative Agreement for the Project and that the Recipient awards to an eligible subrecipient.

b Does not include the Recipient's procurement of property and services the Recipient has needed to carry out the Project or Program (for further explanation, see Subpart B, Sec. \_\_.210 of U.S. OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations").

c May be provided through any legal agreement, including an agreement that the Recipient considers a contract.

5 Subrecipient means an entity that:

a Receives a subaward from the Recipient under the Grant Agreement or Cooperative Agreement for the Project; and

b Is accountable to the Recipient for the use of the Federal funds provided by the subaward.

(2) Reporting Subawards and Executive Compensation. In compliance with U.S. OMB guidance, "Reporting Subaward and Executive Compensation Information," 2 C.F.R. Part 170, [75 Fed. Reg. 55670 - 55671, September 14, 2010], FTA is including the following award term in this Master Agreement excerpted from "Appendix A" of that guidance:

(a) Reporting of first-tier subawards.

1 Applicability. Unless it is exempt as provided in Subparagraph 8.b(2)(d) of this Master Agreement, the Recipient agrees to report each action that obligates \$25,000 or more in Federal funds that does not include Recovery Act funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a subaward to an entity (see definitions in Subparagraph 8.b(2)(e)1 of this Master Agreement).

2 Where and when to report.

a The Recipient agrees to report each obligating action described in Subparagraph 8.b(2)(a)1 of this Master Agreement to <http://www.fsrc.gov>.

b For subaward information, the Recipient agrees to report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)

3 What to report. The Recipient agrees to report the information about each obligating action that the submission instructions posted at <http://www.fsrs.gov> specify.

(b) Reporting Total Compensation of Recipient Executives.

1 Applicability and what to report. The Recipient agrees to report total compensation for each of its five most highly compensated executives for the preceding completed fiscal year, if—

a The total Federal funding authorized to date under this award is \$25,000 or more;

b In the preceding fiscal year, the Recipient received—

i. 80 percent or more of the Recipient's annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 C.F.R. § 170.320 (and subawards); and

ii. \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 C.F.R. § 170.320 (and subawards); and

c The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934, 15 U.S.C. §§ 78m(a), 78o(d), or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

2 Where and when to report. The Recipient agrees to report executive total compensation described in Subparagraph 8.b(2)(b) of this Master Agreement:

a As part of the Recipient's registration profile at <http://www.ccr.gov>.

b By the end of the month following the month in which this award is made, and annually thereafter.

(c) Reporting of Total Compensation of Subrecipient Executives.

1 Applicability and what to report. Unless it is exempt as provided in Subparagraph 8.b(2)(d) of this Master Agreement, for each first-tier subrecipient under this award, the Recipient agrees to report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—

a In the subrecipient's preceding fiscal year, the subrecipient received—

i. 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 C.F.R. § 170.320 (and subawards); and

ii. \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

b The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934, 15 U.S.C. § 78m(a), 78o(d), or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/excomp.htm>.)

2 Where and when to report. The Recipient agrees to report subrecipient executive total compensation described in Subparagraph 8.b(2)(c) of this Master Agreement:

a To the Recipient and elsewhere as may be determined by the Government.

b By the end of the month following the month during which the Recipient makes the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (*i.e.*, between October 1 and 31), the Recipient must report any required compensation information of the subrecipient by November 30 of that year.

(d) Exemptions. If, in the previous tax year, any Recipient had gross income, from all sources, under \$300,000, that Recipient is exempt from the requirements to report:

1 Subawards, and

2 The total compensation of the five most highly compensated executives of any subrecipient.

(e) Definitions. For purposes of this Paragraph 8(b)(2) of the Master Agreement:

1 Entity means all of the following, as defined in 2 C.F.R. Part 25:

a A Governmental organization, which is a State, local government, or Indian tribe;

- b A foreign public entity;
- c A domestic or foreign nonprofit organization;
- d A domestic or foreign for-profit organization;
- e A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

2 Executive means officers, managing partners, or any other employees in management positions.

3 Subaward:

a This term means a legal instrument to provide support for the performance of any portion of the substantive Project or Program for which the Recipient received Federal funds under this Grant Agreement or Cooperative Agreement and that the Recipient awards to an eligible subrecipient.

b The term does not include procurement of property and services needed to carry out the Project or Program (for further explanation, see Subpart B, Sec. \_\_.210 of U.S. OMB Circular A-133, “Audits of States, Local Governments, and Non-Profit Organizations”).

c A subaward may be provided through any legal agreement, including an agreement that the Recipient or a subrecipient considers a contract.

4 Subrecipient means an entity that:

- a Receives a subaward from the Recipient under this award; and
- b Is accountable to the Recipient for the use of the Federal funds provided by the subaward.

5 Total compensation means the cash and noncash dollar value earned by the executive during the Recipient’s or subrecipient’s preceding fiscal year and includes the following (for more information see 17 C.F.R. § 229.402(c)(2)):

- a Salary and bonus.
- b Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

c. Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

d. Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.

e. Above-market earnings on deferred compensation which is not tax-qualified.

f. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

(3) Other Prospective U.S. OMB Reporting Guidance. U.S. OMB has issued proposed guidance, "Recipient Integrity and Performance Matters," to be published at 2 C.F.R. Part 35, containing a mandatory "award term" that, if unchanged, would affect the Recipient when U.S. OMB issues final guidance.

c. Report Formats. The Recipient agrees that all reports and other documents or information intended for public availability developed in the course of the Project and required to be submitted to FTA must be prepared and submitted in electronic or typewritten hard copy formats, or both, as FTA may specify. Electronic submissions must comply with the Federal electronic accessibility provisions of Paragraph 12.g(9) and Subsection 15.u of this Master Agreement. FTA also reserves the right to specify that records be submitted in other formats.

d. Record Retention. During the course of the Project and for three years thereafter from the date of transmission of the final expenditure report, the Recipient agrees to maintain intact and readily accessible all data, documents, reports, records, subagreements, leases, third party contracts, and supporting materials related to the Project as the Federal Government may require.

e. Access to Records of Recipients and Subrecipients. The Recipient agrees to permit, and require its subrecipients to permit, the U.S. Secretary of Transportation, the Comptroller General of the United States, and, to the extent appropriate, the State, or their authorized representatives, upon their request to inspect all Project work, materials, payrolls, and other data, and to audit the books, records, and accounts of the Recipient and its subrecipients pertaining to the Project, as required by 49 U.S.C. § 5325(g).

f. Project Closeout. The Recipient agrees that Project closeout does not alter the reporting and record retention requirements of this Section 8 of the Master Agreement.

## **Section 9. Payments.**

The Recipient agrees that it will not seek payment from FTA for Project costs until it has executed the Grant Agreement or Cooperative Agreement for the Project.

a. Recipient's Request for Payment. In obtaining a payment from FTA for Project expenses, except to the extent that FTA determines otherwise in writing, the Recipient agrees to:

(1) Demonstrate or certify that it will provide adequate local funds that, when combined with Federal payments, will cover all costs to be incurred for the Project. Except to the extent that the Federal Government determines in writing that the Recipient may defer its local share for the Project, a Recipient required by Federal law, regulation, the Grant Agreement or the Cooperative Agreement to provide a local share for the Project agrees that it will not:

(a) Request or obtain Federal funds exceeding the amount justified by the local share it has provided, or

(b) Take any action that would cause the proportion of Federal assistance made available to the Project at any time to exceed the percentage authorized by the Grant Agreement or Cooperative Agreement for the Project,

(2) Submit to FTA all financial and progress reports required to date by the Grant Agreement or Cooperative Agreement for the Project and this Master Agreement, and

(3) Identify the source(s) of Federal assistance provided for the Project from which the payment is to be derived.

b. Payment by FTA. Except to the extent FTA determines otherwise in writing, the Recipient agrees that FTA will make all payments of Federal assistance through the Automated Clearing House (ACH) method of payment regardless of the amount involved, but not before the Recipient has executed the Grant Agreement or Cooperative Agreement for the Project, in accordance with the following provisions:

(1) Electronic Clearing House Operation Payments. If payment is made for Project costs through the FTA Electronic Clearinghouse Operation (ECHO) using an ECHO Control Number, the Recipient agrees to comply with FTA's ECHO requirements that implement U.S. Department of Treasury (U.S. Treasury) Circular 1075, Part 205, "Withdrawal of Cash from the Treasury for Advances Under Federal Grants and Other Programs," Treasury Financial Manual, Vol. 1, Part 6, Chapter 2000; with the ECHO System Operations Manual, "Guidelines for Disbursements;" and with the provisions of this Paragraph 9.b(1) of this Master Agreement. The Recipient also agrees that if it fails to comply with the following provisions of this Paragraph 9.b(1), the Federal Government may revoke the unexpended portion of Federal assistance awarded for the Project.

(a) The Recipient agrees to withdraw cash only when it is actually needed for immediate disbursement required for Project purposes. Except to the extent permitted otherwise or otherwise required by Federal law, regulation, or agreement with the Federal Government, the Recipient agrees to expend all Federal assistance obtained through the Grant Agreement or Cooperative Agreement for Project purposes no later than three (3) days after receiving that Federal assistance. If the Recipient fails to expend that Federal assistance within three (3) days of receipt, fails to return withdrawn but unexpended Federal assistance to FTA within a

reasonable period, or fails to establish procedures to minimize the time elapsing between cash advances and the disbursement, the Federal Government may revoke or temporarily suspend the Recipient's ECHO Control Number and the Recipient's access to the ECHO System. In addition, the Recipient agrees that if it fails to comply with these provisions, it may be subjected to other remedies or penalties authorized by Federal law or regulation.

(b) The Recipient agrees to report its cash disbursements and balances promptly in compliance with applicable Federal laws and regulations, and follow applicable Federal directives, unless FTA determines otherwise in writing.

(c) The Recipient agrees to provide for control and accountability for all Federal assistance for the Project consistent with Federal requirements and procedures for use of the ECHO system.

(d) The Recipient agrees that it will not withdraw Federal assistance for a Project in an amount exceeding the sum obligated by the Federal Government or the current available balance for that Project.

(e) The Recipient agrees to withdraw Federal assistance only for payment of eligible Project costs.

(f) The Recipient agrees that it will not withdraw Federal assistance until it is needed for disbursement for Project expenses.

(g) The Recipient agrees to notify the appropriate Regional or Program Office when a single withdrawal will exceed \$50,000,000 at least three days before the withdrawal is anticipated.

(h) The Recipient agrees to remit interest to the Federal Government on any Federal assistance it has withdrawn prematurely, irrespective of whether that Federal assistance has been deposited in an interest-bearing account. The Recipient agrees that the amount of interest due the Federal Government depends on whether the Recipient is a State or State instrumentality.

1. A Recipient that is a State or State instrumentality agrees to remit to the Federal Government interest as calculated in accordance with U.S. Treasury regulations, "Rules and Procedures for Efficient Federal-State Funds Transfers," 31 C.F.R. Part 205, which implements section 5(b) of the Cash Management Improvement Act of 1990, as amended, 31 U.S.C. § 6503(b).

2. A Recipient that is neither a State nor a State instrumentality agrees to remit to the Federal Government prejudgment common law interest, as authorized by joint U.S. Treasury and U.S. Department of Justice (joint U.S. Treasury/U.S. DOJ) regulations, "Standards for the Administrative Collection of Claims," at 31 C.F.R. § 901.9(i). The amount of interest due may be determined by the Federal Government, and in its discretion may be in an amount equal to the amount of interest the Recipient can document that it has earned on its premature drawdowns of Federal assistance funds, or in an amount as calculated in accordance with the "Treasury tax and

loan account” rate prescribed by 31 U.S.C. § 3717 for debts owed to the United States, or in an amount as otherwise determined by FTA.

(2) Requisition. If the requisition method of payment is used, the Recipient agrees as follows:

(a) Recipient Responsibilities. The Recipient agrees to complete and submit:

1 “Payment Information Form – Echo-ACH Payment System, Revised 10/92,” to FTA’s Accounting Division.

2 Standard Form 270, “Request for Advance or Reimbursement,” to the designated FTA office.

(b) FTA Responsibilities. Upon receiving a request for payment and adequate supporting information, FTA will approve payment by direct deposit, provided that the Recipient has complied with the requirements of the Grant Agreement or Cooperative Agreement for the Project and this Master Agreement, has satisfied FTA that the Federal assistance requested is needed for Project purposes in that requisition period, and is making adequate progress toward Project completion. After the Recipient has demonstrated satisfactory compliance with the preceding requirements, FTA may reimburse the Recipient’s apparent allowable costs incurred (or to be incurred in the requisition period), as set forth in the Approved Project Budget for the Project, but not to exceed the maximum amount of Federal assistance that may be paid through the Federal fiscal year of that requisition.

c. Costs Reimbursed. The Recipient agrees that the Project costs eligible for Federal participation must comply with all the following requirements. Except to the extent that FTA determines otherwise in writing, Project costs must be:

(1) Consistent with the Project Description, the Approved Project Budget, and other provisions of the Grant Agreement or Cooperative Agreement for the Project and this Master Agreement,

(2) Necessary in order to accomplish the Project,

(3) Reasonable for the goods or services purchased,

(4) Actual net costs to the Recipient (*i.e.*, the price paid minus any refunds, rebates, or other items of value received by the Recipient that have the effect of reducing the cost actually incurred, excluding program income),

(5) Incurred for work performed after the Effective Date of the Grant Agreement or Cooperative Agreement for the Project, except to the extent that the Federal Government determines otherwise in writing,

(6) Satisfactorily documented,

(7) Treated consistently in accordance with accounting principles and procedures approved by the Federal Government for the Recipient, and with accounting principles and procedures approved by the Recipient for its subrecipients, lessees, third party contractors, and other participants in the Project,

(8) Eligible for Federal participation under Federal law and regulations and in accordance with applicable Federal directives, and

(9) In compliance with U.S. DOT regulations pertaining to allowable costs at 49 C.F.R. § 18.22(b) or 49 C.F.R. § 19.27, which regulations specify the applicability of U.S. OMB circulars and Federal Acquisition Regulation (FAR) provisions as follows:

(a) U.S. OMB guidance for Grants and Agreements, “Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87),” 2 C.F.R. Part 225, applies to Project costs incurred by a Recipient that is a State, local government, or Indian tribal government.

(b) U.S. OMB guidance for Grants and Agreements, “Cost Principles for Educational Institutions (OMB Circular A-21),” 2 C.F.R. Part 220, applies to Project costs incurred by a Recipient that is an institution of higher education.

(c) U.S. OMB guidance for Grants and Agreements “Cost Principles for Non-profit Organizations (OMB Circular A-122),” 2 C.F.R. Part 230, applies to Project costs incurred by a Recipient that is a private nonprofit organization.

(d) FAR, at 48 C.F.R. Chapter 1, Subpart 31.2, “Contracts with Commercial Organizations” applies to Project costs incurred by a Recipient that is a for-profit organization.

d. Bond Interest and Other Financing Costs. To the extent permitted by Federal laws or regulations, and in accordance with applicable Federal directives, bond interest and other financing costs are allowable. The Recipient agrees that FTA’s participation in Project interest costs will be limited to an amount that does not exceed the most favorable financing terms reasonably available for the Project at the time of borrowing, except to the extent FTA determines otherwise in writing.

e. Excluded Costs. The Recipient understands and agrees that, except to the extent FTA determines otherwise in writing, ineligible costs attributed to the Project will be treated as follows:

(1) In determining the amount of Federal assistance FTA will provide for the Project, FTA will exclude:

(a) Any Project cost incurred by the Recipient before the Effective Date of the Grant Agreement, Cooperative Agreement or any Amendment thereto, unless otherwise permitted by Federal law, regulation, or directive, accompanied by FTA’s approval in writing.;

- (b) Any cost that is not included in the latest Approved Project Budget;
- (c) Any cost for Project property or services received in connection with a subagreement, lease, third party contract, or other arrangement that is required to be, but has not been, concurred in or approved in writing by FTA;
- (d) Any ordinary governmental or nonproject operating cost, consistent with the prohibitions of 49 U.S.C. § 5323(h); and
- (e) Any profit or fee sought by the Recipient for its services under the Grant Agreement or Cooperative Agreement, except to the extent FTA determines otherwise in writing.
- (f) Any cost ineligible for FTA participation as provided by applicable Federal laws or regulations, in accordance with applicable Federal directives, except to the extent the Federal Government determines otherwise in writing.

(2) The Recipient understands and agrees that payment made to the Recipient for any Project cost it has submitted does not constitute the Federal Government's final decision about whether that cost is eligible for payment under the Project, and does not constitute a waiver of any violation by the Recipient of the terms of the Grant Agreement or Cooperative Agreement for the Project or this Master Agreement. The Recipient acknowledges that the Federal Government will not make a final determination about the eligibility of any cost until an audit of the Project has been completed. If the Federal Government determines that the Recipient is not entitled to receive any portion of the Federal assistance requested or paid, the Federal Government will notify the Recipient in writing, stating its reasons. The Recipient agrees that Project closeout will not alter the Recipient's responsibility to return any amounts due the Federal Government as a result of later refunds, corrections, or other similar transactions; nor will Project closeout alter the Federal Government's right to disallow costs and recover Federal assistance provided for the Project based on a later audit or other review. Unless prohibited by Federal law or regulation, the Federal Government may recover any Federal assistance as necessary to satisfy any outstanding monetary claims that the Federal Government may have against the Recipient.

f. Program Income.

(1) State, Local, or Indian Tribal Governments. In addition to uses of program income authorized under 49 C.F.R. § 18.25, FTA reserves the right, after having entered into the Grant Agreement or Cooperative Agreement for the Project, to permit a Recipient that must comply with 49 C.F.R. Part 18 to add program income to the funds FTA and the Recipient have committed to that Grant Agreement or Cooperative Agreement, and use that program income for the purposes of and under the conditions of that Grant Agreement or Cooperative Agreement.

(2) Institutions of Higher Education, Private Non-Profit Organizations, and Private For-Profit Organizations. In addition to uses of program income permitted under 49 C.F.R. § 19.24, FTA reserves the right, after having entered into the Grant Agreement or Cooperative Agreement for the Project, to permit a Recipient that must comply with 49 C.F.R. Part 19 to add

the program income to the funds FTA and the Recipient have committed to that Grant Agreement or Cooperative Agreement, and use that program income to further eligible project or program objectives.

(3) Costs Associated With Program Income. Except to the extent FTA determines otherwise in writing, the costs incident to the earning program income may be deducted from the Recipient's gross income to determine program income, provided these costs have not been charged to the Grant Agreement or Cooperative Agreement.

g. Federal Claims, Excess Payments, Disallowed Costs, Including Interest.

(1) Recipient's Responsibility to Pay. Upon notification to the Recipient that specific amounts are owed to the Federal Government, whether for excess payments of Federal assistance, disallowed costs, or funds recovered from third parties or elsewhere, the Recipient agrees to remit to the Federal Government promptly the amounts owed, including applicable interest, penalties and administrative charges.

(2) Amount of Interest. The Recipient agrees that whether the amount due the Federal Government is treated as a Federal claim or is treated as a debt determines how interest is calculated thereon and becomes due. Thus, Recipient agrees to remit interest to the Federal Government in accordance with the following:

(a) Federal Claims or Debts Within the Purview of the Debt Collection Act. For Federal claims against the Recipient for debts of the Recipient to the Federal Government (including excess payments or disallowed costs) within the purview of the Debt Collection Act of 1982, as amended, 31 U.S.C. §§ 3701 *et seq.*, the Recipient agrees that the amount of interest owed to the Federal Government will be determined in accordance with the provisions of joint U.S. Treasury/U.S. DOJ regulations, "Standards for the Administrative Collection of Claims," at 31 C.F.R. § 901.9(a) through (g) or common law interest authorized by 31 C.F.R. § 901.9(i), whichever is applicable.

(b) Excess Payments or Disallowed Costs. For excess payments or disallowed cost payments made by the Federal Government to the Recipient for which claims procedures have not been initiated under the Debt Collection Act of 1982, as amended, 31 U.S.C. §§ 3701 *et seq.*, the Recipient agrees that common law interest owed the Federal Government will be determined in accordance with joint U.S. Treasury/U.S. DOJ regulations, "Standards for the Administrative Collection of Claims," at 31 C.F.R. § 901.9(i), or otherwise as FTA may determine.

h. De-obligation of Federal Assistance. The Recipient agrees that the Federal Government may de-obligate unexpended Federal assistance before Project closeout.

## **Section 10. Project Completion, Audit, Settlement, and Closeout.**

a. Project Completion. Within ninety (90) calendar days following Project completion or termination by the Federal Government, the Recipient agrees to submit a final Financial Status

Report, either electronically or on Federal Financial Report Standard Form 425 (SF-425), a certification of Project expenses, and third party audit reports, as applicable.

b. Audit of Recipients. Except to the extent the Federal Government determines otherwise in writing, the Recipient acknowledges and agrees as follows:

(1) Audit Requirements. The Recipient agrees to have financial and compliance audits performed as required by the Single Audit Act Amendments of 1996, 31 U.S.C. §§ 7501 *et seq.* As provided by 49 C.F.R. § 19.26, these financial and compliance audits must comply with the provisions of OMB Circular A-133, Revised, “Audits of States, Local Governments, and Non-Profit Organizations,” the latest OMB A-133 Compliance Supplement for U.S. DOT, and any revision or supplement thereto, except to the extent FTA determines otherwise in writing. The Recipient also agrees to obtain other audits the Federal Government may require. The Recipient agrees that these audits will be conducted in accordance with U.S. Government Accountability Office, (U.S. GAO) “Government Auditing Standards.” The Recipient agrees that Project closeout will not alter the Recipient’s audit responsibilities.

(2) Audit Costs. Audit costs for Project administration and management are allowable to the extent authorized by U.S. OMB guidance for Grants and Agreements, “Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87),” 2 C.F.R. Part 225, U.S. OMB guidance for Grants and Agreements, “Cost Principles for Educational Institutions (OMB Circular A-21),” 2 C.F.R. Part 220, U.S. OMB guidance for Grants and Agreements “Cost Principles for Non-profit Organizations (OMB Circular A-122), or the FAR at 48 C.F.R. Chapter I, Subpart 31.2, whichever is applicable.

c. Funds Owed to the Federal Government. The Recipient agrees to remit to the Federal Government any excess payments the Federal Government has made to the Recipient, any costs the Federal Government has disallowed, and any amounts the Recipient recovers from third parties or other sources, as well as any penalties and any interest required by Paragraph 9.g(2) of this Master Agreement.

d. Project Closeout. Project closeout occurs when FTA notifies the Recipient that FTA has closed the Project, and either forwards the final Federal assistance payment to the Recipient, or acknowledges that the Recipient has remitted the proper refund. The Recipient agrees that Project closeout by FTA does not invalidate any continuing requirements imposed by the Grant Agreement or Cooperative Agreement for the Project, this Master Agreement, or any unmet requirements set forth in the Federal Government’s final notification or acknowledgment of Project Closeout.

## **Section 11. Right of the Federal Government to Terminate.**

Upon written notice, the Recipient agrees that the Federal Government may suspend or terminate all or any part of the Federal assistance to be provided for the Project if the Recipient has violated the terms of the Grant Agreement or Cooperative Agreement for the Project including this Master Agreement, or if the Federal Government determines that the purposes of the laws

authorizing the Project would not be adequately served by the continuation of Federal assistance for the Project. The Recipient understands and agrees that any failure to make reasonable progress on the Project or any violation of the Grant Agreement or Cooperative Agreement for the Project, or this Master Agreement that endangers substantial performance of the Project shall provide sufficient grounds for the Federal Government to terminate the Grant Agreement or Cooperative Agreement for the Project. In general, termination of Federal assistance for the Project will not invalidate obligations properly incurred by the Recipient before the termination date to the extent those obligations cannot be canceled. If, however, the Federal Government determines that the Recipient has willfully misused Federal assistance by failing to make adequate progress, by failing to make reasonable and appropriate use of Project property, or by failing to comply with the terms of the Grant Agreement or Cooperative Agreement for the Project including this Master Agreement, the Federal Government reserves the right to require the Recipient to refund the entire amount of Federal assistance provided for the Project or any lesser amount as the Federal Government may determine. Expiration of any Project time period established for the Project does not, by itself, constitute an expiration or termination of the Grant Agreement or Cooperative Agreement for the Project.

## **Section 12. Civil Rights.**

The Recipient agrees to comply with all applicable civil rights laws and regulations, in accordance with applicable Federal directives, except to the extent that the Federal Government determines otherwise in writing. These include, but are not limited to, the following:

- a. Nondiscrimination in Federal Public Transportation Programs. The Recipient agrees to comply, and assures the compliance of each subrecipient, lessee, third party contractor, or other participant at any tier of the Project, with the provisions of 49 U.S.C. § 5332, which prohibit discrimination on the basis of race, color, creed, national origin, sex, or age, and prohibits discrimination in employment or business opportunity.
- b. Nondiscrimination – Title VI of the Civil Rights Act. The Recipient agrees to comply, and assures the compliance of each subrecipient, lessee, third party contractor, or other participant at any tier of the Project, with all provisions prohibiting discrimination on the basis of race, color, or national origin of Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. §§ 2000d *et seq.*, and with U.S. DOT regulations, “Nondiscrimination in Federally-Assisted Programs of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act,” 49 C.F.R. Part 21. Except to the extent FTA determines otherwise in writing, the Recipient agrees to follow all applicable provisions of the most recent edition of FTA Circular 4702.1A, “Title VI and Title VI-Dependent Guidelines for Federal Transit Administration Recipients,” and any other applicable Federal directives that may be issued.
- c. Equal Employment Opportunity. The Recipient agrees to comply, and assures the compliance of each subrecipient, lessee, third party contractor, or other participant at any tier of the Project, with all equal employment opportunity (EEO) provisions of 49 U.S.C. § 5332, with Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000e *et seq.*, and implementing Federal regulations and any later amendments thereto. Except to the extent FTA

determines otherwise in writing, the Recipient also agrees to follow all applicable Federal EEO directives that may be issued. Accordingly:

(1) General. The Recipient agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, sex, disability, age, or national origin. The Recipient agrees to take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, disability, age, or national origin. Such action shall include, but not be limited to, employment, upgrading, demotions or transfers, recruitment or recruitment advertising, layoffs or terminations; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

(2) Equal Employment Opportunity Requirements for Construction Activities. For activities determined by the U.S. Department of Labor (U.S. DOL) to qualify as "construction," the Recipient agrees to comply and assure the compliance of each subrecipient, lessee, third party contractor, or other participant, at any tier of the Project, with all requirements of U.S. DOL regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 *et seq.*; with implementing Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order No. 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note, and with other applicable EEO laws and regulations, and also agrees to follow applicable Federal directives, except as the Federal Government determines otherwise in writing.

d. Disadvantaged Business Enterprise. To the extent authorized by Federal law, the Recipient agrees to facilitate participation by Disadvantaged Business Enterprises (DBEs) in the Project and assures that each subrecipient, lessee, third party contractor, or other participant at any tier of the Project will facilitate participation by DBEs in the Project to the extent applicable as follows:

(1) The Recipient agrees and assures that it shall comply with section 1101(b) of SAFETEA-LU, 23 U.S.C. § 101 note, and U.S. DOT regulations, "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs," 49 C.F.R. Part 26.

(2) The Recipient agrees and assures that it shall not discriminate on the basis of race, color, sex, or national origin in the award and performance of any subagreement, lease, third party contract, or other arrangement supported with Federal assistance derived from U.S. DOT in the administration of its DBE program and shall comply with the requirements of 49 C.F.R. Part 26. The Recipient agrees to take all necessary and reasonable steps as set forth in 49 C.F.R. Part 26 to ensure nondiscrimination in the award and administration of all subagreements, leases, third party contracts, and other arrangements supported with Federal assistance derived from U.S. DOT. As required by 49 C.F.R. Part 26, the Recipient's DBE program approved by U.S. DOT, if any, is incorporated by reference and made part of the Grant Agreement or Cooperative Agreement for the Project. The Recipient agrees that it has a legal obligation to implement its approved DBE program, and that its failure to carry out that DBE program shall be treated as a violation of the Grant Agreement or Cooperative Agreement for the Project and this

Master Agreement. Upon notification by U.S. DOT to the Recipient of the Recipient's failure to implement its approved DBE program, U.S. DOT may impose the sanctions as set forth in 49 C.F.R. Part 26 and may, in appropriate cases, refer the matter to the appropriate Federal authorities for enforcement under 18 U.S.C. § 1001, or the Program Fraud Civil Remedies Act, 31 U.S.C. §§ 3801 *et seq.*, or both.

e. Nondiscrimination on the Basis of Sex. The Recipient agrees to comply with all applicable requirements of Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. §§ 1681 *et seq.*, and with implementing U.S. DOT regulations, "Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance," 49 C.F.R. Part 25, that prohibit discrimination on the basis of sex.

f. Nondiscrimination on the Basis of Age. The Recipient agrees to comply with all applicable requirements of:

(1) The Age Discrimination Act of 1975, as amended, 42 U.S.C. §§ 6101 *et seq.*, and with implementing U.S. Health and Human Services regulations, "Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance," 45 C.F.R. Part 90, which prohibit discrimination against individuals on the basis of age in the administration of programs or activities receiving Federal financial assistance.

(2) The Age Discrimination in Employment Act (ADEA) 29 U.S.C. §§ 621 through 634 and with implementing U.S. Equal Employment Opportunity Commission (U.S. EEOC) regulations, "Age Discrimination in Employment Act," 29 C.F.R. Part 1625, which prohibits discrimination against individuals on the basis of age.

g. Access for Individuals with Disabilities. The Recipient agrees to comply with 49 U.S.C. § 5301(d), which states the Federal policy that elderly individuals and individuals with disabilities have the same right as other individuals to use public transportation services and facilities, and that special efforts shall be made in planning and designing those services and facilities to implement transportation accessibility rights for elderly individuals and individuals with disabilities. The Recipient also agrees to comply with all applicable provisions of section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 794, which prohibits discrimination on the basis of disability in the administration of programs or activities receiving Federal financial assistance; with the Americans with Disabilities Act of 1990 (ADA), as amended, 42 U.S.C. §§ 12101 *et seq.*, which requires that accessible facilities and services be made available to individuals with disabilities; with the Architectural Barriers Act of 1968, as amended, 42 U.S.C. §§ 4151 *et seq.*, which requires that buildings and public accommodations be accessible to individuals with disabilities; and with other laws and amendments thereto pertaining to access for individuals with disabilities that may be applicable. In addition, the Recipient agrees to comply with applicable implementing Federal regulations, and any later amendments thereto, and agrees to follow applicable Federal implementing directives, except to the extent FTA approves otherwise in writing. Among those regulations and directives are:

(1) U.S. DOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 C.F.R. Part 37;

(2) U.S. DOT regulations, “Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance,” 49 C.F.R. Part 27;

(3) Joint U.S. Architectural and Transportation Barriers Compliance Board (U.S. ATBCB)/U.S. DOT regulations, “Americans With Disabilities (ADA) Accessibility Specifications for Transportation Vehicles,” 36 C.F.R. Part 1192 and 49 C.F.R. Part 38;

(4) U.S. DOJ regulations, “Nondiscrimination on the Basis of Disability in State and Local Government Services,” 28 C.F.R. Part 35;

(5) U.S. DOJ regulations, “Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities,” 28 C.F.R. Part 36;

(6) U.S. General Services Administration (U.S. GSA) regulations, “Accommodations for the Physically Handicapped,” 41 C.F.R. Subpart 101-19;

(7) U.S. EEOC, “Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act,” 29 C.F.R. Part 1630;

(8) U.S. Federal Communications Commission regulations, “Telecommunications Relay Services and Related Customer Premises Equipment for the Hearing and Speech Disabled,” 47 C.F.R. Part 64, Subpart F;

(9) U.S. ATBCB regulations, “Electronic and Information Technology Accessibility Standards,” 36 C.F.R. Part 1194;

(10) FTA regulations, “Transportation for Elderly and Handicapped Persons,” 49 C.F.R. Part 609; and

(11) Federal civil rights and nondiscrimination directives implementing those Federal laws and regulations, except to the extent the Federal Government determines otherwise in writing.

h. Drug or Alcohol Abuse - Confidentiality and Other Civil Rights Protections. To the extent applicable, the Recipient agrees to comply with the confidentiality and civil rights protections of the Drug Abuse Office and Treatment Act of 1972, as amended, 21 U.S.C. §§ 1101 *et seq.*, the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, as amended, 42 U.S.C. §§ 4541 *et seq.*, and the Public Health Service Act of 1912, as amended, 42 U.S.C. §§ 290dd through 290dd-2, and any amendments thereto.

i. Access to Services for Persons with Limited English Proficiency. The Recipient agrees to facilitate compliance with the policies of Executive Order No. 13166, “Improving Access to Services for Persons with Limited English Proficiency,” 42 U.S.C. § 2000d-1 note, and follow applicable provisions of U.S. DOT Notice, “DOT Policy Guidance Concerning Recipients’ Responsibilities to Limited English Proficiency (LEP) Persons,” 70 *Fed. Reg.* 74087, December 14, 2005, except to the extent that FTA determines otherwise in writing.

j. Environmental Justice. The Recipient agrees to facilitate compliance with the policies of Executive Order No. 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” 42 U.S.C. § 4321 note; and DOT Order 5620.3, “Department of Transportation Actions To Address Environmental Justice in Minority Populations and Low-Income Populations,” 62 *Fed. Reg.* 18377 *et seq.*, April 15, 1997, except to the extent that the Federal Government determines otherwise in writing.

k. Other Nondiscrimination Laws. The Recipient agrees to comply with applicable provisions of other Federal laws and regulations, and follow applicable Federal directives prohibiting discrimination, except to the extent the Federal Government determines otherwise in writing.

### **Section 13. Planning and Private Enterprise.**

a. General. The Recipient agrees to implement the Project consistent with the plans developed in accordance with the following Federal planning and private enterprise provisions:

(1) 49 U.S.C. §§ 5303, 5304, 5306, and 5323(a)(1);

(2) Joint FHWA/FTA regulations, “Statewide Transportation Planning; Metropolitan Transportation Planning,” 23 C.F.R. Part 450 and 49 C.F.R. Part 613 and any amendments thereto, and

(3) FTA regulations, “Major Capital Investment Projects,” 49 C.F.R. Part 611, to the extent that those regulations are consistent with the SAFETEA-LU amendments to the public transportation planning and private enterprise laws and, when promulgated, any amendments thereto, and the latest FTA “Guidance on New Starts/Small Starts Policies and Procedures.”

b. Governmental and Private Nonprofit Providers of Nonemergency Transportation. In addition to providing opportunities to participate in planning described in Subsection 13.a of this Master Agreement, to the extent feasible, the Recipient agrees to comply with 49 U.S.C. § 5323(k), which affords governmental agencies and nonprofit organizations that receive Federal assistance for nonemergency transportation from Federal Government sources (other than U.S. DOT) an opportunity to be included in the design, coordination, and planning of transportation services.

c. Infrastructure Investment. During the implementation of the Project, the Recipient agrees to take into consideration the recommendations of Executive Order No. 12803, “Infrastructure Privatization,” 31 U.S.C. § 501 note, and Executive Order No. 12893, “Principles for Federal Infrastructure Investments,” 31 U.S.C. § 501 note.

### **Section 14. Preference for United States Products and Services.**

To the extent applicable, the Recipient agrees to comply with the following U.S. domestic preference requirements:

- a. Buy America. The Recipient agrees to comply with 49 U.S.C. § 5323(j) and FTA regulations, “Buy America Requirements,” 49 C.F.R. Part 661, and any amendments thereto.
- b. Cargo Preference - Use of United States-Flag Vessels. To the extent applicable, the Recipient agrees to comply with 46 U.S.C. § 55305 and U.S. Maritime Administration regulations, “Cargo Preference - U.S.-Flag Vessels,” 46 C.F.R. Part 381.
- c. Fly America. The Recipient agrees that the Federal Government will not participate in the costs of international air transportation of any individuals involved in or property acquired for the Project unless that air transportation is provided by U.S.-flag air carriers to the extent such service is available, in compliance with section 5 of the International Air Transportation Fair Competitive Practices Act of 1974, as amended, 49 U.S.C. § 40118, and U.S. GSA regulations, “Use of United States Flag Air Carriers,” 41 C.F.R. §§ 301-10.131 through 301-10.143.

## **Section 15. Procurement.**

To the extent applicable, the Recipient agrees to comply with the following third party procurement provisions:

- a. Federal Standards. The Recipient agrees to comply with applicable third party procurement requirements of 49 U.S.C. chapter 53 and Federal laws in effect now or subsequently enacted; with applicable U.S. DOT third party procurement regulations at 49 C.F.R. § 18.36 or 49 C.F.R. §§ 19.40 through 19.48, and with other applicable Federal regulations pertaining to third party procurements and later amendments thereto. The Recipient also agrees to follow the provisions of the most recent edition and revisions of FTA Circular 4220.1F, “Third Party Contracting Guidance,” except to the extent FTA determines otherwise in writing. The Recipient agrees that it may not use FTA assistance to support its third party procurements unless its compliance with Federal laws and regulations is satisfactory. Although the FTA “Best Practices Procurement Manual” provides additional third party contracting information, the Recipient understands and agrees that the FTA “Best Practices Procurement Manual” may omit certain Federal requirements applicable to specific third party contracts.
- b. Full and Open Competition. In accordance with 49 U.S.C. § 5325(a), the Recipient agrees to conduct all procurement transactions in a manner that provides full and open competition as determined by FTA.
- c. Exclusionary or Discriminatory Specifications. Apart from inconsistent requirements imposed by Federal laws or regulations, the Recipient agrees to comply with the requirements of 49 U.S.C. § 5325(h) by not expending or otherwise using any Federal assistance FTA has made available for the Project to support a procurement using exclusionary or discriminatory specifications.
- d. Geographic Restrictions. The Recipient agrees that it will not use any State or local geographic preference, except State or local geographic preferences expressly mandated or as

permitted by FTA. For example, in procuring architectural engineering, or related services, the contractor's geographic location may be a selection criterion, provided that a sufficient number of qualified firms are eligible to compete.

e. In-State Bus Dealer Restrictions. In accordance with 49 U.S.C. § 5325(i), the Recipient agrees that any State law requiring buses to be purchased through in-State dealers will not apply to purchases of vehicles financed with Federal assistance authorized under 49 U.S.C. chapter 53.

f. Neutrality in Labor Relations. Executive Order No. 13502, "Use of Project Labor Agreements [PLA] for Federal Construction Projects," February 6, 2009, 41 U.S.C. § 251 note, has rescinded Executive Order No. 13202, "Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects," February 17, 2001, as amended by Executive Order No. 13208, April 6, 2001, 41 U.S.C. § 251 note. As a result, the Recipient is no longer prohibited from requiring an affiliation with a labor organization, such as a project labor agreement, as a condition for award of any third party contract or subcontract at any tier for construction or construction management services, except to the extent that the Federal Government determines otherwise in writing.

g. Federal Supply Schedules. A Recipient that is a State, local government, or nonprofit entity may not use Federal Supply Schedules to acquire federally assisted property or services, except to the extent permitted by U.S. GSA, U.S. DOT, or FTA, or otherwise permitted by other Federal laws or regulations and in accordance with applicable Federal directives or determinations.

h. Force Account. The Recipient agrees that FTA may determine the extent to which Federal assistance may be used to participate in force account costs.

i. FTA Technical Review. The Recipient agrees that FTA may review and approve the Recipient's technical specifications and requirements to the extent FTA believes necessary to ensure proper Project administration.

j. Project Approval/Third Party Contract Approval. Except to the extent FTA determines otherwise in writing, the Recipient agrees that FTA's award of Federal assistance for the Project does not, by itself, constitute pre-approval of any non-competitive third party contract associated with the Project.

k. Preference for Recycled Products. To the extent applicable, the Recipient agrees to comply with the U.S. Environmental Protection Agency (U.S. EPA), "Comprehensive Procurement Guideline for Products Containing Recovered Materials," 40 C.F.R. Part 247, which implements section 6002 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. § 6962. Accordingly, the Recipient agrees to provide a competitive preference for products and services that conserve natural resources, protect the environment, and are energy efficient, except to the extent that the Federal Government determines otherwise in writing.

l. Clean Air and Clean Water. The Recipient agrees to include in each subagreement, lease, third party contract, or other arrangement exceeding \$100,000, adequate provisions to ensure that each Project participant will agree to:

(1) Report the use of facilities placed on or likely to be placed on the U.S. EPA “List of Violating Facilities,”

(2) Refrain from using any violating facilities,

(3) Report violations to FTA and the Regional U.S. EPA Office, and

(4) Comply with the inspection and other applicable requirements of:

(a) Section 306 of the Clean Air Act, as amended, 42 U.S.C. § 7606, and other applicable provisions of the Clean Air Act, as amended, 42 U.S.C. §§ 7401 through 7671q; and

(b) Section 508 of the Clean Water Act, as amended, 33 U.S.C. § 1368, and other applicable requirements of the Clean Water Act, as amended, 33 U.S.C. §§ 1251 through 1377.

m. National Intelligent Transportation Systems Architecture and Standards. To the extent applicable, the Recipient agrees to conform to the National Intelligent Transportation Systems (ITS) Architecture and Standards as required by SAFETEA-LU § 5307(c), 23 U.S.C. § 512 note, and follow the provisions of FTA Notice, “FTA National ITS Architecture Policy on Transit Projects,” 66 *Fed. Reg.* 1455 *et seq.*, January 8, 2001, and any other implementing directives FTA may issue at a later date, except to the extent FTA determines otherwise in writing.

n. Rolling Stock. In acquiring rolling stock, the Recipient agrees as follows:

(1) Method of Acquisition. In compliance with 49 U.S.C. § 5325(f), the Recipient agrees that any third party contract award it makes for rolling stock will be based on initial capital costs, or on performance, standardization, life cycle costs, and other factors, or on a competitive procurement process.

(2) Multi-year Options. In accordance with 49 U.S.C. § 5325(e)(1), a Recipient procuring rolling stock financed with Federal assistance under 49 U.S.C. chapter 53 may not enter into a multi-year contract to purchase additional rolling stock and replacement parts with options exceeding five (5) years after the date of the original contract.

(3) Preaward and Post Delivery Requirements. The Recipient agrees to comply with the requirements of 49 U.S.C. § 5323(m) and FTA regulations, “Pre-Award and Post-Delivery Audits of Rolling Stock Purchases,” 49 C.F.R. Part 663 and any amendments thereto.

(4) Bus Testing. To the extent applicable, the Recipient agrees to comply with the requirements of 49 U.S.C. § 5318(e) and FTA regulations, “Bus Testing,” 49 C.F.R. Part 665, and any amendments to those regulations that may be promulgated.

o. Bonding. Except to the extent that FTA determines otherwise in writing, the Recipient agrees to comply with the following bonding provisions, as applicable:

(1) Construction Activities. The Recipient agrees to provide bid guarantee, contract performance, and payment bonds as provided by Federal regulations and to the extent determined adequate by FTA in writing, and follow any other construction bonding provisions in FTA directives, except to the extent that FTA determines otherwise in writing.

(2) Activities Not Involving Construction. The Recipient agrees to follow FTA guidance on bonding restrictions for projects not involving construction, except to the extent that FTA determines otherwise in writing.

p. Architectural Engineering or Related Services. In accordance with 49 U.S.C. § 5325(b), the Recipient agrees to comply with the following requirements pertaining to the procurement of architectural engineering or related services that will be financed with Federal assistance authorized under 49 U.S.C. chapter 53 or other Federal assistance required by Federal law to be administered in accordance with 49 U.S.C. chapter 53:

(1) When procuring architectural engineering, or related services, the Recipient agrees that it and its subcontractors at any tier will:

(a) Negotiate for architectural engineering or related services in the same manner as a contract for architectural engineering or related services is negotiated under chapter 11 of Title 40, United States Code, or

(b) Comply with an equivalent State qualifications-based requirement for contracting for architectural engineering or related services, provided the State has adopted by law such requirement before August 10, 2005.

(2) Upon awarding a contract for architectural engineering or related services, the Recipient agrees that it and its subcontractors at any tier will:

(a) Perform and audit the third party contract or the third party subcontract in compliance with the cost principles of the FAR as set forth in 48 C.F.R. Part 31.

(b) Accept the indirect cost rates established by a cognizant Federal or State government agency in accordance with the FAR for one-year applicable accounting periods, if those rates are not currently under dispute.

(c) Apply the firm's indirect cost rates for purposes of contract estimation, negotiation, administration, reporting, and payment, without limitation by administrative or de facto ceilings, after the firm's indirect cost rates are accepted as provided above.

(d) In compliance with 49 U.S.C. § 5325(b)(2)(D), the Recipient agrees and assures that it and the members of any group of entities sharing cost or rate data described in Subparagraph 15.p(2)(c) of this Master Agreement shall:

1 Notify any affected firm before requesting or using that data,

2 Maintain the confidentiality of that data, and assure that it is not accessible or provided to others, and

3 Not disclose that data under any circumstances if doing so is prohibited by 49 U.S.C. § 5325(b) or other law.

q. Design-Build Projects. In accordance with 49 U.S.C. § 5325(d)(2), the Recipient may use design-build procurements to implement its Projects after it has complied with all applicable requirements established by the Federal Government, whether through Federal laws or regulations and in accordance with applicable Federal directives, except to the extent the Federal Government determines otherwise in writing.

r. Award to Other than the Lowest Bidder. In accordance with 49 U.S.C. § 5325(c), a Recipient may award a third party contract to other than the lowest bidder, if the award furthers an objective (for example, improved long-term operating efficiency and lower long-term costs) that is consistent with the purposes of 49 U.S.C. chapter 53, and any implementing Federal regulations or directives that FTA may issue, except to the extent FTA determines otherwise in writing.

s. Award to Responsible Contractors. In compliance with 49 U.S.C. § 5325(j), the Recipient agrees to award third party contracts only to those contractors possessing the ability to successfully perform under the terms of the proposed procurement. Before awarding a third party contract, the Recipient agrees to consider:

(1) The third party contractor's integrity,

(2) The third party contractor's compliance with public policy,

(3) The third party contractor's past performance, including the performance reported in Contractor Performance Assessment Reports required by 49 U.S.C. § 5309(l)(2), if any, and

(4) The third party contractor's financial and technical resources.

t. Access to Third Party Contract Records. The Recipient agrees to require, and assures that its subrecipients require, their third party contractors and third party subcontractors at each tier to provide to the U.S. Secretary of Transportation and the Comptroller General of the United States or their duly authorized representatives, access to all third party contract records as required by 49 U.S.C. § 5325(g). The Recipient further agrees to require, and assures that its subrecipients require, their third party contractors and third party subcontractors, at each tier, to provide sufficient access to third party procurement records as needed for compliance with Federal laws and regulations or to assure proper Project management as determined by FTA.

u. Electronic and Information Technology. When using Federal assistance to procure reports or information for distribution to FTA, among others, the Recipient agrees to include in its specifications a requirement that the reports or information will be prepared using electronic or information technology capable of assuring that, when provided to FTA, the reports or

information will meet the applicable accessibility standards of section 508 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 794d, and U.S. ATBCB regulations, “Electronic and Information Technology Accessibility Standards,” 36 C.F.R. Part 1194.

## **Section 16. Leases.**

- a. Capital Leases. To the extent applicable, the Recipient agrees to comply with FTA regulations, “Capital Leases,” 49 C.F.R. Part 639, and any revision thereto.
- b. Leases Involving Certificates of Participation. The Recipient agrees to obtain FTA concurrence before entering into any leasing arrangement involving the issuance of certificates of participation in connection with the acquisition of any capital asset.

## **Section 17. Patent Rights.**

- a. General. If any invention, improvement, or discovery of the Recipient or of any subrecipient, lessee, third party contractor, or other participant at any tier of the Project is conceived or first actually reduced to practice in the course of or under the Project, and that invention, improvement, or discovery is patentable under the laws of the United States of America or any foreign country, the Recipient agrees to notify FTA immediately and provide a detailed report in a format satisfactory to FTA.
- b. Federal Rights. The Recipient agrees that its rights and responsibilities, and those of each subrecipient, lessee, third party contractor, or other participant at any tier of the Project, pertaining to that invention, improvement, or discovery will be determined in accordance with applicable Federal laws and regulations, including any waiver thereof. Absent a determination in writing to the contrary by the Federal Government, the Recipient agrees to transmit to FTA those rights due the Federal Government in any invention, improvement, or discovery resulting from that subagreement, third party contract, third party subcontract, or arrangement, as specified in 35 U.S.C. §§ 200 *et seq.*, and U.S. Department of Commerce regulations, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” 37 C.F.R. Part 401, irrespective of the status of the Recipient, subrecipient, lessee, third party contractor or other participant in the Project (*i.e.*, a large business, small business, State government, State instrumentality, local government, Indian tribe, nonprofit organization, institution of higher education, or individual).
- c. License Fees and Royalties. FTA considers income earned from license fees and royalties for patents, patent applications, and inventions produced under the Project to be program income. Except to the extent FTA determines otherwise in writing, as provided in 49 C.F.R. Parts 18 and 19, the Recipient has no obligation to the Federal Government with respect to that program income, apart from compliance with 35 U.S.C. §§ 200 *et seq.*, which applies to patent rights developed under a research project.

## **Section 18. Rights in Data and Copyrights.**

a. Definition. The term “subject data,” as used in this Section 18 of this Master Agreement means recorded information, whether or not copyrighted, that is delivered or specified to be delivered under the Grant Agreement or Cooperative Agreement for the Project. Examples include, but are not limited to: computer software, standards, specifications, engineering drawings and associated lists, process sheets, manuals, technical reports, catalog item identifications, and related information. “Subject data” do not include financial reports, cost analyses, or other similar information used for Project administration.

b. General. The following restrictions apply to all subject data first produced in the performance of the Grant Agreement or Cooperative Agreement for the Project:

(1) Except for its own internal use, the Recipient may not publish or reproduce subject data in whole or in part, or in any manner or form, nor may the Recipient authorize others to do so, without the prior written consent of the Federal Government, unless the Federal Government has previously released or approved the release of such data to the public.

(2) The restrictions on publication of Paragraph 18.b(1) of this Master Agreement, however, do not apply to a Grant Agreement or Cooperative Agreement with an institution of higher learning.

c. Federal Rights in Data and Copyrights. The Recipient agrees to provide to the Federal Government a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, for Federal Government purposes the subject data described in this Subsection 18.c of this Master Agreement. As used herein, “for Federal Government purposes,” means use only for the direct purposes of the Federal Government. Without the copyright owner’s consent, the Federal Government may not provide or otherwise extend to other parties the Federal Government’s license to:

(1) Any subject data developed under the Grant Agreement or Cooperative Agreement for the Project, or under a subagreement, lease, third party contract or other arrangement at any tier of the Project, supported with Federal assistance derived from the Grant Agreement or Cooperative Agreement for the Project, whether or not a copyright has been obtained; and

(2) Any rights of copyright to which a Recipient, subrecipient, lessee, third party contractor, or other participant at any tier of the Project purchases ownership using Federal assistance.

d. Special Federal Rights in Data for Research, Development, Demonstration, and Special Studies Projects. In general, FTA’s purpose in providing Federal assistance for a research, development, demonstration, or special studies Project is to increase transportation knowledge, rather than limit the benefits of the Project to Project participants. Therefore, when the Project is completed, the Recipient agrees to provide a Project report that FTA may publish or make available for publication on the Internet. In addition, the Recipient agrees to provide other reports pertaining to the Project that FTA may request. The Recipient agrees to identify clearly any specific confidential, privileged, or proprietary information it submits to FTA. In addition,

except to the extent that FTA determines otherwise in writing, the Recipient of Federal assistance to support a research, development, demonstration, or a special studies Project agrees that, in addition to the rights in data and copyrights that it must provide to the Federal Government as set forth in Subsection 18.c of this Master Agreement, FTA may make available to any FTA recipient, subrecipient, third party contractor, third party subcontractor or other participant at any tier of the Project, either FTA's license in the copyright to the subject data or a copy of the subject data. If the Project is not completed for any reason whatsoever, all data developed under the Project shall become subject data as defined in Subsection 18.a of this Master Agreement and shall be delivered as the Federal Government may direct. This Subsection 18.d, however, does not apply to adaptations of automatic data processing equipment or programs for the Recipient's use when the costs thereof are financed with Federal assistance through an FTA capital program.

e. License Fees and Royalties. FTA considers income earned from license fees and royalties for copyrighted material, or trademarks produced under the Project to be program income. Except to the extent FTA determines otherwise in writing, as provided in 49 C.F.R. Parts 18 and 19, the Recipient has no obligation to the Federal Government with respect to that program income, apart from compliance with 35 U.S.C. §§ 200 *et seq.*, which applies to patent rights developed under a research project.

f. Hold Harmless. Except as prohibited or otherwise limited by State law or except to the extent that FTA determines otherwise in writing, upon request by the Federal Government, the Recipient agrees to indemnify, save, and hold harmless the Federal Government and its officers, agents, and employees acting within the scope of their official duties against any liability, including costs and expenses, resulting from any willful or intentional violation by the Recipient of proprietary rights, copyrights, or right of privacy, arising out of the publication, translation, reproduction, delivery, use, or disposition of any data furnished under the Project. The Recipient shall not be required to indemnify the Federal Government for any such liability caused by the wrongful acts of Federal employees or agents.

g. Restrictions on Access to Patent Rights. Nothing in Section 18 of this Master Agreement pertaining to rights in data shall either imply a license to the Federal Government under any patent or be construed to affect the scope of any license or other right otherwise granted to the Federal Government under any patent.

h. Data Developed Without Federal Funding or Support. In connection with the Project, the Recipient may find it necessary to provide data to FTA developed without any Federal funding or support by the Federal Government. The requirements of Subsections 18.b, 18.c, and 18.d of this Master Agreement do not apply to data developed without Federal funding or support by the Federal Government, even though that data may have been used in connection with the Project. Nevertheless, the Recipient understands and agrees that the Federal Government will not be able to protect data from unauthorized disclosure unless that data is clearly marked "Proprietary" or "Confidential."

i. Requirements to Release Data. To the extent required by U.S. DOT regulations, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education,

Hospitals, and Other Non-Profit Organizations,” at 49 C.F.R. § 19.36(d), or other applicable Federal laws or Federal regulations, the Recipient understands and agrees that the data and information it submits to the Federal Government may be required to be released in accordance with the Freedom of Information Act (or another Federal law or Federal regulation providing access to such records).

## **Section 19. Use of Real Property, Equipment, and Supplies.**

The Recipient understands and agrees that the Federal Government retains a Federal interest in any real property, equipment, and supplies financed with Federal assistance (Project property) until, and to the extent, that the Federal Government relinquishes its Federal interest in that Project property. With respect to any Project property financed with Federal assistance under the Grant Agreement or Cooperative Agreement, the Recipient agrees to comply with the following provisions of this Master Agreement, except to the extent FTA determines otherwise in writing:

a. Use of Project Property. The Recipient agrees to maintain continuing control of the use of Project property to the extent satisfactory to FTA. The Recipient agrees to use Project property for appropriate Project purposes (which may include joint development purposes that generate program income, both during and after the Project’s award period and used to support public transportation activities) for the duration of the useful life of that property, as required by FTA. Should the Recipient unreasonably delay or fail to use Project property during the useful life of that property, the Recipient agrees that it may be required to return the entire amount of the Federal assistance expended on that property. The Recipient further agrees to notify FTA immediately when any Project property is withdrawn from Project use or when any Project property is used in a manner substantially different from the representations the Recipient has made in its Application or in the Project Description for the Grant Agreement or Cooperative Agreement for the Project.

b. General. A Recipient that is a State, local government, or Indian tribal government agrees to comply with the property management standards of 49 C.F.R. §§ 18.31 through 18.34, including any amendments thereto, and with other applicable Federal regulations and follow applicable Federal directives, except to the extent that FTA determines otherwise in writing. A Recipient that is an institution of higher education or private nonprofit entity, agrees to comply with the property management standards of 49 C.F.R. §§ 19.30 through 19.37, including any amendments thereto, and with other applicable Federal regulations and follow applicable Federal directives, except to the extent that FTA determines otherwise in writing. Any exception to the requirements of 49 C.F.R. §§ 18.31 through 18.34, or 49 C.F.R. §§ 19.30 through 19.37, requires the express approval of the Federal Government in writing. A Recipient that is a for-profit entity agrees to comply with property management standards satisfactory to FTA. The Recipient also agrees to comply with FTA’s reimbursement requirements for premature dispositions of certain Project equipment, as set forth in this Section 19.g of this Master Agreement.

c. Maintenance. The Recipient agrees to maintain its Project property in good operating order, in compliance with any applicable Federal laws and regulations, and in accordance with applicable Federal directives, except to the extent that FTA determines otherwise in writing.

d. Records. The Recipient agrees to keep satisfactory records pertaining to the use of the Project property, and submit to FTA upon request such information as may be required to assure compliance with this Section 19 of this Master Agreement.

e. Incidental Use. The Recipient agrees that:

(1) General. Any incidental use of Project property will not exceed that permitted under applicable Federal laws or regulations and in accordance with applicable Federal directives.

(2) Alternative Fueling Facilities. In accordance with 49 U.S.C. § 5323(p), any incidental use of its federally financed alternative fueling facilities and equipment by nontransit public entities and private entities will be permitted, only if:

(a) The incidental use does not interfere with the Recipient's Project or public transportation operations;

(b) The Recipient fully recaptures all costs related to the incidental use from the nontransit public entity or private entity;

(c) The Recipient uses revenues received from the incidental use in excess of costs for planning, capital, and operating expenses that are incurred in providing public transportation; and

(d) Private entities pay all applicable excise taxes on fuel.

f. Encumbrance of Project Property. Unless FTA approves otherwise in writing, the Recipient agrees to maintain satisfactory continuing control of its Project property as follows:

(1) Written Transactions. Absent the express consent of the Federal Government, the Recipient agrees that it will not execute any transfer of title, lease, lien, pledge, mortgage, encumbrance, third party contract, subagreement, grant anticipation note, alienation, innovative finance arrangement (such as a cross border lease, leveraged lease, or otherwise), or any other obligation pertaining to Project property, that in any way would affect the continuing Federal interest in its Project property.

(2) Oral Transactions. Absent the express consent of the Federal Government in writing, the Recipient agrees that it will not obligate itself to any third party with respect to its Project property in any way that would adversely affect the continuing Federal interest in that property.

(3) Other Actions. The Recipient agrees that it will not take any action that would either adversely affect the Federal interest or impair its continuing control of use of its Project property.

g. Transfer of Project Property. The Recipient understands and agrees as follows:

(1) Recipient Request. The Recipient may transfer any Project property financed with Federal assistance authorized under 49 U.S.C. chapter 53 to a local governmental authority to be

used for any public purpose with no further obligation to the Federal Government, provided the transfer is approved by the Federal Transit Administrator and conforms with the requirements of 49 U.S.C. §§ 5334(h)(1) through 5334(h)(3).

(2) Federal Government Direction. The Recipient agrees that the Federal Government may direct the disposition of, and even require the Recipient to, transfer title to any Project property financed with Federal assistance for the underlying Grant Agreement or Cooperative Agreement.

(3) Leasing Project Property to Another Party. Unless FTA has determined or determines otherwise in writing, if the Recipient leases any Project property to another party, the Recipient agrees to retain ownership of the leased Project property, and assures that the lessee will use the Project property appropriately, either through a written lease between the Recipient and the lessee, or another similar document. Upon request by FTA, the Recipient agrees to provide a copy of any relevant documents.

h. Disposition of Project Property. With prior FTA approval, the Recipient may sell, transfer, or lease Project property and use the proceeds to reduce the gross project cost of other eligible capital public transportation projects to the extent permitted by 49 U.S.C. § 5334(h)(4). The Recipient also agrees that FTA may establish the useful life of Project property, and that it will use Project property continuously and appropriately throughout the useful life of that property.

(1) Project Property Whose Useful Life Has Expired. When the useful life of Project property has expired, the Recipient agrees to comply with FTA's disposition requirements.

(2) Project Property Prematurely Withdrawn from Use. For Project property withdrawn from appropriate use before its useful life has expired, the Recipient agrees as follows:

(a) Notification Requirement. The Recipient agrees to notify FTA immediately when any Project property is prematurely withdrawn from appropriate use, whether by planned withdrawal, misuse, or casualty loss.

(b) Calculating the Fair Market Value of Prematurely Withdrawn Project Property. The Recipient agrees that the Federal Government retains a Federal interest in the fair market value of Project property prematurely withdrawn from appropriate use. The amount of the Federal interest in the Project property shall be determined on the basis of the ratio of the Federal assistance made available for the property to the actual cost of the property. The Recipient agrees that the fair market value of Project property prematurely withdrawn from Project use will be calculated as follows:

1 Equipment and Supplies. Unless otherwise determined in writing by FTA, the Recipient agrees that the fair market value of Project equipment and supplies shall be calculated by straight-line depreciation, based on the useful life of the equipment or supplies as established or approved by FTA. The fair market value of Project equipment and supplies shall be the value immediately before the occurrence prompting the withdrawal of the equipment or supplies from appropriate use. In the case of Project equipment or supplies lost or damaged by fire, casualty, or natural disaster, the fair market value shall be calculated on the basis of the condition of the

equipment or supplies immediately before the fire, casualty, or natural disaster, irrespective of the extent of insurance coverage. As authorized by 49 C.F.R. § 18.32(b), a State may use its own property disposition procedures, provided that those procedures comply with the laws of that State.

2 Real Property. The Recipient agrees that the fair market value of real property financed under the Project shall be determined by FTA on the basis of competent appraisal based on an appropriate date approved by FTA, as provided by 49 C.F.R. Part 24, or by straight line depreciation of improvements to the real property coupled with the value of the land as determined by FTA on the basis of appraisal, or by other applicable Federal law or regulations.

3 Exceptional Circumstances. The Recipient agrees that the Federal Government may require the use of another method to determine the fair market value of Project property withdrawn from service. In unusual circumstances, the Recipient may request that another reasonable method be used, including, but not limited to, accelerated depreciation, comparable sales, or established market values. In determining whether to approve such a request, the Federal Government may consider any action taken, omission made, or unfortunate occurrence suffered by the Recipient concerning Project property no longer used for appropriate purposes.

(c) Financial Obligations to the Federal Government. Unless otherwise approved in writing by the Federal Government, the Recipient agrees to remit to the Federal Government the Federal interest in the fair market value of any Project property prematurely withdrawn from appropriate use. In the case of fire, casualty, or natural disaster, the Recipient may fulfill its obligations to remit the Federal interest by either:

1 Investing an amount equal to the remaining Federal interest in like-kind property that is eligible for assistance within the scope of the Project that provided Federal assistance for the property that has been prematurely withdrawn from use; or

2 Returning to the Federal Government an amount equal to the remaining Federal interest in the withdrawn Project property.

i. Insurance Proceeds. If the Recipient receives insurance proceeds as a result of damage or destruction to the Project property, the Recipient agrees to:

(1) Apply those insurance proceeds to the cost of replacing the damaged or destroyed Project property taken out of service, or

(2) Return to the Federal Government an amount equal to the remaining Federal interest in the damaged or destroyed Project property.

j. Transportation - Hazardous Materials. The Recipient agrees to comply with applicable requirements of U.S. Pipeline and Hazardous Materials Safety Administration regulations, "Shippers - General Requirements for Shipments and Packagings," 49 C.F.R. Part 173, in connection with the transportation of any hazardous materials.

k. Misused or Damaged Project Property. If any damage to Project property results from abuse or misuse occurring with the Recipient's knowledge and consent, the Recipient agrees to restore the Project property to its original condition or refund the value of the Federal interest in that property, as the Federal Government may require.

l. Responsibilities After Project Closeout. The Recipient agrees that Project closeout will not change the Recipient's Project property management responsibilities as stated in Section 19 of this Master Agreement, and as may be set forth in Federal laws, regulations, and directives effective at a later date, except to the extent the Federal Government determines otherwise in writing.

## **Section 20. Insurance.**

In addition to other insurance requirements that may apply, the Recipient agrees as follows:

a. Minimum Requirements. At a minimum, the Recipient agrees to comply with the insurance requirements normally imposed on the Recipient by its State and local laws, regulations, and ordinances, except to the extent that the Federal Government determines otherwise in writing.

b. Flood Hazards. To the extent applicable, the Recipient agrees to comply with the flood insurance purchase provisions of section 102(a) of the Flood Disaster Protection Act of 1973, as amended, 42 U.S.C. § 4012a(a), with respect to any Project activity involving construction or an acquisition having an insurable cost of \$10,000 or more.

## **Section 21. Relocation.**

When relocation of individuals or businesses is required, the Recipient agrees as follows:

a. Relocation Protections. The Recipient agrees to comply with 49 U.S.C. § 5324(a), which requires compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, 42 U.S.C. §§ 4601 *et seq.*, and implementing U.S. DOT regulations, "Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs," 49 C.F.R. Part 24, which provide for fair and equitable treatment of persons displaced as a result of a Federal or federally assisted program. These requirements apply to relocation in connection with all interests in real property acquired for Project purposes irrespective of Federal participation in the costs of that real property.

b. Nondiscrimination in Housing. In carrying out its responsibilities to provide housing that may be required to comply with Federal relocation requirements for individuals, the Recipient agrees to comply with Title VIII of the Civil Rights Act of 1968, as amended, 42 U.S.C. §§ 3601 *et seq.*, and follow Executive Order No. 12892, "Leadership and Coordination of Fair Housing in Federal Programs: Affirmatively Furthering Fair Housing," 42 U.S.C. § 3608 note, except to the extent the Federal Government determines otherwise in writing.

c. Prohibition Against Use of Lead-Based Paint. In undertaking construction or rehabilitation of residential structures on behalf of individuals affected by real property acquisition in connection with the Project, the Recipient agrees that it will not use lead-based paint, consistent with the prohibitions of section 401(b) of the Lead-Based Paint Poisoning Prevention Act, 42 U.S.C. § 4831(b), and implementing U.S. Housing and Urban Development regulations, “Lead-based Paint Poisoning Prevention in Certain Residential Structures,” 24 C.F.R. Part 35.

## **Section 22. Real Property.**

For real property acquired with Federal assistance, the Recipient agrees as follows:

a. Land Acquisition. The Recipient agrees to comply with 49 U.S.C. § 5324(a), which requires compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, 42 U.S.C. §§ 4601 *et seq.*, and implementing U.S. DOT regulations, “Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs,” 49 C.F.R. Part 24, which provide for fair and equitable treatment of persons whose property is acquired as a result of a Federal or federally assisted program. These requirements apply to all interests in real property acquired for Project purposes irrespective of Federal participation in the cost of that real property.

b. Covenant Assuring Nondiscrimination. The Recipient agrees to include a covenant in the title of the real property acquired for the Project to assure nondiscrimination during the useful life of the Project.

c. Recording Title to Real Property. To the extent required by FTA, the Recipient agrees to record the Federal interest in title to real property used in connection with the Project.

d. FTA Approval of Changes in Real Property Ownership. The Recipient agrees that it will not dispose of, modify the use of, or change the terms of the real property title or any other interest in the site and facilities used in the Project without permission and instructions from FTA.

## **Section 23. Construction.**

Except to the extent the Federal Government determines otherwise in writing, the Recipient agrees as follows:

a. Drafting, Review, and Approval of Construction Plans and Specifications. The Recipient agrees to comply with FTA requests pertaining to the drafting, review, and approval of construction plans and specifications.

b. Supervision of Construction. The Recipient agrees to provide and maintain competent and adequate engineering supervision at the construction site to ensure that the completed work conforms to the approved plans and specifications.

- c. Construction Reports. The Recipient agrees to provide progress reports and other data and information that may be required by FTA or the State in which the construction takes place.
- d. Project Management for Major Capital Projects. To the extent applicable, the Recipient agrees to comply with FTA regulations, “Project Management Oversight,” 49 C.F.R. Part 633, and any amendments thereto, and follow the most recent edition of FTA Circular 5800.1, “Safety and Security Management Guidance for Major Capital Projects,” and any later revisions thereto.
- e. Seismic Safety. The Recipient agrees to comply with the Earthquake Hazards Reduction Act of 1977, as amended, 42 U.S.C. §§ 7701 *et seq.*, in accordance with Executive Order No. 12699, “Seismic Safety of Federal and Federally-Assisted or Regulated New Building Construction,” 42 U.S.C. § 7704 note, and comply with implementing U.S. DOT regulations, “Seismic Safety,” 49 C.F.R. Part 41 (specifically, 49 C.F.R. § 41.117).

## **Section 24. Employee Protections.**

a. Construction Activities. The Recipient agrees to comply, and assures the compliance of each subrecipient, lessee, third party contractor, and other participant at any tier of the Project, with the following Federal laws and regulations providing protections for construction employees:

(1) Davis-Bacon Act, as amended, 40 U.S.C. §§ 3141 *et seq.*, pursuant to FTA enabling legislation requiring compliance with the Davis-Bacon Act at 49 U.S.C. § 5333(a), and implementing U.S. DOL regulations, “Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction (also Labor Standards Provisions Applicable to Nonconstruction Contracts Subject to the Contract Work Hours and Safety Standards Act),” 29 C.F.R. Part 5;

(2) Contract Work Hours and Safety Standards Act, as amended, 40 U.S.C. §§ 3701 *et seq.*, specifically, the wage and hour requirements of section 102 of that Act at 40 U.S.C. § 3702, and implementing U.S. DOL regulations, “Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction (also Labor Standards Provisions Applicable to Nonconstruction Contracts Subject to the Contract Work Hours and Safety Standards Act),” 29 C.F.R. Part 5; and the safety requirements of section 107 of that Act at 40 U.S.C. § 3704, and implementing U.S. DOL regulations, “Safety and Health Regulations for Construction,” 29 C.F.R. Part 1926; and

(3) Copeland “Anti-Kickback” Act, as amended, 18 U.S.C. § 874 and 40 U.S.C. § 3145, and implementing U.S. DOL regulations, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in part by Loans or Grants from the United States,” 29 C.F.R. Part 3.

b. Activities Not Involving Construction. The Recipient agrees to comply, and assures the compliance of each subrecipient, lessee, third party contractor, and other participant at any tier of the Project, with the employee protection requirements for nonconstruction employees of the Contract Work Hours and Safety Standards Act, as amended, 40 U.S.C. §§ 3701 *et seq.*, in

particular with the wage and hour requirements of section 102 of that Act at 40 U.S.C. § 3702, and with implementing U.S. DOL regulations, “Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction (also Labor Standards Provisions Applicable to Nonconstruction Contracts Subject to the Contract Work Hours and Safety Standards Act),” 29 C.F.R. Part 5.

c. Activities Involving Commerce. The Recipient agrees to comply with the Fair Labor Standards Act, 29 U.S.C. §§ 201 *et seq.*, to the extent that it applies to employees performing Project work involving commerce.

d. Public Transportation Employee Protective Arrangements. If the Grant Agreement or Cooperative Agreement for the Project indicates that public transportation employee protective arrangements required by U.S. DOL apply to public transportation operations performed in connection with the Project, the Recipient agrees to comply with the following requirements:

(1) Standard Public Transportation Employee Protective Arrangements. To the extent that the Project involves public transportation operations and to the extent required by Federal law, the Recipient agrees to implement the Project in accordance with the terms and conditions that the U.S. Secretary of Labor has determined to be fair and equitable to protect the interests of any employees affected by the Project and that comply with the requirements of 49 U.S.C. § 5333(b), in accordance with U.S. DOL guidelines, “Section 5333(b), Federal Transit Law,” 29 C.F.R. Part 215, and any amendments thereto. These terms and conditions are identified in U.S. DOL’s certification of public transportation employee protective arrangements to FTA, the date of which appears in the Grant Agreement or Cooperative Agreement for the Project. The Recipient agrees to implement the Project in accordance with the conditions stated in that U.S. DOL certification. That certification and any documents cited therein are incorporated by reference and made part of the Grant Agreement or Cooperative Agreement for the Project. The requirements of this Paragraph 24.d(1) of this Master Agreement do not apply to Projects for elderly individuals or individuals with disabilities authorized by 49 U.S.C. § 5310(a)(2) or subsection 3012(b) of SAFETEA-LU, Projects for nonurbanized areas authorized by 49 U.S.C. § 5311; or Projects for the over-the-road bus accessibility program authorized by section 3038 of TEA-21, as amended by section 3039 of SAFETEA-LU, 49 U.S.C. § 5310 note. Separate requirements for those Projects are set forth in Paragraphs 24.d(2), (3), and (4), respectively, of this Master Agreement.

(2) Public Transportation Employee Protective Arrangements for the Elderly Individuals and Individuals with Disabilities Formula Program and for the Elderly Individuals and Individuals with Disabilities Formula Program Pilot Program. To the extent that the U.S. Secretary of Transportation has determined or determines in the future that employee protective arrangements required by 49 U.S.C. § 5333(b) are necessary or appropriate for a governmental authority subrecipient participating in a Project authorized by 49 U.S.C. § 5310(b)(2) or subsection 3012(b) of SAFETEA-LU, 49 U.S.C. § 5310 note, the Recipient agrees to carry out the Project in compliance with the terms and conditions determined by the U.S. Secretary of Labor necessary to comply with the requirements of 49 U.S.C. § 5333(b), in accordance with U.S. DOL guidelines, “Section 5333(b), Federal Transit Law,” at 29 C.F.R. Part 215, and any amendments thereto. These terms and conditions, if any, are identified in the

U.S. DOL's certification of public transportation employee protective arrangements to FTA, the date of which appears in the Grant Agreement. The Recipient agrees to implement the Project in compliance with the conditions stated in that U.S. DOL certification, to the extent that certification is required. Any U.S. DOL certification that may be provided and any documents cited therein are incorporated by reference and made part of the Grant Agreement.

(3) Public Transportation Employee Protective Arrangements for Projects in Nonurbanized Areas Authorized by 49 U.S.C. § 5311. The Recipient agrees to comply with the terms and conditions of the Special Warranty for the Nonurbanized Area Program that is most current as of the date of execution of the Grant Agreement or Cooperative Agreement for the Project, and any alternative comparable arrangements specified by U.S. DOL for application to the Recipient's project, in accordance with U.S. DOL guidelines, "Section 5333(b), Federal Transit Law," 29 C.F.R. Part 215, and any revisions thereto. Any U.S. DOL Special Warranty that may be provided and any documents cited therein are incorporated by reference and made part of the Grant Agreement.

(4) Employee Protective Arrangements for Projects Financed by the Over-the-Road Bus Accessibility Program. The Recipient agrees to comply with the terms and conditions of the Special Warranty for the Over-the-Road Bus Accessibility Program that is most current as of the date of execution of the Grant Agreement or Cooperative Agreement for the Project, and any alternative comparable arrangements specified by U.S. DOL for application to the Recipient's project, in accordance with U.S. DOL guidelines, "Section 5333(b), Federal Transit Law," 29 C.F.R. Part 215, and any revisions thereto. Any U.S. DOL Special Warranty that may be provided and any documents cited therein are incorporated by reference and made part of the Grant Agreement.

## **Section 25. Environmental Protections.**

The Recipient recognizes that many Federal and State laws imposing environmental and resource conservation requirements may apply to the Project. Some, but not all, of the major Federal laws that may affect the Project include: the National Environmental Policy Act of 1969, as amended, 42 U.S.C. §§ 4321 through 4335; the Clean Air Act, as amended, 42 U.S.C. §§ 7401 through 7671q and scattered sections of Title 29, United States Code; the Clean Water Act, as amended, 33 U.S.C. §§ 1251 through 1377; the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §§ 6901 through 6992k; the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9601 through 9675, as well as environmental provisions within Title 23, United States Code, and 49 U.S.C. chapter 53. The Recipient also recognizes that U.S. EPA, FHWA and other Federal agencies have issued, and are expected to issue, Federal regulations and directives that may affect the Project. Thus, the Recipient agrees to comply, and assures the compliance of each subrecipient, lessee, third party contractor, and other participant at any tier of the Project, with any applicable Federal laws and regulations and follow applicable Federal directives in effect now or that become effective in the future, except to the extent the Federal Government determines otherwise in writing. Listed below are environmental provisions of particular concern to FTA and the Recipient. The Recipient understands and agrees that those laws and regulations, and associated Federal directives, might

not constitute the Recipient's entire obligation to meet all Federal environmental and resource conservation requirements.

a. National Environmental Policy. Federal assistance is contingent upon the Recipient's facilitating FTA's compliance with all applicable requirements and implementing regulations of the National Environmental Policy Act of 1969, as amended (NEPA), 42 U.S.C. §§ 4321 through 4335 (as restricted by 42 U.S.C. § 5159, if applicable); Executive Order No. 11514, as amended, "Protection and Enhancement of Environmental Quality," 42 U.S.C. § 4321 note; FTA statutory requirements at 49 U.S.C. § 5324(b); U.S. Council on Environmental Quality regulations pertaining to compliance with NEPA, 40 C.F.R. Parts 1500 through 1508; and joint FHWA/FTA regulations, "Environmental Impact and Related Procedures," 23 C.F.R. Part 771 and 49 C.F.R. Part 622, and other applicable Federal environmental protection regulations that may be promulgated at a later date. The Recipient agrees to comply with the applicable provisions of 23 U.S.C. § 139 pertaining to environmental procedures, and, as applicable, 23 U.S.C. § 326, pertaining to State responsibility for categorical exclusions, in accordance with the provisions of joint FHWA/FTA final guidance, "SAFETEA-LU Environmental Review Process (Public Law 109-59)," 71 *Fed. Reg.* 66576 *et seq.*, November 15, 2006, and any applicable Federal directives that may be issued at a later date, except to the extent that FTA determines otherwise in writing.

b. Air Quality. Except to the extent the Federal Government determines otherwise in writing, the Recipient agrees to comply with all applicable Federal laws and regulations and follow applicable Federal directives implementing the Clean Air Act, as amended, 42 U.S.C. §§ 7401 through 7671q. Specifically:

(1) The Recipient agrees to comply with the applicable requirements of subsection 176(c) of the Clean Air Act, 42 U.S.C. § 7506(c); with U.S. EPA regulations, "Determining Conformity of Federal Actions to State or Federal Implementation Plans," 40 C.F.R. Part 93, Subpart A; and with any other applicable Federal conformity regulations that may be promulgated at a later date. To support the requisite air quality conformity finding for the Project, the Recipient agrees to implement each air quality mitigation or control measure incorporated in the applicable documents accompanying the approval of the Project. The Recipient further agrees that any Project identified in an applicable State Implementation Plan (SIP) as a Transportation Control Measure will be wholly consistent with the design concept and scope of the Project described in the SIP.

(2) U.S. EPA also imposes requirements implementing the Clean Air Act, as amended, that may apply to public transportation operators, particularly operators of large public transportation bus fleets. Accordingly, to the extent they apply to the Project, the Recipient agrees to comply with U.S. EPA regulations, "Control of Air Pollution from Mobile Sources," 40 C.F.R. Part 85; U.S. EPA regulations, "Control of Air Pollution from New and In-Use Motor Vehicles and New and In-Use Motor Vehicle Engines," 40 C.F.R. Part 86; and U.S. EPA regulations "Fuel Economy of Motor Vehicles," 40 C.F.R. Part 600, and any revisions thereto.

(3) The Recipient agrees to comply with the notice of violating facility provisions of section 306 of the Clean Air Act, as amended, 42 U.S.C. § 7414, and facilitate compliance with Executive Order No. 11738, "Administration of the Clean Air Act and the Federal Water

Pollution Control Act with Respect to Federal Contracts, Grants, or Loans,” 42 U.S.C. § 7606 note.

c. Clean Water. Except to the extent the Federal Government determines otherwise in writing, the Recipient agrees to comply with all applicable Federal laws and regulations and follow applicable Federal directives implementing the Clean Water Act, as amended, 33 U.S.C. §§ 1251 through 1377. Specifically:

(1) The Recipient agrees to protect underground sources of drinking water in compliance with the Safe Drinking Water Act of 1974, as amended, 42 U.S.C. §§ 300f through 300j-6.

(2) The Recipient agrees to comply with the notice of violating facility provisions of section 508 of the Clean Water Act, as amended, 33 U.S.C. § 1368, and facilitate compliance with Executive Order No. 11738, “Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, or Loans,” 42 U.S.C. § 7606 note.

d. Use of Certain Public Lands. The Recipient agrees that in implementing its Project, it will not use any publicly owned land from a park, recreation area, or wildlife or waterfowl refuge of national, State, or local significance as determined by the Federal, State, or local officials having jurisdiction thereof, unless the Federal Government makes the findings required by 49 U.S.C. § 303. The Recipient also agrees to comply with joint FHWA/FTA regulations, “Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites,” 23 C.F.R. Part 774, and referenced in 49 C.F.R. Part 622.

e. Wild and Scenic Rivers. The Recipient agrees to comply with applicable provisions of the Wild and Scenic Rivers Act of 1968, as amended, 16 U.S.C. §§ 1271 through 1287, relating to protecting components of the national wild and scenic rivers system, with applicable implementing U.S. Forest Service regulations, “Wild and Scenic Rivers,” 36 C.F.R. Part 297, and with applicable implementing U.S. Bureau of Land Management regulations, “Management Areas,” 43 C.F.R. Part 8350.

f. Coastal Zone Management. The Recipient agrees to assure Project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972, as amended, 16 U.S.C. §§ 1451 through 1465.

g. Wetlands. The Recipient agrees to facilitate compliance with the protections for wetlands addressed in Executive Order No. 11990, as amended, “Protection of Wetlands,” at 42 U.S.C. § 4321 note.

h. Floodplains. The Recipient agrees to facilitate compliance with the flood hazards protections in floodplains in accordance with Executive Order No. 11988, as amended, “Floodplain Management,” 42 U.S.C. § 4321 note.

i. Endangered Species and Fisheries Conservation. The Recipient agrees to comply with applicable protections for endangered species of the Endangered Species Act of 1973, as

amended, 16 U.S.C. §§ 1531 through 1544, and the Magnuson Stevens Fisheries Conservation Act, as amended, 16 U.S.C. §§ 1801 *et seq.*

j. Historic Preservation. The Recipient agrees as follows:

(1) The Recipient agrees that in implementing its Project, it will not use any land from a historic site that is on or eligible for inclusion on the National Register of Historic Places, unless the Federal Government makes the findings required by 49 U.S.C. § 303.

(2) The Recipient agrees to encourage compliance with the Federal historic and archaeological preservation requirements of section 106 of the National Historic Preservation Act, as amended, 16 U.S.C. § 470f; Executive Order No. 11593, "Protection and Enhancement of the Cultural Environment," 16 U.S.C. § 470 note; and the Archaeological and Historic Preservation Act of 1974, as amended, 16 U.S.C. §§ 469a through 469c, as follows:

(a) In accordance with U.S. Advisory Council on Historic Preservation regulations, "Protection of Historic and Cultural Properties," 36 C.F.R. Part 800, the Recipient agrees to consult with the State Historic Preservation Officer concerning investigations to identify properties and resources included or eligible for inclusion in the National Register of Historic Places that may be affected by the Project, and agrees to notify FTA of affected properties.

(b) The Recipient agrees to comply with all applicable Federal regulations and directives to avoid or mitigate adverse effects on those historic properties, except to the extent the Federal Government determines otherwise in writing.

k. Indian Sacred Sites. The Recipient agrees to facilitate compliance with the preservation of places and objects of religious importance to American Indians, Eskimos, Aleuts, and Native Hawaiians, pursuant to the American Indian Religious Freedom Act, 42 U.S.C. § 1996, in accordance with Executive Order No. 13007, "Indian Sacred Sites," 42 U.S.C. § 1996 note, except to the extent that the Federal Government determines otherwise in writing.

l. Mitigation of Adverse Environmental Effects. Should the proposed Project cause or result in adverse environmental effects, the Recipient agrees to take all reasonable measures to minimize the impact of those adverse effects, as required by 49 U.S.C. § 5324(b), and other applicable Federal laws and regulations, including 23 C.F.R. Part 771, 23 C.F.R. Part 774, and 49 C.F.R. Part 622. The Recipient agrees to comply with all environmental mitigation measures that may be identified as commitments in applicable environmental documents, (*i.e.*, environmental assessments, environmental impact statements, memoranda of agreement, and other documents as required by 49 U.S.C. § 303). The Recipient also agrees to comply with any conditions the Federal Government might impose in a finding of no significant impact or record of decision. The Recipient agrees that those environmental mitigation measures are incorporated by reference and made part of the Grant Agreement or Cooperative Agreement for the Project. The Recipient also agrees that any deferred mitigation measures will be incorporated by reference and made part of the Grant Agreement or Cooperative Agreement for the Project as soon as agreement with the Federal Government is reached. The Recipient agrees that any mitigation measures agreed on may not be modified or withdrawn without the written approval of the Federal Government.

## **Section 26. Energy Conservation.**

The Recipient agrees to comply with applicable mandatory energy standards and policies of State energy conservation plans under the Energy Policy and Conservation Act, as amended, 42 U.S.C. §§ 6321 *et seq.*, except to the extent that the Federal Government determines otherwise in writing. As applicable, the Recipient agrees to perform an energy assessment for any building constructed, reconstructed, or modified with FTA assistance, in compliance with FTA regulations, “Requirements for Energy Assessments,” 49 C.F.R. Part 622, Subpart C.

## **Section 27. State Management and Monitoring Systems.**

The Recipient agrees to comply with joint FHWA/FTA regulations, “Management and Monitoring Systems,” 23 C.F.R. Part 500, and FTA regulations, “Transportation Infrastructure Management,” 49 C.F.R. Part 614, to the extent applicable.

## **Section 28. Charter Service Operations.**

The Recipient agrees that neither it nor any public transportation operator performing work in connection with a Project financed under 49 U.S.C. chapter 53 or under 23 U.S.C. §§ 133 or 142, will engage in charter service operations, except as authorized by 49 U.S.C. § 5323(d) and FTA regulations, “Charter Service,” 49 C.F.R. Part 604, and any Charter Service regulations or FTA directives that may be issued, except to the extent that FTA determines otherwise in writing. The Charter Service Agreement the Recipient has selected in its latest annual Certifications and Assurances is incorporated by reference and made part of the Grant Agreement or Cooperative Agreement for the Project. If the Recipient has failed to select the Charter Service Agreement in its latest annual Certifications and Assurances to FTA and does conduct charter service operations prohibited by FTA’s Charter Service regulations, the Recipient understands and agrees that: (1) the requirements of FTA’s Charter Service regulations and any amendments thereto will apply to any charter service it or its subrecipients, lessees, third party contractors, or other participants in the Project provide; (2) the definitions of FTA’s Charter Service regulations will apply to the Recipient’s charter operations, and (3) a pattern of violations of FTA’s Charter Service regulations may require corrective measures and imposition of remedies, including barring the Recipient, subrecipient, lessee, third party contractor, or other participant in the Project operating public transportation under the Project from receiving Federal financial assistance from FTA, or withholding an amount of Federal assistance as set forth in Appendix D to FTA’s Charter Service regulations.

## **Section 29. School Transportation Operations.**

The Recipient agrees that neither it nor any public transportation operator performing work in connection with a Project financed under 49 U.S.C. chapter 53 or under 23 U.S.C. §§ 133 or 142,

will engage in school transportation operations for the transportation of students or school personnel exclusively in competition with private school transportation operators, except as authorized by 49 U.S.C. §§ 5323(f) or (g), as applicable, and FTA regulations, “School Bus Operations,” 49 C.F.R. Part 605 to the extent consistent with 49 U.S.C. §§ 5323(f) or (g), in accordance with any School Transportation Operations regulations or FTA directives that may be issued at a later date, except to the extent that FTA determines otherwise in writing. The School Transportation Operations Agreement the Recipient has selected in its latest annual Certifications and Assurances is incorporated by reference and made part of the Grant Agreement or Cooperative Agreement for the Project. If the Recipient has failed to select the School Transportation Agreement in its latest annual Certifications and Assurances to FTA and does conduct school transportation operations prohibited by FTA’s School Bus Operations regulations, 49 C.F.R. Part 605, to the extent those regulations are consistent with 49 U.S.C. §§ 5323(f) or (g), the Recipient understands and agrees that: (1) the requirements of FTA’s School Bus Operations regulations, 49 C.F.R. Part 605, to the extent consistent with 49 U.S.C. §§ 5323(f) or (g), will apply to any school transportation service it or its subrecipients, lessees, third party contractor, or other participants in the project provide, (2) the definitions of FTA’s School Bus Operations regulations will apply to the Recipient’s school transportation operations, and (3) if there is a violation of FTA’s School Bus Operations regulations, to the extent consistent with 49 U.S.C. §§ 5323(f) or (g), FTA will bar the Recipient, subrecipient, lessee, third party contractor, or other Project participant operating public transportation that has violated FTA’s School Bus Operations regulations, 49 C.F.R. Part 605, to the extent consistent with 49 U.S.C. §§ 5323(f) or (g), from receiving Federal transit assistance in an amount FTA considers appropriate.

### **Section 30. Metric System.**

To the extent U.S. DOT or FTA directs, the Recipient agrees to use the metric system of measurement in its Project activities, in accordance with the Metric Conversion Act, as amended by the Omnibus Trade and Competitiveness Act, 15 U.S.C. §§ 205a *et seq.*; Executive Order No. 12770, “Metric Usage in Federal Government Programs,” 15 U.S.C. § 205a note; and applicable U.S. DOT or FTA regulations, and agrees to follow applicable Federal directives, except to the extent the Federal Government determines otherwise in writing. As practicable and feasible, the Recipient agrees to accept products and services with dimensions expressed in the metric system of measurement.

### **Section 31. Geographic Information and Related Spatial Data.**

The Recipient agrees to implement the Project in accordance with of U.S. OMB Circular A-16, “Coordination of Geographic Information and Related Spatial Data Activities,” August 19, 2002, so that any Project activities involving spatial data or geographic information systems activities financed directly or indirectly, in whole or in part, with Federal assistance, are or will be consistent with the National Spatial Data Infrastructure promulgated by the Federal Geographic Data Committee, except to the extent that FTA determines otherwise in writing.

### **Section 32. Substance Abuse.**

To the extent applicable, the Recipient agrees to comply with the following Federal regulations and guidance:

- a. Drug-Free Workplace. U.S. OMB guidance, “Governmentwide Requirements for Drug-Free Workplace (Financial Assistance),” 2 C.F.R. Part 182, and U.S. DOT regulations, “Governmentwide Requirements for Drug-Free Workplace (Financial Assistance),” 49 C.F.R. Part 32, that implement the Drug-Free Workplace Act of 1988, as amended, 41 U.S.C. §§ 702 *et seq.*, including any amendments to these U.S. DOT regulations when they are promulgated.
- b. Alcohol Misuse and Prohibited Drug Use. FTA regulations, “Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations,” 49 C.F.R. Part 655, that implement 49 U.S.C. § 5331.

### **Section 33. Motor Carrier Safety.**

To the extent applicable, the Recipient agrees to comply with, and assures the compliance of its subrecipients, lessees, third party contractors, and other Project participants with the following U.S. Federal Motor Carrier Safety Administration (U.S. FMCSA) regulations:

- a. Financial Responsibility. The Recipient agrees as follows:

(1) To the extent that the Recipient is engaged in interstate commerce and not within a defined commercial zone, the Recipient agrees to comply with U.S. FMCSA regulations, “Minimum Levels of Financial Responsibility for Motor Carriers,” 49 C.F.R. Part 387, setting forth requirements for economic registration and insurance requirements. For a Recipient of Federal assistance under 49 U.S.C. §§ 5307, 5310, or 5311 with interstate transit operations, 49 C.F.R. Part 387 is modified by 49 U.S.C. § 31138(e)(4), which reduces the amount of insurance required of the Recipient to the highest amount required by any State in which the transit provider operates.

(2) To the extent that the Recipient is engaged in interstate commerce and not within a defined commercial zone and the Recipient is not a unit of government (defined as the Federal Government, a State, any political subdivision of a State or any agency established under a compact between States), the Recipient agrees to comply with U.S. FMCSA regulations, Part 387, Subpart B, “Federal Motor Carrier Safety Regulations,” and also with 49 C.F.R. Parts 390 through 396.

- b. Driver Qualifications. The Recipient agrees to comply with U.S. FMCSA’s regulations, “Commercial Driver’s License Standards, Requirements, and Penalties,” 49 C.F.R. Part 383.

- c. Substance Abuse Rules for Motor Carriers. To the extent applicable, the Recipient agrees to comply with U.S. FMCSA’s regulations, “Drug and Alcohol Use and Testing Requirements,”

49 C.F.R. Part 382, and implementing Federal guidance that applies to transit providers that operate a commercial motor vehicle that has a gross vehicle weight rating of more than 26,000 pounds or is designed to transport sixteen (16) or more passengers, including the driver.

#### **Section 34. State Safety Oversight of Rail Fixed Guideway Public Systems.**

To the extent applicable, the Recipient agrees to comply with 49 U.S.C. § 5330 and any amendments thereto, with FTA regulations, “Rail Fixed Guideway Systems; State Safety Oversight,” 49 C.F.R. Part 659 and any amendment thereto, and follow applicable implementing Federal directives, except to the extent that FTA determines otherwise in writing.

#### **Section 35. Federal “\$1 Coin” Requirements.**

To the extent required by the Federal Government, the Recipient agrees to comply with the provisions of section 104 of the Presidential \$1 Coin Act of 2005, 31 U.S.C. § 5112(p), so that the Recipient’s equipment and facilities requiring the use of coins or currency will be fully capable of accepting and dispensing \$1 coins in connection with that use. The Recipient also agrees to display signs and notices denoting the \$1 coin capability of its equipment and facilities on its premises where coins or currency are accepted or dispensed, including on each vending machine.

#### **Section 36. Safe Operation of Motor Vehicles.**

The Recipient agrees as follows:

a. Seat Belt Use. In accordance with the provisions of Executive Order No. 13043, “Increasing Seat Belt Use in the United States,” April 16, 1997, 23 U.S.C. § 402 note, the Recipient is encouraged to adopt and promote on-the-job seat belt use policies and programs for its employees and other personnel that operate company-owned, rented, or personally operated vehicles, and to include this provision in any subagreements, leases, third party contracts, or other similar documents in connection with the Project.

b. Distracted Driving, Including Text Messaging While Driving.

In accordance with Executive Order No. 13513, “Federal Leadership on Reducing Text Messaging While Driving,” October 1, 2009, and DOT Order 3902.10, “Text Messaging While Driving,” December 30, 2009, the Recipient is encouraged to comply with the terms of the following Special Provision:

(1) Definitions. As used in this Special Provision:

(a) “Driving” means operating a motor vehicle on a roadway, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise. “Driving” does

not include being in your vehicle (with or without the motor running) in a location off the roadway where it is safe and legal to remain stationary.

(b) “Text Messaging” means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include the use of a cell phone or other electronic device for the limited purpose of entering a telephone number to make an outgoing call or answer an incoming call, unless the practice is prohibited by State or local law.

(2) Safety. The Recipient is encouraged to:

(a) Adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers including policies to ban text messaging while driving—

(b) Recipient-owned or Recipient-rented vehicles or Government-owned, leased or rented vehicles;

(c) Privately-owned vehicles when on official Project related business or when performing any work for or on behalf of the Project; or

(d) Any vehicle, on or off duty, and using an employer supplied electronic device.

(3) Recipient Size. The Recipient is encouraged to conduct workplace safety initiatives in a manner commensurate with the Recipient’s size, such as:

(a) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

(b) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(4) Extension of Provision. The Recipient is encouraged to include this Special Provision in its subagreements with its subrecipients, its leases, and its third party contracts, and also encourage its subrecipients, lessees, and third party contractors to comply with the terms of this Special Provision, and include this Special Condition in each subagreement, lease, and third party contract at each tier financed with Federal assistance provided by the Federal Government.

### **Section 37. Protection of Sensitive Security Information.**

To the extent applicable, the Recipient agrees to comply with 49 U.S.C. § 40119(b) and implementing U.S. DOT regulations, “Protection of Sensitive Security Information,” 49 C.F.R. Part 15; and with 49 U.S.C. § 114(r) and implementing U.S. Department of Homeland Security, Transportation Security Administration regulations, “Protection of Sensitive Security Information,” 49 C.F.R. Part 1520.

### **Section 38. Special Notification Requirements for States.**

To the extent required by Federal law, the State agrees that, in administering any Federal assistance Program or Project supported by the Grant Agreement or Cooperative Agreement, any request for proposals, solicitation, grant application, form, notification, press release, or other publication involving the distribution of FTA assistance for the Program or the Project shall indicate that FTA is the Federal agency that is providing the Federal assistance, the Catalog of Federal Domestic Assistance Number of the program from which the Federal assistance is authorized, as may be applicable, and the amount of Federal assistance FTA provided.

### **Section 39. Special Provisions for the Urbanized Area Formula Program.**

The Recipient agrees that the following provisions apply to Urbanized Area Formula Program assistance authorized under 49 U.S.C. § 5307, and agrees to comply with the Federal laws and regulations applicable to that program in accordance with applicable FTA directives, except to the extent that FTA determines otherwise in writing:

- a. Fares and Services. Before increasing fares or instituting a major reduction of service, the Recipient agrees to use its established administrative process to solicit and consider public comment.
- b. Audit Requirements. The Recipient agrees that the Federal Government may conduct, or may require the Recipient to engage an independent entity to conduct, annual or more frequent reviews and audits as required by 49 U.S.C. § 5307(h) and other applicable Federal laws and regulations and in accordance with applicable Federal directives. The Recipient agrees that such audits will be conducted in accordance with U.S. GAO “Government Auditing Standards.”
- c. Half-Fare Requirements. The Recipient agrees that the fares or rates it charges elderly individuals and handicapped individuals during nonpeak hours for public transportation using or involving Project property will not exceed one-half the rates that generally apply to other individuals at peak hours, irrespective of whether the Project property is operated by the Recipient or another entity connected with the Project, either through subagreement, lease, third party contract, or otherwise. The Recipient also agrees to give the rate required to any individual presenting a Medicare card duly issued to that individual pursuant to Title II or Title XVIII of the Social Security Act, 42 U.S.C. §§ 401 *et seq.*, or 42 U.S.C. §§ 1395 *et. seq.*, respectively.
- d. Use of Formula Assistance for Operations. A Recipient authorized to use Federal assistance authorized under 49 U.S.C. § 5307 to support operations agrees as follows:

(1) The Recipient will comply with the restrictions of 49 U.S.C. §§ 5307(b) and 5307(f) in using Urbanized Area Formula Program assistance for operations, unless permitted otherwise by Federal law, regulation, or directive issued at a later date.

(2) Federal assistance authorized by 49 U.S.C. § 5307 may be applied to the Net Project Cost of the Recipient's operating expenses incurred during the Project time period as set forth in the Approved Project Budget and, with FTA approval, may be extended to a later date to the extent permitted by law, provided that applicable operating assistance limits are not exceeded.

e. Public Transportation Security. For each fiscal year that it receives Federal assistance authorized under 49 U.S.C. § 5307, the Recipient agrees to spend at least one (1) percent of that Federal assistance for public transportation security projects as described in 49 U.S.C. § 5307(d)(1)(J)(i), unless the Recipient has determined that such expenditures for public transportation security projects are not necessary. For a Recipient serving an urbanized area with a population of 200,000 or more, only capital projects are eligible for support with that Federal assistance.

f. Public Transportation Enhancements. If the Recipient serves an urbanized area with a population of 200,000 or more, the Recipient agrees to spend each fiscal year at least one (1) percent of its Federal assistance authorized under 49 U.S.C. § 5307 for public transportation enhancements as defined at 49 U.S.C. § 5302(a), and submit an annual report listing the projects carried out in the preceding fiscal year with that Federal assistance.

g. Reporting Requirements. For each fiscal year, the Recipient agrees to conform, and assures that any public transportation operator to which the Recipient provides Federal assistance authorized under 49 U.S.C. § 5307 will conform, to the National Transit Database reporting system and the uniform system of accounts and records required by 49 U.S.C. § 5335(a) for FTA's national transit database, and comply with implementing FTA regulations, "Uniform System of Accounts and Records and Reporting System," 49 C.F.R. Part 630, and any other reporting regulations and in accordance with FTA directives.

h. Participation of Subrecipients. The Recipient agrees to enter into a written agreement with each subrecipient participating in an Urbanized Area Formula Project, which agreement sets forth the subrecipient's responsibilities, and includes appropriate clauses imposing requirements necessary to assure that the subrecipient will not compromise the Recipient's compliance with Federal requirements applicable to the Project and the Recipient's obligations under the Grant Agreement for the Project and this Master Agreement.

#### **Section 40. Special Provisions for the Elderly Individuals and Individuals with Disabilities Formula Program and Pilot Program.**

The Recipient agrees that the following provisions apply to the Elderly Individuals and Individuals with Disabilities Formula Program and Pilot Program assistance authorized under 49 U.S.C. § 5310, as amended by SAFETEA-LU, and subsection 3012(b) of SAFETEA-LU, 49 U.S.C. § 5310 note, respectively, and agrees to follow applicable Federal directives that may be issued, except to the extent that FTA determines otherwise in writing:

a. Eligible Subrecipients. The Recipient agrees to provide Federal assistance authorized under 49 U.S.C. § 5310 or subsection 3012(b) of SAFETEA-LU, 49 U.S.C. § 5310 note, only to a

subrecipient that qualifies as: (1) a private nonprofit organization meeting the special needs of elderly individuals and individuals with disabilities for whom public transportation services are unavailable, insufficient, or inappropriate; (2) a governmental authority approved by the State to coordinate services for elderly individuals and individuals with disabilities; or (3) a governmental authority that certifies to the Governor of its State that there are no nonprofit organizations in its area readily available to provide service meeting the special needs of elderly individuals and individuals with disabilities.

b. State Procedures. The Recipient agrees to administer each Project financed with Federal assistance authorized under the Elderly Individuals and Individuals with Disabilities Formula Program in accordance with 49 U.S.C. § 5310. A Recipient participating in the Elderly Individuals and Individuals with Disabilities Pilot Program agrees to administer each Project in accordance with subsection 3012(b) of SAFETEA-LU, 49 U.S.C. § 5310 note, and applicable provisions of 49 U.S.C. § 5310. The Recipient agrees to comply with applicable Federal laws and regulations, and to follow the most recent edition of FTA Circular 9070.1, “Elderly Individuals and Individuals with Disabilities Program Guidance and Application Instructions,” including any revisions thereto, except to the extent FTA determines otherwise in writing.

c. Participation of Subrecipients. The Recipient agrees to enter into a written agreement with each subrecipient participating in an Elderly Individuals and Individuals with Disabilities Formula Project or Pilot Project, that sets forth the subrecipient’s responsibilities, and includes appropriate clauses imposing requirements necessary to assure that the subrecipient will not compromise the Recipient’s compliance with Federal requirements applicable to the Project and the Recipient’s obligations under its Grant Agreement for the Project and this Master Agreement.

d. Eligible Project Activities. Federal assistance authorized under 49 U.S.C. § 5310 may be used for a Project to meet the special needs of elderly individuals and individuals with disabilities, as follows:

(1) Capital Projects. Except as provided in Paragraph 40.d(2) of this Master Agreement below, only capital projects are eligible for support with Federal assistance authorized under 49 U.S.C. § 5310. Projects may include meal delivery service to the extent permitted by 49 U.S.C. § 5310(g).

(2) Operating Assistance Limitation. Only if the Recipient is selected to participate in the Elderly Individuals and Individuals with Disabilities Pilot Program established by subsection 3012(b) of SAFETEA-LU, 49 U.S.C. § 5310 note, may Federal assistance authorized under 49 U.S.C. § 5310 be used to finance operating expenses, and then only 33 percent of the Federal assistance under 49 U.S.C. § 5310 apportioned to the Recipient may be used to finance operating expenses for projects to meet the special needs of elderly individuals and individuals with disabilities.

e. Leasing of Vehicles. Vehicles acquired with Federal assistance authorized under 49 U.S.C. § 5310 may be leased to local governmental authorities to improve transportation services to meet the special needs of elderly individuals and individuals with disabilities.

f. Transfer of Project Property. In addition to 49 U.S.C. § 5334(h), which authorizes the transfer of Project property financed with FTA assistance, 49 U.S.C. § 5310(h) also authorizes the Recipient to transfer Project property acquired with Federal assistance authorized under 49 U.S.C. § 5310 to any entity eligible to receive assistance under 49 U.S.C. chapter 53, provided that the subrecipient currently possessing the Project property consents to the transfer, and the transferred Project property will continue to be used in accordance with the requirements of 49 U.S.C. § 5310.

#### **Section 41. Special Provisions for the New Freedom Program.**

The Recipient agrees that the following provisions apply to New Freedom Program assistance authorized under 49 U.S.C. § 5317, and agrees to comply with the requirements thereof, except to the extent that FTA determines otherwise in writing:

a. General. The Recipient agrees to comply with the requirements of other Federal laws and regulations that may apply to the Project. The Recipient agrees to follow the most recent edition of FTA Circular, 9045.1, “New Freedom Program Guidance and Application Instructions,” including any revisions thereto, except to the extent FTA determines otherwise in writing.

b. Participation of Subrecipients. The Recipient agrees to enter into a written agreement with each subrecipient participating in a New Freedom Project, that sets forth the subrecipient’s responsibilities, and include appropriate clauses imposing requirements as necessary to assure that the subrecipient will not compromise the Recipient’s compliance with the Federal requirements applicable to the Project and the Recipient’s obligations under the Grant Agreement or Cooperative Agreement for the Project and this Master Agreement.

#### **Section 42. Special Provisions for the Nonurbanized Area Formula Program.**

The Recipient agrees that the following provisions apply to Nonurbanized Area Formula Program assistance administered by States and authorized under 49 U.S.C. § 5311(b), and agrees to comply with those requirements, except to the extent FTA determines otherwise in writing:

a. Provisions Applicable to States.

(1) State Procedures. The Recipient agrees to administer each Project in accordance with 49 U.S.C. § 5311(b) and other applicable provisions of 49 U.S.C. § 5311. Except to the extent that FTA determines otherwise in writing, the Recipient agrees to follow the provisions of the most recent edition of FTA Circular 9040.1, “Nonurbanized Area Formula Program Guidance and Grant Application Instructions,” including any revisions thereto, and comply with Federal laws and regulations that apply to the Projects.

(2) Participation of Subrecipients. The Recipient agrees to enter into a written agreement with each subrecipient participating in a Nonurbanized Area Formula Project, that sets forth the subrecipient’s responsibilities, and includes appropriate clauses imposing requirements necessary

to assure that the subrecipient will not compromise the Recipient's compliance with Federal requirements applicable to the Project and the Recipient's obligations under its Grant Agreement for the Project and this Master Agreement.

(3) Eligible Project Activities. Federal assistance provided for the Grant Agreement and subagreements may be used for public transportation Projects in areas other than urbanized areas. Projects financed with Federal assistance transferred from other Federal programs must be eligible for Federal assistance authorized under 49 U.S.C. § 5311(b). Those Projects may include purchase of service agreements with private providers of public transportation service, capital assistance, operating assistance, and meal delivery service, to the extent permitted by 49 U.S.C. § 5310(g).

(4) Transfer of Project Property. In addition to 49 U.S.C. § 5334(h), which authorizes the transfer of Project facilities and equipment, 49 U.S.C. § 5311(h) also authorizes the transfer of Project property acquired with Federal assistance authorized under 49 U.S.C. § 5311 to any entity eligible to receive Federal assistance authorized under 49 U.S.C. chapter 53, provided that the subrecipient currently possessing the Project property consents to that transfer, and the transferred Project property will continue to be used for purposes in accordance with 49 U.S.C. § 5311.

(5) Intercity Transportation. The Recipient agrees to spend a minimum of at least fifteen (15) percent of its Federal assistance authorized under 49 U.S.C. § 5311(f) each fiscal year for intercity transportation Projects, unless the chief executive officer of the State or his or her duly authorized designee has certified to FTA that the intercity bus service needs within the State are being adequately fulfilled.

(6) Reporting Requirements. As required by 49 U.S.C. § 5311(b)(4) and 49 U.S.C. § 5335(a), the Recipient agrees to conform to, and assures that any public transportation operator to which the Recipient provides Federal assistance authorized under 49 U.S.C. § 5311(b) will conform to, the reporting system and the uniform system of accounts and records required by 49 U.S.C. § 5335(a) for FTA's national transit database, and will comply with the implementing FTA regulations, "Uniform System of Accounts and Records and Reporting System," 49 C.F.R. Part 630, and any additional regulations and directives FTA may issue at a later date, except to the extent FTA determines otherwise in writing.

b. Provisions Applicable to Indian Tribes. The Recipient agrees as follows:

(1) An Indian tribe that is a subrecipient of Federal assistance authorized under 49 U.S.C. § 5311(b), agrees to comply with the requirements of Paragraph 42.a of this Master Agreement that are applicable to other subrecipients of the State receiving FTA assistance authorized under 49 U.S.C. § 5311(c)(2), except to the extent that FTA determines otherwise in writing.

(2) The provisions of Subsection 42.a and Paragraph 42.b(1) of this Master Agreement do not apply to a Tribal Transit Project financed with Federal assistance authorized under 49 U.S.C. § 5311(c)(1).

### **Section 43. Special Provisions for the Clean Fuels Grant Program.**

The Recipient agrees that the following provisions apply to Clean Fuels Grant Program assistance authorized under 49 U.S.C. § 5308, and agrees to comply with the requirements thereof, except to the extent that FTA determines otherwise in writing:

a. General. The Recipient agrees to comply with 49 U.S.C. § 5308, and with the provisions of 49 U.S.C. § 5307, and other Federal laws that may be applicable. The Recipient also agrees to comply with FTA regulations, “Clean Fuels Grant Program,” 49 C.F.R. Part 624, and other applicable Federal regulations, and follow applicable FTA directives, except to the extent FTA determines otherwise in writing.

b. Participation of Subrecipients. The Recipient agrees to enter into a written agreement with each subrecipient of Clean Fuels Grant financial assistance, which agreement sets forth the subrecipient’s responsibilities, and includes appropriate clauses imposing requirements necessary to assure that the subrecipient will not compromise the Recipient’s compliance with Federal requirements applicable to the Project, the Recipient’s obligations under the Grant Agreement for the Project, and this Master Agreement.

### **Section 44. Special Provisions for Research, Development, Demonstration, and Special Studies Projects.**

The Recipient agrees to comply with the following provisions pertaining to Projects financed with Federal assistance authorized for research, development, demonstration, or special studies projects, except to the extent that FTA determines otherwise in writing:

a. Project Report. The Recipient agrees to:

(1) Prepare and make available a sufficiently comprehensive report, to the extent FTA deems satisfactory, of the results of the Project, the conclusions reached, and the methods used that FTA may publish or make available for publication on the Internet, in addition to other reports that FTA may request the Recipient to provide.

(2) The Recipient agrees to identify clearly and precisely any specific confidential, privileged, or proprietary information or data contained within any report or document it submits to FTA.

(3) Include appropriate notice in the report that: (a) the report is being disseminated under the sponsorship of the U.S. Department of Transportation, Federal Transit Administration, in order to foster information exchange, (b) the U.S. Government assumes no responsibility or liability for the contents or use of that report, (c) the U.S. Government is not endorsing any manufacturers, products, or services cited in that report, and (d) any trade name that may appear in that report has been included only because it is essential to the contents of that report.

b. Project Identification. The Recipient understands and agrees that each tangible product resulting from the Project shall contain or include an appropriate sign, designation, or notification stating that the Project has been financed with Federal assistance provided by the U.S. Department of Transportation, Federal Transit Administration. Unless determined otherwise in writing by FTA, this requirement applies to all equipment, hardware, construction, reports, data, or any similar items produced in the course of the Grant Agreement or Cooperative Agreement for the Project.

c. Protection of Human Subjects. The Recipient agrees to comply with the requirements of the National Research Act, as amended, 42 U.S.C. §§ 289 *et seq.*, and U.S. DOT regulations, “Protection of Human Subjects,” 49 C.F.R. Part 11, pertaining to protections for human subjects participating in or involved in research, development, and activities related to the Project.

d. Protection of Animals. The Recipient agrees to comply with the requirements of the Animal Welfare Act, as amended, 7 U.S.C. §§ 2131 *et seq.*, and U.S. Department of Agriculture regulations, “Animal Welfare,” 9 C.F.R. Chapter I, Subchapter A, Parts 1, 2, 3, and 4 pertaining to the care, handling, and treatment of warm blooded animals involved in Project research, development, and related activities.

e. Export Control. The Recipient understands and agrees that any technical information developed in the course of implementing the Grant Agreement or Cooperative Agreement for the Project may be subject to export control regulations promulgated by the U.S. Department of Commerce, Bureau of Export Administration, or other Federal Government departments, including the U.S. Department of State, the U.S. Department of the Treasury, and the U.S. Department of Defense. Thus, the Recipient agrees that it will not export to any countries or foreign persons any technical information or any direct product of that technical information that is subject, directly or indirectly, to U.S. Department of Commerce, “Export Administration Regulations,” 15 C.F.R. Parts 730 *et seq.*, or other applicable Federal regulations without first obtaining the necessary Federal license or licenses and complying with those Federal regulations.

#### **Section 45. Special Provisions for the Medical Transportation Demonstration Projects.**

The Recipient of Federal assistance authorized under the Medical Transportation Demonstration Program agrees to comply with 49 U.S.C. § 5314(a)(6) and comply with other applicable Federal laws or regulations. The Recipient also agrees to follow any applicable Federal directives, except to the extent FTA determines otherwise in writing.

#### **Section 46. Special Provisions for the National Technical Assistance Center for Senior Transportation.**

The Recipient of Federal assistance authorized under the National Technical Assistance Center for Senior Transportation agrees to comply with the requirements of 49 U.S.C. § 5314(c) and other applicable Federal laws and regulations. The Recipient also agrees to follow any applicable Federal directives, except to the extent that FTA determines otherwise in writing.

#### **Section 47. Special Provisions for Human Resources Fellowships.**

The Recipient agrees that the following provisions apply to Human Resources Fellowships Program assistance authorized under 49 U.S.C. § 5322(b), and agrees to comply with the requirements thereof, except to the extent that FTA determines otherwise in writing:

- a. General. In addition to 49 U.S.C. § 5322(b), the Recipient agrees to comply with other applicable Federal laws and regulations, and follow applicable Federal directives, except to the extent FTA determines otherwise in writing.
- b. Fellowship Awards. The Recipient agrees any individual who receives a fellowship financed with Federal assistance under the Human Resources Fellowships Program authorized under 49 U.S.C. § 5322(b) will be selected on the basis of that individual's demonstrated ability and the contribution that individual reasonably can be expected to make to an efficient public transportation operation.

#### **Section 48. Special Provisions for Job Access and Reverse Commute Formula Grant Program.**

The Recipient agrees that the following provisions apply to Job Access and Reverse Commute (JARC) Formula Grant Program assistance authorized under 49 U.S.C. § 5316, except to the extent that FTA determines otherwise in writing:

- a. General. The Recipient agrees to comply with the requirements of 49 U.S.C. § 5316, and applicable provisions of 49 U.S.C. § 5307. Except to the extent that FTA determines otherwise in writing, the Recipient agrees to follow the most recent edition of FTA Circular, 9050.1, "The Job Access And Reverse Commute (JARC) Program Guidance And Application Instructions," including any revisions thereto, and comply with Federal laws and regulations that apply to the Project.
- b. Participation of Subrecipients. The Recipient agrees to enter into a written agreement with each subrecipient participating in a JARC Project, which agreement sets forth the subrecipient's responsibilities, and includes appropriate clauses imposing requirements necessary to assure that the subrecipient will not compromise the Recipient's compliance with any Federal requirements applicable to the Project and the Recipient's obligations under the Grant Agreement or Cooperative Agreement and this Master Agreement.

#### **Section 49. Special Provisions for the Paul S. Sarbanes Transit in Parks Program.**

The Recipient agrees that the following provisions apply to the Paul S. Sarbanes Transit in Parks Program authorized under 49 U.S.C. § 5320, except to the extent that FTA determines otherwise in writing:

a. General. The Recipient agrees to comply with the requirements of 49 U.S.C. § 5320, applicable requirements of 49 U.S.C. § 5307, and other applicable Federal laws and regulations.

b. FTA Notice. The Recipient agrees to follow the provisions of the most recent applicable FTA Notice pertaining to the Paul S. Sarbanes Transit in Parks Program and other applicable FTA directives, including any amendment or revision thereto, except to the extent FTA determines otherwise in writing. FTA and the Recipient agree that the provisions of the latest FTA Notice and revisions thereto will supersede conflicting provisions of this Master Agreement.

### **Section 50. Special Provisions for Over-the-Road Bus Accessibility Projects.**

The Recipient agrees that the following provisions apply to Federal assistance under the Over-the-Road Bus Accessibility Program, except to the extent that FTA determines otherwise in writing:

a. General. The Recipient agrees to comply with section 3038 of TEA-21, as amended by section 3039 of SAFETEA-LU, 49 U.S.C. § 5310 note, and other Federal laws and regulations that may be applicable to the Over-the-Road Bus Accessibility Program, in accordance with applicable Federal directives, when issued.

b. Accessibility. The Recipient agrees to comply with the “Over-the-Road Buses,” regulations within U.S. DOT regulations, “Transportation Services for Individuals with Disabilities (ADA),” 49 C.F.R. Part 37, Subpart H, and with joint U.S. ATBCB/U.S. DOT regulations, “Americans With Disabilities (ADA) Accessibility Specifications for Transportation Vehicles,” 36 C.F.R. Part 1192 and 49 C.F.R. Part 38.

c. Employee Protective Arrangements. Paragraph 24.d(4) of this Master Agreement describes the employee protections of the U.S. DOL Special Warranty for the Over-the-Road Bus Accessibility Program.

d. FTA Notice. The Recipient agrees to follow the provisions of the most recent applicable FTA Notice pertaining to Over-the-Road Bus Accessibility Program Grants, and any revision thereto, except to the extent FTA determines otherwise in writing. FTA and the Recipient agree that the provisions of the most recent FTA Notice pertaining to the Over-the-Road Bus Accessibility Program supersede conflicting provisions of this Master Agreement.

### **Section 51. Special Provisions for State Infrastructure Bank Projects.**

The Recipient agrees that the following provisions apply to a Project financed with Federal assistance deposited in a State Infrastructure Bank (SIB), and agrees to comply with the requirements thereof:

a. General. The Recipient agrees to administer its Project in accordance with laws applicable to the SIB that provides Federal assistance for the Project. Federal requirements and directives for the Project may be set forth in: (1) 23 U.S.C. § 610, (2) section 1511 of TEA-21, 23 U.S.C. § 181 note to the extent it has not been superseded by 23 U.S.C. § 610, (3) section 350 of the National Highway System Designation Act of 1995, as amended, (NHS Act), 23 U.S.C. § 101 note, to the extent it has not been superseded by 23 U.S.C. § 610, (4) any law amending any of the foregoing, and any law applicable to the Project enacted at a later date, (5) any other applicable Federal directives that may be issued, except to the extent FTA determines otherwise in writing, (6) the terms and conditions of any U.S. Department of Labor Certification(s) of Public Transportation Employee Protective Arrangements, (7) the Cooperative Agreement establishing the SIB program in the State, entered into by the Federal Highway Administrator, Federal Transit Administrator, and authorized State official(s), and (8) the FTA Grant Agreement providing Federal assistance for the SIB Project; except, however, any provision of this Master Agreement conflicting with Federal law, applicable Federal SIB Guidelines, the Cooperative Agreement establishing the SIB program within the State, or this Grant Agreement will not apply to the Grant Agreement or the Project to the extent the SIB program is involved, except to the extent FTA determines otherwise in writing.

b. Limitations on Accessing Federal Assistance in the Transit Account. The Recipient understands that the total amount of Federal assistance awarded under the Grant Agreement for the SIB may not be available for immediate withdrawal. Thus, the State agrees to restrict the amount of Federal assistance it withdraws to an amount not exceeding the limits specified in its Grant Agreement for the SIB Project or the Approved Project Budget for that Grant Agreement.

## **Section 52. Special Provisions for TIFIA Projects.**

To the extent applicable, the Recipient agrees to administer each Project financed with Federal credit assistance authorized under the Transportation Infrastructure Finance and Innovation Act, as amended (TIFIA), in accordance with: (1) 23 U.S.C. §§ 601 through 609, including any further amendments thereto; (2) 49 U.S.C. §§ 5307, 5309, and 5323(o); (3) joint U.S. DOT/FTA regulations, “Credit Assistance for Surface Transportation Projects,” 49 C.F.R. Part 80 and 49 C.F.R. Part 640, to the extent those regulations have not been superseded by SAFETEA-LU, and any amendments to those regulations when promulgated. Any provision of this Master Agreement that conflicts with 23 U.S.C. §§ 601 through 609, 49 U.S.C. §§ 5307, 5309, or 5323(o), or the foregoing joint U.S. DOT/FTA regulations, or amendments thereto, will not apply to the TIFIA Loan, Loan Guarantee, or Line of Credit made available for the Project. The Recipient agrees that FTA may declare the Recipient in violation of the Master Agreement if the Recipient has defaulted on a TIFIA Loan, a Loan Guarantee under TIFIA, or a Line of Credit made available under TIFIA, and such default has not been cured within 90 days.

## **Section 53. Special Provisions for Recovery Act Projects.**

The Recipient agrees that the following provisions apply to funds made available under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, February 17, 2009

("Recovery Act"), and agrees to comply with the requirements thereof, except to the extent FTA determines otherwise in writing:

a. Identification of Recovery Act Funding. A Grant Agreement or Cooperative Agreement financed with Recovery Act funds will indicate that the Recovery Act is the source of funding as follows:

(1) If the "Citation of Statute(s) Authoring Project" of the underlying Grant Agreement displays "49 USC 5307 – Urbanized Area - Economic Recovery," the Project or Projects are financed with Recovery Act funds appropriated for the Transit Capital Assistance for the Urbanized Area Formula Grant Program authorized by 49 U.S.C. § 5307.

(2) If the "Citation of Statute(s) Authoring Project" of the underlying Grant Agreement displays "49 USC 5307 – Urbanized Area - Economic Recovery Flex," the Project or Projects are financed with Recovery Act appropriations for highways transferred to support the FTA Urbanized Area Formula Grant Program authorized by 49 U.S.C. § 5307.

(3) If the "Citation of Statute(s) Authoring Project" of the underlying Grant Agreement displays "49 USC 5309 – New Starts - Economic Recovery," the Project is financed with Recovery Act appropriations for Capital Investment Grants authorized for Small Starts or New Starts by 49 U.S.C. §§ 5309(d) or (e), respectively.

(4) If the "Citation of Statute(s) Authoring Project" of the underlying Grant Agreement displays "49 USC 5309 – Fixed Guideway - Economic Recovery," the Project is financed with Recovery Act appropriations for Fixed Guideway Infrastructure Investment for Modernization, authorized by 49 U.S.C. § 5309(b)(2).

(5) If the "Citation of Statute(s) Authoring Project" of the underlying Grant Agreement displays "49 USC 5311 – Nonurbanized Area - Economic Recovery," the Project is financed with Recovery Act appropriations for Transit Capital Assistance for the Nonurbanized Area Formula Program authorized by 49 U.S.C. § 5311.

(6) If the "Citation of Statute(s) Authoring Project" of the underlying Grant Agreement displays "49 USC 5311 – Nonurbanized Area - Economic Recovery Flex," the Project or Projects are financed with Recovery Act appropriations for highways transferred to support the Nonurbanized Area Formula Grant Program authorized by 49 U.S.C. § 5311.

(7) If the "Citation of Statute(s) Authoring Project" of the underlying Grant Agreement or Cooperative Agreement displays "PL 111-5 – Transp. Invest/Greenhouse Gas & Energy Red. – Economic Recovery," the Project is financed with Recovery Act funds specified in Title XII for Federal Transit Administration capital investments that will assist in reducing the energy consumption or greenhouse gas emissions of the Recipient's public transportation systems.

(8) If the "Citation of Statute(s) Authoring Project" of the underlying Grant Agreement displays "PL 111-5 – OST Surface Transportation – Economic Recovery," the Project is financed with Recovery Act funds specified in Title XII for the U.S. DOT Office of the Secretary

Supplemental Discretionary Grants for a National Surface Transportation System, also referred to as the “TIGER Discretionary Grant Program.”

b. Identification of Project(s). The Project or Projects financed with Recovery Act funds are set forth in the Recipient’s Project application and reflected in the Approved Project Budget.

c. Prompt Implementation. The Recipient agrees to begin work on its Recovery Act Project promptly after FTA has awarded Recovery Act funds for that Project, and agrees to continue to expend those Recovery Act funds expeditiously for Project purposes.

d. Federal Requirements. In addition to applicable Recovery Act statutory and regulatory requirements, the Recipient agrees that applicable requirements of 49 U.S.C. chapter 53 apply to each federally assisted public transportation Project financed with Recovery Act funds, except that the Federal share of the costs for which any Recovery Act award is made under this heading shall be, at the option of the Recipient, up to 100 percent of the cost of the Project.

e. U.S. OMB Provisions. The Recipient agrees to comply with applicable provisions of U.S. Office of Management and Budget, “Requirements for Implementing Sections 1512, 1605, and 1606 of the American Recovery and Reinvestment Act of 2009 for Financial Assistance Awards,” 2 C.F.R. Part 176, 74 *Fed. Reg.* 18449 *et seq.*, April 23, 2009. Specifically the Recipient acknowledges and agrees to comply with the following provisions

(1) Reporting and Registration Requirements under Section 1512 of the Recovery Act.

(a) This award requires the Recipient to complete projects or activities that are funded under the Recovery Act and to report on use of Recovery Act funds provided through this award. Information from these reports will be made available to the public.

(b) The Recipient agrees to submit the requisite reports no later than ten calendar days after each calendar quarter in which it receives the Federal assistance award funded in whole or in part by the Recovery Act.

(c) The Recipient agrees to have, and require its subrecipients to have, a Dun and Bradstreet Data Universal Numbering System (DUNS) Number (<http://www.dnb.com>).

(d) The Recipient agrees to maintain a current registration in the Central Contractor Registration (<http://www.ccr.gov>) at all times during which it has an active Federal award funded with Recovery Act funds. If the Recipient has delegated any of its reporting requirements under Section 1512 of the Recovery Act to any subrecipient, the Recipient agrees to require that subrecipient to maintain a current registration in the Central Contractor Registration (<http://www.ccr.gov>) at all times during which it is participating in a Project financed through an active Federal award funded with Recovery Act funds.

(e) The Recipient agrees to report the information described in section 1512(c) of the Recovery Act using the reporting instructions and data elements that will be provided online at

<http://www.FederalReporting.gov> and ensure that any information that is pre-filled is corrected or updated as needed.

(2) Buy America Requirements under Section 1605 of the Recovery Act. Statutory provisions of 49 U.S.C. chapter 53 impose Buy America requirements sufficient for compliance with Section 1605 of the Recovery Act.

(3) Wage Rate Requirements under Section 1606 of the Recovery Act. Statutory provisions of 49 U.S.C. chapter 53 impose Wage Rate requirements involving construction, alteration, maintenance, or repair sufficient for compliance with Section 1606 of the Recovery Act.

(4) Recovery Act Transactions Listed in Schedule of Expenditures of Federal Awards and Recipient Responsibilities for Informing Subrecipients.

(a) To maximize the transparency and accountability of funds authorized under the Recovery Act as required by Congress and in accordance with 49 C.F.R. § 18.20 or 49 C.F.R. § 19.21, as applicable, the Recipient agrees to maintain records that identify adequately the source and application of Recovery Act funds.

(b) A Recipient covered by the Single Audit Act Amendments of 1996, and U.S. OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations," agrees to separately identify the expenditures for Federal awards under the Recovery Act on the Schedule of Expenditures of Federal Awards (SEFA) and the Data Collection Form (SF-SAC) required by U.S. OMB Circular A-133. The Recipient agrees to accomplish this by identifying expenditures for Federal awards made under Recovery Act separately on the SEFA, and as separate rows under Item 9 of Part III on the SF-SAC by CFDA number, and inclusion of the prefix "ARRA-" in identifying the name of the Federal program on the SEFA and as the first characters in Item 9d of Part III on the SF-SAC.

(c) The Recipient agrees to separately identify to each subrecipient, and document at the time of subaward and at the time of disbursement of funds, the Federal award number, CFDA number, and amount of Recovery Act funds. When the Recipient awards Recovery Act funds for an existing program, the Recipient agrees to furnish sufficient information to each subrecipient that distinguishes the subawards of incremental Recovery Act funds from regular subawards under the existing program.

(d) The Recipient agrees to require each subrecipient to include on its SEFA information to specifically identify Recovery Act funding similar to the requirements for the Recipient's SEFA described above. This information is needed to allow the Recipient to properly monitor subrecipient expenditures of Recovery Act funds as well as oversight by FTA, DOT, Offices of Inspector General and the Government Accountability Office.

f. One-Time Funding. The Recipient acknowledges that receipt of Recovery Act funds is a "one-time" disbursement that does not create any future obligation by FTA to advance similar funding amounts. The Recipient agrees that the total amount of Recovery Act funds for the entire period of Project performance is the amount displayed on the underlying Grant Agreement

or Cooperative Agreement for the Project, including the latest amendment thereto. The Government's liability to make payments to the Recipient is limited to the eligible Project costs that can be financed with those Recovery Act funds as displayed on the underlying Grant Agreement or Cooperative Agreement for the Project including the latest amendment thereto.

g. Integrity. The Recipient agrees that all data it submits to FTA in compliance with Recovery Act requirements will be accurate, objective, and of the highest integrity.

h. Violations of Law. The Recipient agrees that it and each of its subrecipients shall report to the U.S. DOT Inspector General or other appropriate Inspector General any credible evidence that a principal, employee, agent, contractor, subrecipient, subcontractor, or other person has submitted a false claim under the False Claims Act, 31 U.S.C. §§ 3729 *et seq.*, or has committed a criminal or civil violation of law pertaining to fraud, conflict of interest, bribery, gratuity, or similar misconduct involving Recovery Act funds.

i. Maintenance of Effort. A Recipient that is a State agrees to comply with the maintenance of effort certification it has made in compliance with Section 1201 of Recovery Act.

j. Emblems. The Recipient is encouraged to use signs and materials that display both the American Recovery and Reinvestment Act (Recovery Act) emblem and the Transportation Investment Generating Economic Recovery (TIGER) program emblem to identify its Project(s) financed with Recovery Act funds that are provided by U.S. DOT in a manner consistent with Federal guidance, and to include this provision in any subagreements, leases, third party contracts, or other similar documents used in connection with its Recovery Act Project(s).

k. Contracts Financed With Recovery Act Funds. In compliance with Section 1554 of the Recovery Act, the Recipient agrees to award contracts financed under this Act as fixed-price contracts through the use of competitive procedures to the maximum extent possible. The Recipient agrees to post a summary of the contract on the Recovery Act web site maintained by the Recovery Accountability and Transparency Board when it does not award fixed price contracts or does not use competitive procedures.

l. Further Requirements. The Recipient agrees to comply with applicable future Federal requirements that may be imposed on the use of Recovery Act funds, and to follow applicable Federal directives that may be issued, except to the extent the Federal Government determines otherwise in writing.

#### **Section 54. Special Provisions for Joint FTA - FRA Recovery Act Projects.**

The Recipient agrees that, in addition to the provisions of 49 U.S.C. chapter 53, the following provisions apply to funds made available under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, February 17, 2009 ("Recovery Act") when the U.S. Federal Railroad Administration (FRA) has also made Recovery Act funds available for the same project. The Recipient agrees to comply with the provisions thereof, except to the extent FTA determines otherwise in writing:

- a. Disadvantaged Business Enterprises. The statutory and regulatory provisions relating to disadvantaged business enterprises (DBE) differ significantly between FTA and FRA. Section 1101(b) of SAFETEA-LU (23 U.S.C. § 101 note) applies to FTA, but not to FRA. U.S. DOT regulations, “Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs,” 49 C.F.R. Part 26, which implement Section 1101(b) of SAFETEA-LU, apply to FTA, but not to FRA; and FRA is not authorized to use the provisions of those DBE regulations. Consequently, the Recipient agrees to comply with the statutory and regulatory DBE provisions applicable to FTA funds when using FTA funds for purchases and to use the “contracting with small and minority firms, women's business enterprise” provisions of 49 C.F.R. § 18.36(e) or 49 C.F.R. § 19.44(b), as applicable, when using FRA funds.
- b. Buy America. The statutory and regulatory Buy America provisions applicable to FTA funds differ from those applicable to FRA funds. The Recipient agrees to comply with the statutory and regulatory Buy America provisions applicable to FTA funds when using FTA funds for purchases and to use the Buy American provisions applicable to FRA funds, 49 U.S.C. § 24405(a) added by section 301(a) of the Passenger Rail Investment and Improvement Act of 2008, Pub. L. 110-432, October 16, 2008 (PRIIA), when using FRA funds for purchases. If the Recipient uses both FTA and FRA funds for a purchase, the Recipient agrees to comply with the most restrictive provisions applicable to either FTA or FRA funds.
- c. Force Account - Procurement. If the project is being conducted on the property of a railroad and if, under the railroad’s collective bargaining agreements with its employees, certain work to be performed for the Recipient must be performed by force account employees, FTA deems Subsection 15(b) of this Master Agreement to be satisfied if the work is performed by the railroad’s force account employees.
- d. Procurement of Rolling Stock. If FRA requires the Recipient to acquire rolling stock for the project from the Next Generation Corridor Equipment Pool Committee established pursuant to section 305 of PRIIA, FTA deems Paragraph 15(n)(1) of this Master Agreement to be satisfied.
- e. Use of Real Property, Equipment, and Supplies. Application of Section 19 of this Master Agreement is reserved pending resolution by the U.S. Internal Revenue Service of whether Recovery Act grant funds invested in railroad property constitute non-taxable contributions to equity.
- f. Davis-Bacon. As provided in 49 U.S.C. § 24312, wages paid to railroad employees at rates provided in a collective bargaining agreement negotiated under the Railway Labor Act, 45 U.S.C. §§ 151 *et seq.*, are deemed to comply with 40 U.S.C. §§ 3141-3144, 3146, and 3147.
- g. Employee Protective Arrangements. The Recipient shall not pass down employee protective arrangements provided in Subsection 24(d) of this Master Agreement. Instead, the Recipient shall pass down to a railroad subject to the Railway Labor Act (45 U.S.C. §§ 151 *et seq.*) employee protective arrangements provided in Attachment 1A, section 3, of FTA’s grant or cooperative agreement with the Recipient.

h. Motor Carrier Safety. Paragraph 33(a)(2) of this Master Agreement does not apply to railroad signal employees concerning hours of service. *See*, 49 U.S.C. § 21104(e). Instead, those employees and their employers must comply with 49 U.S.C. § 21104 and FRA's hours of service regulation at 49 C.F.R. Part 228.

i. Railroad Safety. A railroad subject to FRA's safety jurisdiction shall comply with the Federal railroad safety laws.

## **Section 55. Freedom of Information Act.**

The Recipient understands and agrees that the Freedom of Information Act (FOIA), 5 U.S.C. § 552, applies to information and documents, both paper and electronic, submitted to FTA and U.S. DOT. The Recipient should therefore be aware that all applications and materials submitted to FTA that are related to its FTA assisted Project will become agency records and are or will be subject to FOIA and to public release through individual FOIA requests, unless FTA determines that a valid exemption under FOIA or another statute applies. President Obama's January 21, 2009 Memorandum for the Heads of Executive Departments and Agencies on the Freedom of Information Act directs Federal agencies to adopt a presumption of disclosure. Therefore, FTA does not consent to honor any "routine" confidentiality statements that may appear on documents, correspondence, letters, or similar correspondence (paper or electronic) that accompany submission of Project information, absent a requirement under Federal law or regulation that the information must be kept confidential. Genuinely confidential or privileged information, should be marked clearly and specifically, and justified as confidential or privileged. FTA, however, will review documents and information that are the subject of each FOIA request to determine, as permitted by Federal law and regulations, the extent to which FTA must or should exercise its discretion and withhold those documents.

## **Section 56. Disputes, Breaches, Defaults, or Other Litigation.**

The Recipient agrees that FTA has a vested interest in the settlement of any dispute, breach, default, or litigation involving the Project. Accordingly:

a. Notification to FTA. The Recipient agrees to notify FTA in writing of any current or prospective major dispute, breach, default, or litigation that may affect the Federal Government's interests in the Project or the Federal Government's administration or enforcement of Federal laws or regulations. If the Recipient seeks to name the Federal Government as a party to litigation for any reason, in any forum, the Recipient agrees to inform FTA in writing before doing so. At a minimum, each notice to FTA under this Section 56 of this Master Agreement shall be provided to the FTA Regional Counsel within whose Region the Recipient operates its public transportation system or implements the Project.

b. Federal Interest in Recovery. The Federal Government retains the right to a proportionate share of any proceeds derived from any third party recovery, based on the percentage of the

Federal share awarded for the Project, except that the Recipient may return liquidated damages recovered to its Project Account in lieu of returning the Federal share to the Federal Government.

c. Enforcement. The Recipient agrees to pursue its legal rights and remedies available under any third party contract or available under law or regulations.

d. FTA Concurrence. FTA reserves the right to concur in any compromise or settlement of any claim involving the Project and the Recipient.

e. Alternative Dispute Resolution. FTA encourages the Recipient to use alternative dispute resolution procedures, as may be appropriate.

### **Section 57. Amendments to the Project.**

The Recipient agrees that a change in Project circumstances causing an inconsistency with the terms of the Grant Agreement or Cooperative Agreement for the Project or this Master Agreement will require an amendment to that Grant Agreement or Cooperative Agreement and signed by the original signatories or their authorized designees or successors. The Recipient agrees that a change in the fundamental information submitted in its Application will also require an amendment to its Application or the underlying Grant Agreement or Cooperative Agreement for the Project.

### **Section 58. FTA's Electronic Management System.**

a. Recipient Use. Unless FTA permits otherwise in writing, the Recipient agrees to use FTA's electronic management system to submit information and reports to FTA. FTA, however, reserves the right to determine the extent to which the Recipient may use FTA's electronic management system to execute legal documents pertaining to FTA Projects.

b. TEAM System Terminology. The Recipient and FTA agree that the terms used by FTA in its current Transportation Electronic Award and Management (TEAM) system do not necessarily reflect, and are not intended to be treated as, the exclusive evidence of such matters as Project, its scope, activities, and so forth include, except to the extent FTA so states in writing. FTA reserves the right to treat information other than that reflected in its current TEAM system as determinative of what constitutes the "Project," "Scope of the Project," and "Project Activities."

### **Section 59. Information Obtained Through Internet Links.**

Although this Master Agreement may include electronic links to Federal laws, regulations, and directives, FTA does not guarantee the accuracy of information accessed through such links. Accordingly, the Recipient understands and agrees that any information obtained through any electronic link within this Master Agreement does not represent an official version of a Federal law, regulation, or directive, and might be inaccurate. Thus, information obtained through such

links is neither incorporated by reference nor made part of this Master Agreement. The Federal Register and the Code of Federal Regulations are the official sources for regulatory information pertaining to the Federal Government.

**Section 60. Severability.**

The Recipient agrees that if any provision of the Grant Agreement or Cooperative Agreement for the Project, or this Master Agreement is determined invalid, the remainder of that Agreement shall not be affected if that remainder would continue to conform to the requirements of applicable Federal laws or regulations.



U.S. Department  
of Transportation

**Federal Transit  
Administration**

# CIRCULAR

FTA C 5010.1D

November 1, 2008

**Subject: GRANT MANAGEMENT REQUIREMENTS**

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1. **PURPOSE.** This circular is a re-issuance of guidance for post-award grant administration and project management activities for all applicable Federal Transit Administration (FTA) grant programs. This revision incorporates provisions of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), and includes the most current guidance for the Federal public transportation program as of the date of publication.

These requirements are intended to assist grantees in administering FTA-funded projects and in meeting grant responsibilities and reporting requirements. Grantees have a responsibility to comply with regulatory requirements and to be aware of all pertinent material to assist in the management of federally assisted grants.

2. **CANCELLATION.** This circular cancels FTA Circular 5010.1C, "Grant Management Guidelines," dated 10-1-98.
3. **AUTHORITY.**
  - a. Federal Transit Laws, codified at 49 U.S.C. Chapter 53.
  - b. 49 CFR 1.51.
4. **WAIVER.** FTA reserves the right to waive any provision of this circular to the extent permitted by Federal law or regulation.
5. **FEDERAL REGISTER NOTICE.** In conjunction with publication of this circular, a *Federal Register* notice was published on September 30, 2008 (73 FR 56892), addressing comments received during the development of the circular.
6. **AMENDMENTS TO THE CIRCULAR.** FTA reserves the right to update this circular to reflect changes in other revised or new guidance and regulations that undergo notice and comment without further notice and comment on this circular. FTA will post updates on our website: [www.fta.dot.gov](http://www.fta.dot.gov). The website allows the public to register for notification when FTA issues *Federal Register* notices or new guidance; visit the website and click on "sign up for e-mail updates."

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**Distribution:** FTA Headquarters Offices (T-W-2)  
FTA Regional Offices (T-X-2)

**OPI:** Office of Program  
Management

7. ACCESSIBLE FORMATS. This document is available in accessible formats upon request. To obtain paper copies of this circular as well as information regarding these accessible formats, telephone FTA's Administrative Services Help Desk, at 202-366-4865. Individuals with hearing impairments may contact the Federal Relay Service at 1-800-877-8339 for assistance with the call.

/S/ Original Signed by  
James S. Simpson  
Administrator

**PROGRAM CIRCULAR**

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## CHAPTER I

### INTRODUCTION AND BACKGROUND

1. THE FEDERAL TRANSIT ADMINISTRATION (FTA). FTA is one of ten modal administrations within the U.S. Department of Transportation (DOT). Headed by an Administrator who is appointed by the President of the United States, FTA functions through a Washington, DC, headquarters office, ten regional offices, and five metropolitan offices that assist transit agencies in all 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, Northern Mariana Islands, and American Samoa and federally recognized Indian tribes.

Public transportation includes buses, subways, light rail, commuter rail, monorail, passenger ferry boats, trolleys, inclined railways, people movers, and vans. Public transportation can be either fixed-route or demand-response service.

The Federal Government, through FTA, provides financial assistance to develop new transit systems and improve, maintain, and operate existing systems. FTA oversees thousands of grants to hundreds of State and local transit providers, primarily through its regional and metropolitan offices. These grantees are responsible for managing their programs in accordance with Federal requirements, and FTA is responsible for ensuring that grantees follow Federal statutory and administrative requirements.

2. AUTHORIZING LEGISLATION. Most Federal transit laws are codified at 49 U.S.C. Chapter 53. Authorizing legislation is substantive legislation enacted by Congress that establishes or continues the legal operation of a Federal program or agency. Congress typically amends FTA's authorizing legislation every four to six years. FTA's most recent authorizing legislation is the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Public Law 109-59, signed into law August 10, 2005. SAFETEA-LU authorizes FTA programs from Federal Fiscal Year (FY) 2006 through FY 2009. Changes have been added to this circular to reflect the SAFETEA-LU changes to Federal transit law and to reflect changes required by other laws that have become effective since the circular was last published in 1998.
3. HOW TO CONTACT FTA. FTA's regional and metropolitan offices are responsible for the provision of financial assistance to FTA grantees and oversight of grant implementation for most FTA programs. Certain specific programs are the responsibility of FTA headquarters. Inquiries should be directed to either the regional or metropolitan office responsible for the geographic area in which you are located. See Appendix H of this circular for additional information.

Visit FTA's website, <http://www.fta.dot.gov>, or contact FTA Headquarters at the following address and phone number:

Federal Transit Administration  
Office of Communication and Congressional Affairs

1200 New Jersey Avenue SE.  
Room E56-205  
Washington, DC 20590  
Phone: 202-366-4043  
Fax: 202-366-3472

4. GRANTS.GOV. FTA posts all competitive grant opportunities on Grants.gov. Grants.gov is the one website for information on all discretionary Federal grant opportunities. Led by the U.S. Department of Health and Human Services (DHHS) and in partnership with Federal grant-makers including 26 agencies, 11 commissions, and several States, Grants.gov is one of 24 Federal cross-agency E-government initiatives. It is designed to improve access to government services via the Internet. More information about Grants.gov is available at <http://www.grants.gov>.
5. DEFINITIONS. All definitions in 49 U.S.C. 5302(a) apply to this circular as well as the following definitions:
  - a. Accrual Basis of Accounting: The accounting method where income is recorded when earned instead of when received, and expenses are recorded when incurred instead of when paid.
  - b. Administrative Amendment: A minor change in a Grant Agreement normally initiated by FTA to modify or clarify certain terms, conditions, or provisions of a grant.
  - c. Administrative Settlement: Purchase price for property may exceed the amount offered as just compensation when reasonable efforts to negotiate an agreement at that amount have failed and an authorized Agency official approves such an arrangement. Such an arrangement must be reasonable, prudent, and in the public interest.
  - d. Acquisition Cost of Project Property and Purchased Equipment: The purchase price of equipment. This is the net invoice unit price, including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment usable for the intended purpose. Other charges such as the cost of inspection, installation, transportation, taxes, duty or protective in-transit insurance should be treated in accordance with the grantee's regular accounting practices, as separate line items. The cost of items separately installed and removable from rolling stock, such as fareboxes and radios, is treated as a separate acquisition and not as part of the cost of the vehicle.
  - e. Air Rights: The space located above, at, or below (subterranean) the surface of the ground, lying within a project's property limits.
  - f. Brownfields: The Environmental Protection Agency (EPA) defines "Brownfields" (one type of contaminated property), as abandoned, idled, or under-used industrial and commercial land, often found in urban areas, where redevelopment is complicated by real or perceived hazardous contamination. These properties have lower levels of

contamination than Superfund sites, but they are a health risk and economic detriment to the communities where they are located.

- g. Budget Revision: Any change within the scope that has impact on budget allocations of the original grant. A budget revision may be a transfer of funds within a project scope or between existing activity line items (ALIs) within an approved grant. It could also include the addition or deletion of an ALI.
- h. Capital Asset: Facilities or equipment with a useful life of at least one year, which are eligible for capital assistance.
- i. Capital Lease: Any transaction whereby the grantee acquires the right to use a capital asset without obtaining ownership.
- j. Cash Basis of Accounting: Cash basis of accounting is the method when revenue is recorded when received, rather than when earned, and expenses are recorded when paid, rather than incurred. FTA does not allow the Financial Status Report to be prepared in the cash method of accounting.
- k. Catalog of Federal Domestic Assistance (CFDA): The Catalog of Federal Domestic Assistance is a government-wide compendium of Federal programs, projects, services, and activities that provide assistance or benefits to the American public. It contains financial and nonfinancial assistance programs administered by departments and establishments of the Federal Government. As the basic reference source of Federal programs, the primary purpose of CFDA is to assist users in identifying programs that meet specific objectives of the potential applicant, and to obtain general information on Federal assistance programs. In addition, the intent of CFDA is to improve coordination and communication between the Federal Government and State and local governments. The CFDA number assigned to each program is used to report and track audit findings related to Federal grants.
- l. Concurrent Non-Project Activities: Also known as betterments, concurrent non-project activities are improvements to the transit project desired by the grant recipient that are nonintegral to the planned functioning of the Federal transit project and are carried out simultaneous with grant execution and are not included in the Federal grant.
- m. Contingency Fleet: Inactive rolling stock reserved/retained for emergencies and separate from spare fleet.
- n. Cost of Project Property: The purchase price of project property. This is the net invoice unit price, including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment usable for the intended purpose. Other charges, such as the cost of inspection, installation, transportation, taxes, duty, or in-transit insurance, should be treated in accordance with the grantee's regular accounting practices, in the same or as separate line items. The cost of items separately installed and removable from rolling stock, such as fareboxes and radios, is treated as a

separate acquisition and not as part of the cost of the vehicle if not included in the procurement of rolling stock.

- o. Depreciation: Method used to calculate the reduction in value of an item of personal or real property over time. Is the term most often used to indicate that personal property has declined in service potential. For the purpose of this circular, it is also a method of determining fair market value when disposing of an asset prior to the end of its useful life.
- p. Discretionary Funding: Grant funds distributed at the discretion of the agency as distinct from formula funding.
- q. Economic Useful Life: The period over which an improvement or structure contributes to property value. This concept is used in conjunction with the concept of “Economic Age,” which is defined as the age of a structure that is based on the amount of observed deterioration and obsolescence it has sustained, which may be different from its chronological age. Appraisers sometimes use an “age-life” ratio to estimate a building’s depreciation. This factor is developed by dividing the structure’s “Economic Age” by its “Economic/Useful Life.” Available building cost services provide guidelines for estimating the economic life of property structures using various construction materials and architectural designs and thus assist in conducting this analysis. Useful life assumes a normal level of on going maintenance of the structure. This applies only to real estate (for vehicular useful life see “Useful Life” in definitions).
- r. Electronic Clearing House Operation (ECHO): ECHO is a Web-based application that processes draw down requests and makes payments to FTA grantees.
- s. Equipment: An article of nonexpendable, tangible personal property having a useful life of more than one year and an acquisition cost which equals or exceeds the lesser of the capitalization level established by the governmental unit for financial statement purposes, or \$5,000. Includes rolling stock and all other such property used in the provision of public transit service.
- t. Equipment Inventory: A physical inventory of project (non-real) property taken and results reconciled with the personal property records.
- u. Excess Property: Property which the grantee determines is no longer required for its needs or fulfillment of its responsibilities and has not met its useful life under an FTA assisted grant.
- v. Excess Real Property Inventory and Utilization Plan: The document which lists each real estate parcel acquired with participation of Federal funds that is no longer needed for approved FTA project purposes and which states how the grantee plans to use or dispose of the excess real property.

- w. Facilities: All or any portion of a building or structure including roads, walks, and parking lots.
- x. Fair Market Value: The most probable price equipment or project property would bring in a competitive and open market.
- y. Federally Recognized Indian Tribal Government: The governing body or a governmental agency of any Indian tribe, band, nation, or other organized group or community, (including any native village as defined in Section 3 of the Alaska Native Claims Settlement Act (ANCSA), (43 U.S.C. 1601 *et seq.*) certified by the Secretary of the Interior as eligible for the special programs and service provided through the Bureau of Indian Affairs.
- z. Fleet Management Plan: The management plan includes an inventory of all buses among other items, such as operating policies, peak vehicle requirements, maintenance and overhaul programs, system and service expansions, rolling stock procurements and related schedules, and spare ratio justification. The plan also calculates the number of rolling stock needed to operate at peak normal days.
- aa. Force Account: The use of a grantee's own labor force to accomplish a capital grant project.
- bb. Formula Funding: Grant funding allocated using factors that are specified in the law, or in an administrative formula developed by FTA.
- cc. Global Settlement: In real estate this means the combination of all payments, acquisition and relocation, into one payment. This is not permitted on FTA projects as global settlements are considered in conflict with the intent of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Under the Uniform Act, an appraisal sets Just Compensation for the real estate and is made prior to the initiation of negotiations on a particular parcel. The relocation of personal property, on the other hand, is reimbursed based upon the actual, reasonable, and necessary costs that most often cannot be determined until after the move is complete.
- dd. Grant: An award of financial assistance, including Cooperative Agreements, in the form of money, or property in lieu of money, by the Federal Government to an eligible grantee or recipient. Used interchangeably with Grant Agreement.
- ee. Grant Amendment: The modification of a grant that includes a change in scope and/or change in Federal funds.
- ff. Grantee: An entity to which a grant is awarded directly by FTA to support a specific project in which FTA does not take an active role or retain substantial control, as set forth in 31 U.S.C. 6304. In this circular FTA uses the term grantee interchangeably with grant recipient and recipient.

- gg. Grant Scope: The broad purpose or objectives of a grant. The scope of a grant may encompass one or more specific projects identified by scope codes in each grant project budget.
- hh. Incidental Use of Project Property and Equipment: The authorized use of real property and equipment acquired with FTA funds for purposes of transit service but which also has limited non-transit use due to transit operating circumstances. Such use must be compatible with the approved purposes of the project and not interfere with intended public transportation uses of project assets.
- ii. Lapsed Funds: Funds no longer available for obligation to a grantee or project.
- jj. Large Urbanized Area: Any urbanized area with a population of at least 200,000.
- kk. Legal Settlement: Used in the context of an eminent domain property acquisition. A legal settlement can occur in one of several ways. First, once an acquisition case is referred to legal counsel to initiate condemnation proceedings, a settlement between the parties may occur before a condemnation complaint is filed. The second situation, involves the settlement of a case after the condemnation action has been filed. This may be referred to as a legal or stipulated settlement. In this case a stipulation agreement is prepared and signed by the parties involved after which the court may approve or issue an order approving the stipulation agreement and dismissing the court case. In either case such a settlement would necessarily be justified in writing similarly to an administrative settlement as described in 49 CFR 24.102(i) of the URA regulations.
- ll. Local Governmental Authority: Includes (A) a political subdivision of a State; (B) an authority of at least one State or political subdivision of a State; (C) an Indian tribe; or (D) a public corporation, board, or commission established under the laws of a State.
- mm. Master Agreement: The official FTA document containing FTA and other cross-cutting Federal requirements applicable to the FTA recipient and its project. The Master Agreement is typically revised annually in October. The Master Agreement is incorporated by reference and made part of each FTA grant, Cooperative Agreement, and amendment thereto.
- nn. NEPA: National Environmental Policy Act (NEPA), signed into law by President Nixon January 1, 1970, 42 USC Section 4321–4370d declared a national policy to safeguard the environment and created the Council on Environmental Quality in the Executive Office of the President. To implement the national environmental policy, NEPA requires that environmental factors such as historic resources, noise, air, vibration, groundwater, habitat, and wildlife be considered when Federal agencies make decisions and that a detailed statement of environmental impacts be prepared for all major Federal actions significantly affecting the quality of the human environment.

- oo. Net Present Value: The discounted monetized value of expected net benefits (i.e., benefits minus costs). It is calculated by assigning monetary values to benefits and costs, discounting future benefits and costs using an appropriate discount rate to obtain a present value, and subtracting the sum total of discounted costs from the sum total of discounted benefits.
- pp. Net Proceeds from the Sale of Project Equipment and Real Property: The amount realized from the sale of property no longer needed for transit purposes less the expense of any actual and reasonable selling and any necessary expenses associated with repairs to make saleable.
- qq. Overhaul: Systematic replacement or upgrade of systems whose useful life is less than the useful life of the entire vehicle in a programmed manner. Overhaul is performed as a planned or concentrated preventive maintenance activity and is intended to enable the rolling stock to perform to the end of the original useful life.
- rr. Preventive Maintenance: Is defined as all maintenance costs related to vehicles and non-vehicles. Specifically, it is defined as all the activities, supplies, materials, labor, services, and associated costs required to preserve or extend the functionality and serviceability of the asset in a cost effective manner, up to and including the current state of the art for maintaining such an asset.
- ss. Program Income: Gross income received by the grantee or subgrantee directly generated by a grant supported activity, or earned only as a result of the Grant Agreement during the grant period (the time between the effective date of the grant and the ending date of the grant reflected in the final financial report).
- tt. Program of Projects (POP): A list of projects to be funded in a grant application submitted to FTA by a designated recipient. The POP lists the subrecipients and indicates whether they are private non-profit agencies, governmental authorities, or private providers of transportation service, designates the areas served (including rural areas), and identifies any tribal entities. In addition, the POP includes a brief description of the projects, total project cost, and Federal share for each project.
- uu. Project: For the purposes of the FTA program, public transportation improvement activities funded under an executed grant.
- vv. Project Activity Line Item (ALI): The description and dollar amount contained in the budget for an approved grant activity associated within a particular scope approved as part of a grant. ALIs under each scope are informational and are used as tools for FTA and the grantee to manage the grant.
- ww. Project Property: Includes equipment, real property, supplies, and rolling stock.
- xx. Project Scope: The broad purpose of a specific project within a grant. There may be multiple scopes identifying each of the different projects within a grant and each

scope may contain a number of activities which represent the estimate of actions needed to complete the project. FTA reserves the right to consider other information in determining the “scope of the project” when that term is used for legal purposes. See the Master Agreement.

- yy. Public Transportation: Transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include school bus, charter, sightseeing or intercity bus transportation or intercity passenger rail transportation provided by AMTRAK. The terms “transit,” “mass transportation,” and “public transportation” are used interchangeably in transit law.
- zz. Real Property: Land, including affixed land improvements, structures, and appurtenances. It does not include movable machinery and equipment.
- aaa. Realty/Personalty Report: A realty/personalty report is a listing of items of real estate to be appraised and items of personalty to be moved. Real estate is the land and anything permanently affixed to the land, such as buildings, fences, and those things attached to the buildings, which if removed, deface the structure or integrality of the building, such as plumbing, heating fixtures, etc. Personal property, on the other hand, is the right or interest in things of a temporary or moveable nature. State law varies on the definition of real property and personal property; therefore, the grantee should rely on its State law’s definition of real property and personal property.
- bbb. Rebuild: A recondition at the end of useful life that creates additional useful life. Rebuild is a capital expense incurred at or near the end of the rolling stock’s useful life that results in a new useful life of the rolling stock that is consistent with the extent of the rebuilding.
- ccc. Recipient: An entity that receives funds from FTA, whether as a direct recipient or a subrecipient. For purpose of this circular, FTA uses the term recipient interchangeably with the terms grant recipient and grantee and subgrantee.
- ddd. Refurbishment: Same as overhaul.
- eee. Remaining Federal Interest for Dispositions Before the End of Useful Life: Is the amount calculated by multiplying the current fair market value or proceeds from sale by FTA’s share of the equipment. Fair market value is the greater of the unamortized value of the remaining service life based on straight line depreciation of the original purchase price or the Federal share of the sales proceeds.
- fff. Remaining Federal Interest for Real Property: Federal interest is the greater of the Federal share of the fair market value of the property, or the straight line depreciated value of improvements plus the Federal share of the current appraised land value.

- ggg. Rent Schedules: This refers to a method used to document an array of rent and utilities charged in an area or neighborhood for various sized dwellings based on a survey of available dwellings listed for rent.
- hhh. Rolling Stock Status Report: A report that identifies rolling stock to be retired, or disposed of and identifies both its mileage and age at the time of removal from service, and it discusses the proposed anticipated spare ratio.
- iii. Sales Proceeds: Sales Proceeds are the net proceeds generated by the disposition of excess real property or equipment that was purchased in whole or in part with FTA grant funds.
- jjj. Shared Use: Those instances in which a project partner, separate from the transit agency or grantee, occupies part of a larger facility and pays for its pro rata share of the construction, maintenance, and operation costs. Shared uses are declared at the time of grant award.
- kkk. Straight Line Depreciation: In absence of fair market value, straight line depreciation method is used to determine the remaining useful life of property. This method is considered as a function of time instead of a function of usage. This method is widely used in practice because of its simplicity. It basically assumes that the asset's economic usefulness is the same each year.
- lll. Subrecipient: A State or local government authority, non-profit organization, or operator of public transportation services that receives a grant indirectly through a recipient.
- mmm. Supplies: All tangible project property other than equipment with a unit value of less than \$5,000.
- nnn. TEAM-Web: Web-based application used to apply for, administer, and manage FTA grants most commonly referred to as "TEAM." TEAM stands for Transportation Electronic Award and Management (TEAM) system.
- ooo. Transit Enhancements: Projects or project elements that are designed to enhance public transportation service or use and are physically or functionally related to transit facilities. Eligible enhancements include historic preservation, rehabilitation and operation of historic public transportation buildings, structures, and facilities; bus shelters; landscaping and other scenic beautification; public art; pedestrian access and walkways; bicycle access; transit connections to parks within the grantee's transit service area; signage; and enhanced access for persons with disabilities to public transportation.
- ppp. Uneconomical Remnant: A parcel of real property in which the owner is left with an interest after the partial acquisition or use of the owner's property, and which the acquiring agency has determined has little or no value or utility to the owner.

- qqq. Uniform Act: Refers to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Pub. L. 91-646, 84 Stat. 1894; 42 U.S.C. 4601 *et seq.* as amended). This act also is referred to with the abbreviation URA per the regulations codified at 49 CFR part 24. All real estate acquisition and relocation assistance undertaken with FTA Federal assistance must be compliant with this act and its implementing regulations at 49 CFR part 24.
- rrr. Unliquidated Obligations: Funding commitments that have been incurred, but for which outlays have not yet been recorded because goods and services have not been received. Unliquidated obligations should be accounted for on Line D of the Financial Status Report (FSR).
- sss. Urbanized Area: An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the Bureau of the Census.
- ttt. Useful Life: The expected lifetime of project property, or the acceptable period of use in service. Useful life of revenue rolling stock begins on the date the vehicle is placed in revenue service and continues until it is removed from service. See Chapter IV of this circular; and current Circular 9030.1 and Circular 9300.1 Capital Program. Used interchangeably with “service life.” **Note:** Land does not depreciate and therefore does not have a useful life.
- uuu. Value Engineering: Value engineering is the systematic application of recognized techniques that identify the function of a product or service, establish a value for that function, and provide the necessary function reliably at the lowest overall cost. In all instances, the required function should be achieved at the lowest possible life-cycle cost consistent with requirements for performance, maintainability, safety, security, and aesthetics.

## CHAPTER II

### CIRCULAR OVERVIEW

1. GENERAL. This circular provides requirements and procedures for management of all Federal Transit Administration (FTA) programs at 49 U.S.C. Chapter 53, where grant management requirements unique to a particular FTA program are not described in the specific program circular.

FTA implements the requirements of the Uniform Administrative Requirements for States and Local Governments (49 CFR part 18) that have specific provisions to states in the areas of equipment, procurement, and financial management. These requirements apply to those programs that have States as grantees, including 49 U.S.C. Sections 5305, 5310, 5311, 5316, and 5317.

FTA implements the requirements of the Uniform Administrative Requirements (49 CFR part 19) to manage grants to Institutions of Higher Education, Hospitals, and Non-Profit Organizations.

FTA regional and metropolitan offices have responsibility for management oversight of most grants and projects. References in this circular to the cognizant agency mean the FTA regional or metropolitan office, unless otherwise defined.

2. APPLICABLE PROGRAM DESCRIPTIONS. FTA provides formula and discretionary funding under a variety of programs by awarding grants to eligible recipients. While this circular contains the post-award guidance applicable to all FTA programs, several of the programs including research programs described below have individual program circulars that contain pre-award instructions and unique grant administration and project management guidance. If there is a conflict between 5010 and program specific circulars, program specific circulars should prevail. Please reference FTA's public website at <http://www.fta.dot.gov> for a complete listing of FTA programs and their current FTA circulars.
  - a. Metropolitan Planning, Statewide Planning, and Planning Programs (Section 5303, Section 5304, and Section 5305). These programs provide funding to support cooperative, continuous, and comprehensive planning for making transportation investment decisions in metropolitan areas and statewide.

For planning activities that:

- (1) support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- (2) increase the safety of the transportation system for motorized and nonmotorized users;

- (3) increase the security of the transportation system for motorized and nonmotorized users;
- (4) increase the accessibility and mobility of people and for freight;
- (5) protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- (6) enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- (7) promote efficient system management and operation; and
- (8) emphasize the preservation of the existing transportation system.

Funds are apportioned annually by a formula to States that include consideration of each State's urbanized area population in proportion to the urbanized area population for the entire nation as well as other factors. States receive no less than 0.5 percent of the amount apportioned. These funds are sub-allocated by States to Metropolitan Planning Organizations (MPOs) by a formula that considers each MPO's urbanized area population, their individual planning needs, and a minimum distribution. For more information, please refer to the Joint Planning Regulations at 49 CFR part 613 and FTA Circular 8100.1. To be eligible for funding under these programs, projects and strategies must come from the applicable transportation planning process.

- b. Urbanized Area Formula Program (Section 5307). The Urbanized Area Formula Program makes Federal resources available to urbanized areas and to the Chief Executive Officer of a State (Governor) for transit planning, capital, and operating assistance in urbanized areas. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the Bureau of the Census.

For urbanized areas with a population of 200,000 or more, Urbanized Area Formula Program funds are apportioned and flow directly to a designated grantee(s) selected by the Governor to apply for and receive Federal funds. For urbanized areas under 200,000 in population, the funds are apportioned to the Governor of each State for distribution, unless such an area has been designated as a transportation management area at the request of the Governor and the MPO. These areas also receive apportionments directly. Guidance for Section 5307 is found in FTA Circular 9030.1. To be eligible for funding under this program, project and strategies must come from the applicable transportation planning process and contained in a local Transportation Improvement Plan and State Transportation Improvement Plan.

- c. Nonurbanized Area Formula Program (Section 5311). This program provides formula funding to States for the purpose of supporting public transportation in population areas of less than 50,000. It is apportioned in proportion to each State's nonurbanized

population and density factors. Each State prepares an annual program of projects (POP), which must provide for fair and equitable distribution of funds within the States, including Indian reservations, and must provide for maximum feasible coordination with transportation services assisted by other Federal sources.

Funds may be used for capital, operating, and administrative assistance to State agencies, local public bodies, and non-profit organizations (including Indian tribes and groups), and operators of public transportation services. The State must use 15 percent of its annual apportionment to support intercity bus service, unless the Governor certifies that these needs of the State are adequately met. Guidance for Section 5311 is found in FTA Circular 9040.1. To be eligible for funding under this program, projects and strategies must come from the applicable transportation planning process.

- d. Capital Investment Program (Section 5309). The Section 5309 Capital Investment Grants Program funds three different programs: (1) fixed guideway modernization in areas with populations over 200,000 with fixed guideway segments at least seven years old (based on a formula); (2) construction and extension of new fixed guideway systems (New Starts, Small Starts, and Very Small Starts Programs); and, (3) purchase of bus and bus related equipment and facilities in both urbanized and nonurbanized areas (Bus and Bus Facility Program). States and local governmental authorities are eligible applicants for Section 5309 funds. Eligible applicants may apply for Section 5309 bus grants on behalf of private non-profit agencies, private providers of public transportation services, and public subrecipients.

Many recipients look to the Bus Capital Program to supplement vehicles acquired under formula programs or to construct facilities. While distribution of capital program funds is often determined according to Congressional direction, FTA encourages States to apply on behalf of nonurbanized areas and transit operators to apply in behalf of non-profit agencies in their service area that receive earmarks.

Guidance for Section 5309 is found in FTA Circular 9300.1. To be eligible for funding under this program, projects and strategies must come from the applicable transportation planning process.

- e. Elderly Individuals and Individuals with Disabilities (Section 5310). The goal of the Section 5310 program is to improve mobility of elderly individuals and individuals with disabilities throughout the country. Toward this goal, FTA provides financial assistance for transportation services planned, designed, and carried out to meet the special transportation needs of elderly individuals and individuals with disabilities in all areas—urbanized, small urban, and rural. Funds for the Section 5310 program are available for capital expenses as defined in Section 5302(a)(1) to support the provision of transportation services to meet the special needs of elderly persons and persons with disabilities.

Section 5310 funds are apportioned among the States by a formula which is based on the number of elderly persons and persons with disabilities in each State according to

the latest available U.S. census data. Up to 10 percent of the States total fiscal year (FY) apportionment may be used to fund program administration costs including administration, planning, and technical assistance. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires that projects selected for funding under the Section 5310 program be derived from a locally developed, coordinated public transit-human services transportation plan.

Guidance on the Section 5310 program is contained in FTA Circular 9070.1.

- f. Job Access and Reverse Commute Program (Section 5316). The JARC formula grant program aims to improve access to transportation services to employment and employment related activities for welfare recipients and eligible low-income individuals and to transport residents of urbanized areas and nonurbanized areas to suburban employment opportunities. Funds from the JARC program are available for capital, planning, and operating expenses that support the development and maintenance of transportation services designed to transport low-income individuals to and from jobs and activities related to their employment and to support reverse commute projects.

Of the total JARC funds available, FTA apportions 60 percent among designated recipients in large urbanized areas; 20 percent to the States for small urbanized areas; and 20 percent to the States for rural and small urban areas under 50,000 in population. JARC funds are apportioned by formula. The formula is based on the ratio that the number of eligible low-income individuals and welfare recipients in each area bears to the number of eligible low-income individuals and welfare recipients in all such areas. Up to 10 percent of the recipient's total FY apportionment may be used to fund program administration costs including administration, planning, and technical assistance. SAFETEA-LU requires that projects selected for funding under the New Freedom program be derived from a locally developed, coordinated public transit-human services transportation plan.

Guidance on the JARC program is contained in FTA Circular 9050.1.

- g. New Freedom Program (Section 5317). The New Freedom formula grant program aims to provide additional tools to overcome existing barriers facing Americans with disabilities seeking integration into the work force and full participation in society. New Freedom program funds are available for capital and operating expenses that support new public transportation services beyond those required by the ADA and new public transportation alternatives beyond those required by the ADA designed to assist individuals with disabilities with accessing transportation services.

Of the total New Freedom funds available, FTA apportions 60 percent among designated recipients in large urbanized areas; 20 percent to the States for small urbanized areas; and 20 percent to the States for rural and small urban areas under 50,000 in population. New Freedom funds are apportioned among the recipients by formula. The formula is based on the ratio that the number of individuals with

disabilities in each area bears to the number of individuals with disabilities in all such areas. Up to 10 percent of the recipient's total FY apportionment may be used to fund program administration costs including administration, planning, and technical assistance. SAFETEA-LU requires that projects selected for funding under the New Freedom program be derived from a locally developed, coordinated public transit-human services transportation plan.

Guidance for the New Freedom Program is contained in FTA Circular 9045.1.

- h. Paul S. Sarbanes Transit in the Parks Program—formerly Alternative Transportation in Parks and Public Lands (ATPPL) (Section 5320). The Paul S. Sarbanes Transit in the Parks Program, 49 U.S.C. 5320, was established by SAFETEA-LU. The program's purpose is to enhance the protection of national parks and Federal lands, and increase the enjoyment of those visiting them. The program makes available FTA assistance toward capital and planning expenses in projects designed to improve alternative transportation systems in parks and public lands. Eligible applicants are Federal land management agencies and State, tribal, and local governments with jurisdiction over land in the vicinity of an eligible area. All applicants for funds under the parks' program must have the consent of a Federal land management agency. FTA carries out the program in consultation with the Department of the Interior (DOI) and other Federal land management agencies. Applicants must submit an application in a competitive selection process established by FTA and the Federal land management agencies. The Secretary of the Interior, after consultation with and in cooperation with the Secretary of Transportation, determines the final selection of qualified projects and the funding levels. To be eligible for funding under this program, project and strategies must come from the applicable transportation planning process.
- i. Clean Fuels Grant Program (Section 5308). SAFETEA-LU amended 49 U.S.C. 5308 and changed this program from a formula-based program to a discretionary grant program. This program assists in financing the acquisition of clean-fuel rolling stock and clean-fuel related facilities for agencies providing public transportation and operating in an urbanized area designated as a non-attainment area for ozone or carbon monoxide under Section 107(d) of the Clean Air Act (CAA), 42 U.S.C. Section 7407(d), or a maintenance area for ozone or carbon monoxide. Eligible grant recipients are designated recipients as defined in 5307(a)(2), an urbanized areas over 200,000 in population, and States for urbanized areas with populations of less than 200,000, for areas that are designated as non-attainment areas for ozone or carbon monoxide under Section 107(d) of the CAA, 42 U.S.C. Section 7407(d); or are maintenance areas for ozone or carbon monoxide. Nonurbanized areas are not eligible recipients under this program.

Eligible projects include the following: the purchase or lease of clean-fuel rolling stock, the construction or lease of clean-fuel electrical-recharging facilities, and improvement of existing facilities to accommodate clean-fuel rolling stock. In addition, clean-fuel, bio-diesel, hybrid-electric, or zero-emissions-technology rolling

stock that exhibit emissions reductions equivalent or superior to existing clean-fuel or hybrid-electric technologies may be eligible at FTA's discretion, provided that the Administrator of the Environmental Protection Agency (EPA) has certified the project sufficiently reduces harmful emissions. Section 5308 states that not more than 25 percent of the amount authorized for this program may be used for clean-diesel projects. FTA has implemented this program through a rulemaking to revise 49 CFR part 624. The final rule was published in the *Federal Register* (72 FR 15049, Mar. 30, 2007).

Applications are solicited through a notice in the *Federal Register* in each FY that discretionary funds are appropriated by Congress for the program. Grants under this program are subject to the applicable requirements of 49 U.S.C. Section 5307. To be eligible for funding under this program, projects and strategies must come from the applicable transportation planning process.

3. **RESPONSIBILITIES OF GRANT MANAGEMENT.** Grantees are responsible for the day-to-day management of their Federal grants and of grant supported activities. FTA monitors grants and federally funded projects to confirm that grantees establish and follow procedures that comply with Federal requirements. Chapter III of this circular describes the mechanics and requirements for grant administration, and Chapter IV describes the requirements for managing federally funded projects.
  - a. **Grantee's Role.** A grantee must monitor grant supported activities to ensure compliance with applicable Federal requirements. This includes the administration and management of the grant in compliance with the Federal regulations, Grant Agreement, and applicable FTA circulars. A grantee is also responsible for funds that "pass through" to a subrecipient. In general, submission of Annual Certifications and Assurances stands in lieu of detailed FTA oversight before approval of a grant; however, the results of ongoing or routine FTA oversight activities also will be considered as applicable. Annual independent organization wide audits (A-133 audits), audits of grantees, and other recurring and specialized reviews give FTA an opportunity to verify the grantee's Certifications and Assurances (see Chapter V, "Oversight," of this circular). The grantee's responsibilities include but are not limited to actions that:
    - (1) Demonstrate legal, financial, and technical capacity to carry out the program, including safety and security aspects of the program.
    - (2) Provide administrative and management support of project implementation.
    - (3) Provide, directly or by contract, adequate technical inspection and supervision by qualified professionals of all work in progress.
    - (4) Ensure conformity to Grant Agreements, applicable statutes, codes, ordinances, and safety standards.

- (5) Maintain the project work schedule agreed to by FTA and the grantee and monitor grant activities to assure that schedules are met and other performance goals are achieved.
  - (6) Keep expenditures within the latest approved project budget.
  - (7) Ensure compliance with FTA and Federal requirements on the part of agencies, consultants, contractors, and subcontractors working under approved third party contracts or inter-agency agreements.
  - (8) Request and withdraw Federal funds for eligible activities only in amounts and at times as needed to make payments that are due and payable within three business days and retain receipts to substantiate withdrawals.
  - (9) Account for project property and maintain property inventory records that contain all the elements required.
  - (10) Demonstrate and retain satisfactory continuing control over the use of project property.
  - (11) Demonstrate procedures for asset management and adequate maintenance of equipment and facilities.
  - (12) Ensure that an annual independent organization-wide audit is conducted in accordance with Office of Management and Budget (OMB) Circular, A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
  - (13) Prepare force account and Cost Allocation Plans (CAPs) and submit and obtain approval if applicable before incurring costs.
  - (14) Prepare and submit FTA required reports (see Chapter III, Section 3. "Reporting Requirements").
  - (15) Update and retain FTA required reports and records for availability during audits or oversight reviews.
  - (16) Ensure that effective control and accountability are maintained for all grants and subgrants, cash, real and personal property, and other assets. Grantees and subgrantees must ensure that resources are properly used and safeguarded, and used solely for authorized purposes.
- b. FTA Role. FTA Headquarters in Washington, DC, serves a broad, program-level role in the administration of the programs. FTA Headquarters performs the following functions:
- (1) Provides overall policy and is primarily responsible for policy and program guidance for all FTA programs; ensures that programs are consistent with the law.

- (2) Ensures consistent administration of programs by regional and metropolitan offices.
  - (3) Prepares and publishes annual apportionment of funds to the States and designated grantees.
  - (4) Develops and implements financial management procedures.
  - (5) Initiates and manages program-support activities, such as training, courses, regional consistency, and oversight reviews.
  - (6) Conducts national program reviews and evaluations.
  - (7) Carries out responsibility for national compliance with program requirements.
  - (8) Develops national standard operating practices.
- c. FTA Regional and Metropolitan Offices are responsible for the day-to-day administration of grants, projects, and programs. Regional and metropolitan offices responsibilities include, but are not limited to, actions that:
- (1) Review and approve grant applications, grant amendments, and budget revisions, as necessary.
  - (2) Obligate and deobligate funds.
  - (3) Work with grantees to implement and manage the programs and projects and ensure grantee compliance.
  - (4) Provide technical assistance.
  - (5) Receive designated grantee's certifications and amendments to the POP.
  - (6) Review Milestone Progress Reports and Financial Status Reports as well as monitor and close grants.
  - (7) Conduct triennial reviews and other reviews as necessary.
4. CIVIL RIGHTS REQUIREMENTS. The recipient agrees to comply with all applicable civil rights statutes and implementing regulations including, but not limited to, the following:
- a. Nondiscrimination in Federal Public Transportation Programs. The recipient agrees to comply, and ensures the compliance of each third party contractor at any tier and each subrecipient at any tier under the project, with the provisions of 49 U.S.C. 5332. These provisions prohibit discrimination on the basis of race, color, creed, national origin, sex, or age and prohibit discrimination in employment or business opportunity.

- b. Nondiscrimination—Title VI. The recipient agrees to comply, and ensures the compliance of each third party contractor at any tier and each subrecipient at any tier of the project, with all of the following requirements under Title VI of the Civil Rights Act of 1964:
- (1) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance;
  - (2) DOT regulations, “Nondiscrimination in Federally-Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act,” 49 CFR part 21;
  - (3) FTA Circular 4702.1 “Title VI and Title VI—Dependent Guidelines for Federal Transit Administration Recipients.” This document provides FTA recipients and subrecipients with guidance and instructions necessary to carry out DOT’s Title VI regulations (49 CFR part 21): DOT’s order 5610.0 on Environmental Justice (62 FR 18377, Apr. 15, 1997), and DOT Policy Guidance Concerning Recipient’s Responsibilities to Limited English Proficient (LEP) persons (70 FR 74087, Dec. 14, 2005);
  - (4) DOT Order to Address Environmental Justice in Minority Populations and Low-Income Populations. This Order describes the process that the Office of the Secretary of Transportation and each operating administration will use to incorporate environmental justice principles (as embodied in Executive Order 12898 on Environmental Justice) into existing programs, policies, and activities; and
  - (5) Pursuant to Executive Order 13166 and DOT Policy Guidance Concerning Recipients’ Responsibilities to Limited English Proficient (LEP) Persons. This guidance clarifies the responsibilities of recipients of Federal financial assistance from DOT and assists them in fulfilling their responsibilities to Limited English Proficient (LEP) persons, pursuant to Title VI of the Civil Rights Act of 1964 and implementing regulations.
- c. Equal Employment Opportunity. The recipient agrees to comply, and ensures the compliance of each third party contractor and each subrecipient at any tier of the project, with all Equal Employment Opportunity (EEO) requirements of Title VII of the Civil Rights Act of 1964, as amended, (42 U.S.C. Section 2000e), and 49 U.S.C. Section 5332, and FTA Circular 4704.1, “Equal Employment Program Guidelines for Grant Recipients” and any implementing requirements FTA may issue. Grantees who receive \$1 million dollars in FTA assistance (or \$250,000 in FTA planning assistance) and have 50 transit-related employees must submit an EEO program to FTA. Both criteria must be met in order to meet the requirement for program submission.

- d. Nondiscrimination on the Basis of Sex. The recipient agrees to comply with all applicable requirements of Title IX of the Education Amendments of 1972, as amended, (20 U.S.C. Section 1681 *et seq.*), with implementing DOT implementing regulations, “Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance,” 49 CFR part 25, and with any implementing directives that DOT or FTA may promulgate, which prohibit discrimination on the basis of sex.
- e. Nondiscrimination on the Basis of Age. The recipient agrees to comply with all applicable requirements of the Age Discrimination Act of 1975, as amended, (42 U.S.C. Section 6101 *et seq.*), and Health and Human Services’ implementing regulations, “Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance,” (45 CFR part 90), which prohibit discrimination against individuals on the basis of age (40 years or older). In addition, the recipient agrees to comply with all applicable requirements of the Age Discrimination Act (ADEA), 29 U.S.C. 621 through 634, and Equal Employment Opportunity Commission (EEOC) implementing regulations, “Age Discrimination in Employment Act” (29 CFR part 1625), which prohibits discrimination against individuals on the basis of age.
- f. Nondiscrimination on the Basis of Disability. The recipient agrees to comply, and ensures the compliance of each third party contractor and each subrecipient at any tier of the project, with the applicable laws and regulations, discussed below, for nondiscrimination on the basis of disability.
- (1) The Rehabilitation Act of 1973 (Section 504), as amended (29 U.S.C. Section 794), prohibits discrimination on the basis of disability by recipients of Federal financial assistance.
  - (2) Section 508 of the rehabilitation Act of 1973, (Section 508), as amended (29 U.S.C. Section 794(d)), requires reports and other information prepared in electronic format developed in connection with a third party contract, whether as a contract end item or in compliance with contract administration provisions, must comply with the accessibility standards established under Architectural and Transportation Barriers Compliance Board (ATBCB) regulations, “Electronic and Information Technology Accessibility Standards,” 36 CFR part 1194.
  - (3) The Americans with Disabilities Act of 1990 (ADA), as amended (42 U.S.C. Section 12101 *et seq.*), prohibits discrimination against qualified individuals with disabilities in all programs, activities, and services of public entities as well as imposes specific requirements on public and private providers of transportation.
  - (4) DOT regulations implementing Section 504 and the ADA include 49 CFR parts 27, 37, and 38. Among other provisions, the regulations specify accessibility requirements for the design and construction of new transportation facilities; require that vehicles acquired (with limited exceptions) be accessible to and usable

by individuals with disabilities, including individuals using wheelchairs; require public entities, including a private non-profit entity of the State as a subrecipient providing fixed-route service, to provide complementary paratransit service to individuals with disabilities who cannot use the fixed-route service; and include service requirements intended to ensure that individuals with disabilities are afforded equal opportunity to use transportation systems and services.

- (5) In addition, recipients of any FTA funds should be aware that they also have responsibilities under Titles I, III, IV, and V of the ADA in the areas of employment, public services, public accommodations, telecommunications, and other provisions, many of which are subject to regulations issued by other Federal agencies.
- g. Disadvantaged Business Enterprise (DBE). To the extent required by Federal law, regulation, or directive, the recipient agrees to take the following measures to make it possible for DBEs to participate in the project:
- (1) The recipient agrees and ensures that it will comply with Section 1101(b) of SAFETEA-LU, which requires FTA to make available not less than 10 percent of its funding under that Act for contracts with small business concerns owned and controlled by socially and economically disadvantaged persons. The DOT DBE Regulation at 49 CFR 26.21(2) states that FTA recipients receiving planning, capital and/or operating assistance who will award prime contracts (excluding transit vehicle purchases) exceeding \$250,000 in FTA funds in a Federal FY are required to have a DBE program. Grantees must comply with applicable requirements of DOT regulations, "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs," 49 CFR part 26, (DBE regulations), in order to receive FTA funding. Contracts funded in whole or in part with FTA funds and subject to FTA's procurement rule are also subject to the grantee's DBE Program and are included to the extent of FTA funding in determining (i) whether the grantee meets the DBE threshold for goal setting; and, (ii) the goal if the threshold is met.
  - (2) The recipient agrees and ensures that it will comply with DOT regulations, "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs," 49 CFR part 26. Among other provisions, this regulation requires recipients of DOT Federal financial assistance meeting a threshold funding level of \$250,000 to have a DBE program. This applies to all who receive planning, capital and/or operating assistance including State and local transportation agencies, to establish goals for the participation of disadvantaged entrepreneurs and certify the eligibility of DBE firms to participate in their DOT-assisted contracts. FTA recipients are instructed by 49 CFR 26.49 to require in their DBE program that each transit vehicle manufacturer, as a condition of being authorized to bid or propose on a FTA-assisted transit vehicle

procurement (new vehicles only), certify that it complied with the requirements of the DBE program.

- (3) The recipient agrees and ensures that it shall not discriminate on the basis of race, color, sex, national origin, or disability in the award and performance of any third party contract, or subagreement supported with Federal assistance derived from DOT or in the administration of its DBE program and will comply with the requirements of 49 CFR part 26. The recipient agrees to take all necessary and reasonable steps set forth in 49 CFR part 26 to ensure nondiscrimination in the award and administration of all third party contracts and subagreements supported with Federal assistance derived from DOT. As required by 49 CFR part 26 and approved by DOT, the recipient's DBE program is incorporated by reference and made part of the Grant Agreement or Cooperative Agreement. The recipient agrees that implementation of this DBE program is a legal obligation, and that failure to carry out its terms shall be treated as a violation of the Grant Agreement or Cooperative Agreement. Upon notification by DOT to the recipient of a failure to implement its approved DBE program, DOT may impose sanctions as provided for under 49 CFR part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001, and/or the Program Fraud Civil Remedies Act, (31 U.S.C. 3801 *et seq*).
5. CROSS-CUTTING REQUIREMENTS. The grantee understands and agrees that it must comply with all applicable Federal laws, regulations, and directives, except to the extent that FTA determines otherwise, in writing. Refer to FTA's Master Agreement for a list of applicable laws, regulations, and directives. FTA updates the Master Agreement annually.

## CHAPTER III

### GRANT ADMINISTRATION

1. OVERVIEW. This chapter discusses the mechanics and requirements for post-award grant administration. Project management requirements are described in Chapter IV. The following sections emphasize the requirements associated with administering and managing a grant after the grant has been awarded and executed in the Transportation Electronic Award and Management (TEAM) system.
2. GRANT APPLICATION PROCESS. The Federal Transit Administration's (FTA's) pre-award, program-specific circulars describe the grant application process and requirements. Refer to these circulars for instructions for completing a grant application. For a full listing of FTA program circulars, see Appendix A of this circular or visit [www.fta.dot.gov](http://www.fta.dot.gov).

FTA provides a streamlined electronic interface between grantees and FTA that allows complete electronic grant application submission, review, approval, and management of all grants. This is done through a Web-based electronic system, commonly known by the acronym "TEAM." Among other things, grantees apply for grants, inquire about the status of grants, file the required financial status and milestone progress reports, and submit annual Certifications and Assurances in TEAM. The TEAM User Guide can be found at FTA's website in the "Grants and Financing" section under "Apply for and Manage Grants" located at: <http://ftateamweb.fta.dot.gov/static/userguide.html>.

The TEAM Grant Life Cycle is as follows:

- a. Grant application created,
- b. Grant number assigned,
- c. Signoffs and Approvals,
- d. Grant funds reserved,
- e. Grant awarded,
- f. Grant award executed,
- g. Grant managed, and
- h. Grant closed.

FTA staff notifies grantees by phone or e-mail of grant approval. Grantees also can check the status of grant applications in TEAM to determine when it has been awarded. The Grant Agreement includes the notification of award and the approved project budget. Special conditions of the approval may be included in the award, the current Master

Agreement, the electronic grant (screen), or the conditions for using pre-award authority if applicable. In certain cases, pre-award authority may be available for incurring project-related costs prior to approval of an application.

Once a grantee receives the notification of grant award, the grantee executes the grant in TEAM. The electronic execution of the Grant Agreement signifies the grant is active and post-award grant requirements apply.

3. REPORTING REQUIREMENTS. Once a grant is active, a grantee is subject to one or more of the following types of post-award reporting requirements, several of which can be done using TEAM. The reporting requirements may vary depending on the size of the grantee, the type of funding, or the amount of funding a grantee receives. Please contact the regional or metropolitan office with questions regarding the applicability of the following reporting requirements:
  - a. Financial Status and Milestone/Progress Reports. FTA uses the Financial Status and Milestone Progress Reports to evaluate several elements of the grant status, such as:
    - (1) The purposes of the grant are being achieved;
    - (2) The project is progressing on time and within budget;
    - (3) The grantee is demonstrating competence and control in executing the project;
    - (4) The project meets all program requirements;
    - (5) There is a problem developing which may require FTA resources to resolve.

FTA monitors grant activities to ensure proper grantee stewardship of Federal funds and compliance with the laws and regulations that govern its grant programs. FTA also must be able to report on program results, industry trends, and its own oversight responsibilities. The information FTA needs for program forecasting, management, and reporting is furnished through the Financial Status Reports (FSRs) and narrative Milestone/Progress Reports (MPRs) submitted by grantees about significant events, relevant grant activities, and any changes to or variances in the grant schedule or budget.

With respect to the level of detail required for these reports, FTA treats all approved activity line items (ALIs) alike. Thus, an activity contained in a grant must be presented in the reports in sufficient detail that important information is not lost in aggregation. For example, the number of full-sized buses in a grant must not be reported together with vans under the scope “rolling stock,” but instead should be reported separately under the applicable ALI. FTA staff is available to meet with grantees to agree on the appropriate level of reporting detail and formats for reporting in TEAM. This will ensure that FTA has the information needed to manage its overall program.

All grantees should report significant developments or changes as they occur during the year, including any problems, delays, or adverse conditions that may materially impair the ability to meet the objective of the award, as well as any favorable developments that may enable meeting time schedules and objectives sooner or at a cost substantially less than expected in FSRs.

If necessary, attachments can accompany FSRs and MPRs by using the “paperclip” feature in TEAM.

FTA may withhold payment for failure to submit either FSRs or MPRs in a timely manner. In individual cases, FTA may grant extensions of report due dates for good cause.

Report due dates and additional information about the FSRs and MPRs are described below. Please contact your regional or metropolitan office for questions regarding any of these reports.

- b. Financial Status Report (FSR). A grantee must submit an FSR for each active/executed grant. The requirement for an FSR applies to all FTA grants covered by this circular. The FSR accompanies the MPR (described below) and is used to monitor project funds. The purpose of the FSR is to provide a current, complete, and accurate financial picture of the grant. This report is submitted electronically in TEAM and must be prepared on the accrual basis of accounting; that is, income is recorded when earned instead of when received, and expenses are recorded when incurred instead of when paid. FTA does not allow the FSR to be prepared in the cash method of accounting. A grantee may keep its books on the cash basis during its accounting year. If this is the case, at the submission of the FSR, the grantee must prepare the necessary accruals and submit the FSR on the accrual basis of accounting.

The FSR must contain the following elements:

- (1) All financial facts (e.g., expenditures and obligations) relating to the scope and purpose of each financial report and applicable reporting period should be completely and clearly displayed in the reports.
- (2) Reported financial data should be accurate and up to date. The requirement for accuracy does not rule out inclusion of reasonable estimates when precise measurement is impractical, uneconomical, unnecessary, or conducive to delay.
- (3) Financial reports should be based on the required supporting documentation maintained in the grantee’s official financial management system that produces information which objectively discloses financial aspects of events or transactions.
- (4) Financial data reported should be derived from accounts that are maintained on a consistent, periodic basis; material changes in accounting policies or methods and their effect must be clearly explained.

- (5) Reporting terminology used in financial reports to FTA should be consistent with receipt and expense classifications included in the latest approved project.
- (6) The FSR screen in TEAM consists of three tabs: Summary, Financial Status and Remarks, and Comments.
- (7) The Summary tab provides basic information, with entry fields for the Period of the FSR, Initial Submission, and Last Update dates. It also allows the grantee to select whether it is a Final Report, a Paper Award, or if the grantee used Pre-Award Authority. It is important to enter in this tab whether the grantee is charging indirect costs to the grant.
- (8) In the Financial Status tab the grantee enters in the cumulative total column the actual financial information related to Outlays, Recipient Share of Outlays, Unliquidated Obligations, and Recipient Share of Unliquidated Obligations. The remaining information is generated by TEAM.
  - (a) The entry in Line A, Total Outlays, must be
    - 1 Sum of actual cash disbursement for direct charges such as but not limited to:
      - a Project construction costs
      - b Fuel
      - c Driver wages
      - d Other operating expenses
      - e Less: Farebox revenues (if operating assistance received), rebates, refunds, or other credits.
    - 2 Indirect expense incurred—Overhead costs
    - 3 Value of in-kind contributions:
      - a Use of facilities
      - b Land, right-of-way
      - c Donated services (e.g., legal, architectural)
    - 4 Accounts Payable—Goods or services received, but not yet paid.
  - (b) The entry in Line B, Recipient Share of Outlays, as the name indicates, is how much of the amount entered in Line A is locally funded. Any overmatch is

shown only when it is actually paid. If the grant was approved for deferred local share, the amount on Line B should be zero until the local share is paid.

- (c) In line C, the FSR will show how much of the Outlays (line A) is to be funded by FTA. The grantee must compare the amount on line C to the amount of actual drawdowns received. These two numbers should be fairly close, and this comparison will indicate whether the grantee has excess Federal funds on hand.
  - (d) The entry in Line D, Total Unliquidated Obligations, is for obligations (commitments) the grantee has entered into and cannot cancel without substantial penalties. Examples of these obligations include:
    - 1 Signed contract for purchase of buses when delivery has not yet occurred;
    - 2 Contract for construction services not yet rendered;
    - 3 Open purchase orders;
    - 4 Contract retention;
    - 5 Goods and services not yet received.
  - (e) The entry in line E, Recipient Share of Unliquidated Obligations, as the name indicates, is how much of the amount entered in Line D will be locally funded.
  - (f) The amount in Line I, Unobligated Balance of Federal Funds, which TEAM computes is very important. It means how much of the amount of the grant the grantee has “not put to work” yet. FTA monitors this amount closely.
- c. Milestone/Progress Reports. The MPR must be submitted for all active/executed grants. The requirement for a MPR applies to all FTA grants covered by this circular. The MPR is the primary written communication between the grantee and FTA. This report should be submitted electronically in TEAM. If only operating assistance is included in the grant, the reporting requirements are limited to the estimated and actual dates when all funding has been expended. Each MPR must include the following data as appropriate:
- (1) Current status of each open ALI within the active/executed grant.
  - (2) A narrative description of projects, status, any problems encountered in implementation, specification preparation, bid solicitation, resolution of protests, and contract awards.
  - (3) Detailed discussion of all budget or schedule changes.
  - (4) The dates of expected or actual requests for bid, delivery, etc.

- (5) Actual completion dates for completed milestones.
  - (6) Revised estimated completion dates when original estimated completion dates are not met.
  - (7) Explanation of why scheduled milestones or completion dates were not met. Identification of problem areas and narrative on how the problems will be solved. Discussion of the expected impacts and the efforts to recover from the delays.
  - (8) Analysis of significant project cost variances. Completion and acceptance of equipment and construction or other work should be discussed, together with a breakout of the costs incurred and those costs required to complete the project. Use quantitative measures, such as hours worked, sections completed, or units delivered.
  - (9) A list of all outstanding claims exceeding \$100,000, and all claims settled during the reporting period. This list should be accompanied by a brief description, estimated costs, and the reasons for the claims.
  - (10) A list of all potential and executed change orders and amounts exceeding \$100,000, pending or settled, during the reporting period. This list should be accompanied by a brief description.
  - (11) A list of claims or litigation involving third party contracts and potential third party contracts that:
    - (a) Have a value exceeding \$100,000,
    - (b) Involve a controversial matter, irrespective of amount, or
    - (c) Involve a highly publicized matter, irrespective of amount.
  - (12) A list of all real property acquisition actions, including just compensation, property(s) under litigation, administrative settlements, and condemnation for each parcel during the reporting period.
- d. Report Due Dates.
- (1) Grantees located in urbanized areas over 200,000 population. FSRs and MPRs are due to FTA within 30 days after the end of each calendar quarter, i.e., by January 30, April 30, July 30, and October 30.
  - (2) Grantees located in urbanized areas under 200,000 population. Grantees in areas with less than 200,000 in population submit FSRs and MPRs annually. Annual reports are due October 30, one month after the Federal fiscal year (FY) ends. The FTA regional or metropolitan office may request more frequent reporting or additional reports if circumstances warrant additional reporting.

- (3) Exceptions:
- (a) Section 5309 Grants: All grant recipients, regardless of location and population area, are required to submit quarterly reports in TEAM according to the dates in Subsection 3.d.(1) above when grants include construction of facility.
  - (b) State Departments of Transportation (State DOTs): State DOTs are required to report annually for all State administered programs; this includes Section 5303, 5304, 5307 (Governor's Apportionment), 5310, 5311, 5316, and 5317 Programs. The exception described in the preceding paragraph applies to the State DOTs.
  - (c) Depending on project complexity, at its discretion, FTA may also request other special reports or quarterly project management meetings.
- e. Transit Enhancement Reports. Transit Enhancement Reports must be submitted by grantees with population areas of 200,000 and above who receive funds under the Urbanized Area Formula Program (Section 5307). Recipients of these funds are required under Section 5307(d)(K)(ii) to submit a report listing the projects carried out during the previous FY with those funds including the amounts expended. This report should be submitted as a narrative attachment to the electronic 4th quarter MPR in TEAM. Certification that this report has been submitted is required as part of the Annual List of Certifications and Assurances.
- f. Civil Rights Reports. Grantees must submit, on a triennial basis, a report on their compliance with the objectives of the current Circular 4702.1, "Title VI and Title VI Dependent Guidelines for FTA Recipients." This circular provides details on the contents of compliance reports. Grantees covered under FTA's Equal Employment Opportunity (EEO) Circular must submit triennial reports on their compliance with this circular. Grantees who meet the \$250,000 funding threshold of FTA's Disadvantaged Business Enterprise (DBE) regulations must submit annual DBE goals to FTA by August 1 of each FY. If they do not anticipate reaching the threshold, then they are not required to develop annual goal for that FY in which the contracting opportunities are not available. Grantees must submit a one-time DBE program submission to FTA the first time they meet the threshold. For the first year it is a program and goal submission; the next year it is only a goal submission. Reports and goals are submitted to the Regional Civil Rights Officer. See Chapter III, Subsections 3.f.(1) and (2) below for applicability of these two reporting requirements. Grantees must also submit semi-annual DBE progress reports to the Regional Office. Grantees may also be required to submit, on an as-requested basis, reports on their activities and progress to address findings identified in civil rights compliance reviews and assessments.
- (1) Equal Employment Opportunity (EEO). FTA's EEO program reporting requirements apply to grantees employing 50 or more people and receiving \$1 million or more of FTA assistance.

- (2) Disadvantaged Business Enterprise (DBE). FTA's DBE goal setting requirements apply to grantees who will award prime contracts (excluding vehicle purchases) exceeding \$250,000 in FTA funds in any given FY. These grantees are required to provide DBE goals to FTA on an annual basis.
- g. Reports of Significant Events. Unforeseen events that impact the schedule, cost, capacity, usefulness, or purpose of a project should be reported to FTA immediately after detection and then reflected in the next quarterly progress report. Special reports should be submitted when:
- (1) Problems, delays, or adverse conditions will affect the grantee's ability to achieve project objectives within the scheduled time period or within the approved project budget. The report should discuss actions taken and/or contemplated and any Federal assistance needed to resolve the situation; or
  - (2) Favorable developments will enable the grantee to achieve project goals/complete project activities ahead of schedule or at lower cost.
  - (3) Local events that effect transit in general. Events such as bond issues, major new employer, loss of employer, public policy or transit district in news.
- h. National Transit Database (NTD) Reporting. The NTD was established by Congress to be the Nation's primary source for information and statistics on the transit systems of the United States. NTD data is used to support numerous DOT programs and to "help meet the needs of individual public transportation systems, the United States Government, State and local governments, and the public for information on which to base public transportation service planning." (49 U.S.C. 5335). Recipients or beneficiaries of grants from FTA under the Urbanized Area Formula Program (Section 5307) or Other Than Urbanized Area Formula Program (Section 5311) are required by statute to submit data to the NTD.

The legislative requirement for the NTD is in 49 U.S.C. 5335. FTA implemented this legislative requirement through the NTD Rule at 49 CFR part 630. A recipient or beneficiary of FTA grants that is required to report to the NTD, must provide a complete report to the NTD of all transit operations, regardless of whether those operations are or are not funded in whole or part by FTA. Financial information reported to the NTD must be reported in accordance with the Uniform System of Accounts (USOA). The complete reporting requirements for the NTD, along with information on due dates, extensions, and waivers can be found in the current versions of the NTD Reporting Manuals. The NTD Rule, the USOA, and the most recent versions of the NTD Reporting Manuals can be found on FTA's NTD website at <http://www.ntdprogram.gov/>.

- (1) Annual Reports. Recipients or beneficiaries of FTA's Urbanized Area Formula Program (Section 5307) or Nonurbanized Area Formula Program (Section 5311) are required by statute to report to the NTD. Recipients of the Urbanized Area

Formula Program funding must also submit monthly operations reports to the Monthly Module (2) and monthly reports to the Safety and Security Module.

- (a) Annual Report (Urbanized). Recipients or beneficiaries of Section 5307 Grants must annually report financial and non-financial data in accordance with the USOA as well as other data on operations, organizational relationships, available resources, and capital assets. The NTD Annual Manual, published by FTA each year, contains the specific reporting requirements, detailed reporting instructions, and information on due dates, waivers, and extensions.
  - (b) Rural Report (non-Urbanized). Recipients of Section 5311 Grants must annually report financial and non-financial data in accordance with the USOA as well as other data on operations, organizational relationships, available resources, and capital assets. Recipients also need to report on behalf of their beneficiaries or subrecipients. The NTD Rural Manual, published by FTA each year, contains the specific reporting requirements, detailed reporting instructions, and information on due dates, waivers, and extensions.
- (2) Monthly Report (Urbanized). Recipients or beneficiaries of Section 5307 Grants are required to file monthly reports on transit operations to the NTD. These monthly reports include information on unlinked passenger trips, vehicle revenue miles, vehicle revenue hours, vehicles operated in maximum service, and regular service days for each month. The NTD Monthly Manual, published by FTA each year, contains the specific reporting requirements, detailed reporting instructions, and information on due dates, waivers, and extensions.
- (3) Safety and Security Report (Urbanized). Recipients or beneficiaries of Section 5307 Grants are required to file monthly safety and security reports. These monthly reports include information on fatalities, injuries, collisions, derailments, fires, hazardous material spills, evacuations, arrests, and significant security events. The NTD Safety & Security Manual, published by FTA each year, contains the specific reporting requirements, detailed reporting instructions, and information on due dates, waivers, and extensions.
- i. Value Engineering Reports. Grantees with major capital projects are required to submit a VE report to the appropriate FTA Regional Office at the end of each Federal fiscal year (FY) (October 1) indicating the results of their VE efforts. Copies of the VE report form are available in each Regional Office.
4. GRANT MODIFICATIONS. At times, it may be necessary to modify a grant after it has been awarded by revising the budget or amending the grant. The grantee is responsible for controlling and monitoring all grant activities to ensure that they are carried out in accordance with the approved budget. Each grant program has specific requirements that are included in each program grant application circular that should be referenced before contemplating a grant modification. For example, for Section 5307 grants, transit

enhancement funds must be used for eligible activities, and the funding for the Americans with Disabilities Act (ADA) complementary paratransit service as a capital project cannot exceed 10 percent of the annual apportionment. Section 5310 and 5311 grants also have specific requirements for grant modifications that are addressed in the program grant application circulars. Also, funds flexed from other programs, such as the Congestion Mitigation and Air Quality (CMAQ) Improvement Program or Surface Transportation Program (STP), may have additional requirements that are addressed in other guidance that must be considered before modifying an approved grant. The manner in which a budget is initially structured during the grant application phase can facilitate or impede project management, particularly when unforeseen events require changes in the project.

There are three ways to modify a grant after it has been awarded—either through a budget revision, an administrative amendment, or a grant amendment. Whether a budget revision may be permitted (with or without prior FTA approval before incurring costs) or whether an amendment to the project will be necessary, depends on the effect of the proposed change on the scope of the project. If an ALI is added to an existing scope, the budget revision may be sent to the Department of Labor (DOL) for informational purposes but the labor protection arrangements for the original grant will apply to any modifications without further DOL certification. Grantees should contact the FTA regional or metropolitan office for questions relating to grant modification requests, including which type of grant modification is appropriate for the proposed action.

Grant modifications are electronically submitted, reviewed, and approved in TEAM.

a. Budget Revision.

- (1) General. Budget revisions may be made as long as there is no change in the grantee purpose, scope codes, and Federal funding of the grant, regardless of the FY the funds were appropriated. Budget revisions are generally changes to ALIs amount or descriptions. Budget revisions must be consistent with the activities contained in an approved Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP) and satisfy applicable National Environmental Policy Act (NEPA) requirements. Useful life of new activities must be addressed in the budget revision, as applicable.
- (2) Procedures. A grantee must submit a budget revision in TEAM using the “Revise Project Budget” screen. Budget revision requests must include a reason for the revision. For each ALI being adjusted, either by quantity or dollar amount, a grantee must include a brief explanation and impact to the project or grant in the “Details” section for the change being requested. If necessary, additional information can be provided by using the attachments feature in TEAM. Incomplete budget revisions will be returned to the grantee by the FTA reviewer for inclusion of additional information. For assistance with completing budget revisions, please contact the FTA regional or metropolitan office.

A grantee may request a budget revision either before or after incurring costs, depending on the nature of the request. If the budget revision meets the criteria outlined in (3) below, FTA concurrence is required before incurring costs associated with the proposed change.

- (3) Budget Revisions that Require Prior Approval. Under certain circumstances, a grantee must obtain FTA approval before incurring costs for proposed budget revisions. For these grants, the proposed budget revision must be submitted in TEAM and approved before incurring costs associated with the budget revision. If FTA determines the proposed budget revision does not meet the criteria for a budget revision, alternate methods for modifying the grant, such as a grant amendment, may be recommended. The FTA regional or metropolitan office will make this determination during its review. Prior FTA approval must be obtained if the proposed budget revision meets any of the following criteria:

- (a) The Federal share of the grant exceeds \$100,000 and the change in the cumulative amount of funds allocated to each scope from the originally approved scope exceeds 20 percent.
- (b) Federal funds are transferred between ALIs with different Federal matching ratios, such as moving funds from a capital activity with a match ratio of 80/20 to an operating activity with a match ratio of 50/50. This activity also requires a financial purpose code (FPC) transfer. See Chapter III, Subsection 4.a.(4) below.
- (c) Changing the Federal share of an existing ALI, such as changing an ALI from 80/20 to 83/17 to account for compliance with ADA or CAA requirements.
- (d) For revenue rolling stock, when the budget revision changes the number of vehicles to be purchased by more than two units (for grants with fewer than 10 vehicles) or more than 20 percent from the quantity identified in the original grant.

The grantee must continue to meet FTA bus spare ratio requirements for any change in the number of revenue rolling stock. If the change in the number of revenue rolling stock exceeds 20 percent, the budget revision must be supported by a Rolling Stock Status Report.

- (e) The budget revision changes the size or physical characteristics of the items in the ALIs without changing the project scope.
- (f) The addition or deletion of an ALI to an existing scope included in the grant, provided that the request does not change the amount of Federal funds awarded in the original grant or change the scope of the project contained in the grant. The addition of an activity within an approved scope requires that the grantee affirm in the budget revision request that the new activity is

consistent with the approved STIP and, if applicable, has satisfied NEPA requirements.

- (4) Financial Purpose Code Transfers. When a budget revision includes a transfer of funds between capital/operating/planning activities, an FPC change is required to be made by the FTA Project Manager before the grantee is able to draw funds for this purpose. Budget revisions with FPC transfers of any kind require prior FTA concurrence and Regional Office notification to FTA's Office of Accounting.
- (5) Examples. The following are examples of typical budget revisions. Please note that if the examples below meet any of the criteria outlined above in Chapter III, Subsection 4.a.(3), the grantee must request FTA concurrence before incurring the costs for the requested activities.
  - (a) Budget revisions to existing ALIs. Grant AB-90-1234 includes a scope for vehicles (111-00) with the ALI to purchase 40' buses (11.12.01) and a scope for stations stops/terminals (113-00) with the ALI for construction of a bus terminal (11.33.01). The construction costs for the station are expected to be higher than originally anticipated, and there is a surplus in the vehicle line item because the vehicle costs were less than anticipated. A grantee may request to move funds from ALI 11.12.01 to 11.33.01 to cover additional construction expenses. Following the process described above in Chapter III, Subsection 4.a.(2) and after determining if the request meets the threshold for prior FTA approval, the grantee may request to move the excess funds from 11.12.01 to 11.33.01.
  - (b) Budget revisions that require an FPC transfer. Grant AB-90-1234 has an approved budget for \$250,000 in Federal funds for operating assistance (30.09.01 at a 50 percent Federal/50 percent local funding ratio, and \$50,000 in Federal funds for the purchase of vans (11.12.15) at an 80 percent Federal/20 percent local funding ratio). The grantee has \$5,000 in Federal funds remaining under operating assistance and would like to use the remaining operating funds toward the purchase of vans, a capital line item. With prior concurrence from FTA, this can be accomplished through a budget revision. Since these two scopes have different funding ratios, the local share must be adjusted to ensure the correct funding ratio is maintained for each ALI. The example below shows the budget before and after the revision. As shown, the Federal share remains the same, and the local share and total eligible cost are adjusted to reflect the correct funding ratios in each line item.

**Approved Project Budget Example**

<u>Project Budget</u>			
	<u>Qty.</u>	<u>FTA Amount</u>	<u>Tot. Elig. Cost</u>
<u>SCOPE</u>			
<b>300-00 OPERATING ASSISTANCE</b>	0	\$250,000.00	\$500,000.00
<u>ACTIVITY</u>			
<b>30.09.01 UP TO 50% FEDERAL SHARE</b>	0	\$250,000.00	\$500,000.00
<u>SCOPE</u>			
<b>111-00 BUS—ROLLING STOCK</b>	1	\$50,000.00	\$62,500.00
<u>ACTIVITY</u>			
<b>11.12.15 BUY REPLACEMENT VANS</b>	1	\$50,000.00	\$62,500.00
<b>Estimated Total Eligible Cost:</b>			<b>\$562,500.00</b>
<b>Federal Share:</b>			<b>\$300,000.00</b>
<b>Local Share:</b>			<b>\$262,500.00</b>

**Revised Project Budget Example**

<u>Project Budget</u>			
	<u>Qty.</u>	<u>FTA Amount</u>	<u>Tot. Elig. Cost</u>
<u>SCOPE</u>			
<b>300-00 OPERATING ASSISTANCE</b>	0	\$245,000.00	\$490,000.00
<u>ACTIVITY</u>			
<b>30.09.01 UP TO 50% FEDERAL SHARE</b>	0	\$245,000.00	\$490,000.00
<u>SCOPE</u>			
<b>111-00 BUS—ROLLING STOCK</b>	1	\$55,000.00	\$68,750.00
<u>ACTIVITY</u>			
<b>11.12.15 BUY REPLACEMENT VANS</b>	1	\$55,000.00	\$68,750.00
<b>Estimated Total Eligible Cost:</b>			<b>\$558,750.00</b>
<b>Federal Share:</b>			<b>\$300,000.00</b>
<b>Local Share:</b>			<b>\$258,750.00</b>

The result of the budget revision is an FPC transfer completed by the FTA Project Manager. FTA will reduce Federal funds in the operating FPC (04) by \$5,000, and increase the Federal funds in the capital FPC (02) by \$5,000.

(c) Adding an ALI to an existing scope. The scope for Stations Stops/Terminals (113–00) exists in the grant, and funds are allocated to acquire route signing (11.32.09). However, the grantee determines that the agency prefers to use the funds to construct passenger shelters (11.33.10), which is an activity within the scope 113–00. The grantee may request a budget revision to add the ALI—11.33.10 and shift the funds from 11.32.09 with prior FTA concurrence. In addition, the grantee must confirm that the approved STIP includes construction of bus shelters, and applicable NEPA requirements have been satisfied.

(6) Operating Assistance Changes. A grantee may use a budget revision to reflect time period changes, adjustments or extensions to the operating period provided the total amount of Federal funds previously awarded under the grant remains unchanged.

b. Administrative Amendment.

(1) General. An administrative amendment is usually initiated by FTA and may only be used when no change will result in the scope, amount, or purpose of the grant. An administrative amendment may be used to change or clarify the terms, conditions, or provisions of a Grant Agreement. An administrative amendment is also used to change the year or type of funds obligated for a grant, to transfer equipment from one grantee to another, to reflect a change in the grantee or grantee's name, or to deobligate Federal funds that are no longer needed to complete the approved project scope or purpose.

c. Grant Amendment.

(1) General. A grant amendment is required when there is either a change in the scope or an addition of Federal funds to an existing grant. Grant amendments are subject to the same application requirements as a new grant request. All grant amendments are subject to DOL certification.

(2) Procedure. Grantees submit grant amendments in TEAM using the "Create Amendment" screen. Grant amendments require a revised Grant Agreement, revised budget, and may require a change in the amount of funds obligated for the grant. An amendment is subject to the same requirements as a new grant request except that the grantee need not resubmit portions of the original grant application that are unaffected by the change. The grantee must submit a detailed description of the changes and a revised project budget. For example, in TEAM under the project Details section of the grant, grantees should include a header, "Amendment

#1,” and describe the reason for the amendment and the changes to the grant and budget.

(3) Change of Scope. FTA requires a grant amendment if the request changes the overall scope of a grant or changes the project scopes within a grant. Examples and an exception to changes in scope that result in a grant amendment include:

(a) Examples of change in scope.

1 A change in the quantity of items to be purchased or constructed that materially change the purpose or intent of the approved grant.

2 The addition of a new project scope code or the deletion a project scope code if the deletion affects the intent or objectives of the grant.

3 The addition of an ALI that results from an amendment to the approved TIP/STIP.

(b) Exception to change in scope. For earmarks, all changes to the grant after award must be consistent with the original intent of the Congressional language. Your FTA Regional Office will assist you in making this determination. For example, if the earmark is only for a facility, a grant amendment cannot be executed to add a scope for vehicles without explicit direction from Congress to FTA to change the earmark.

(4) Change in Federal Funds. FTA requires a grant amendment if the request changes the total amount of Federal funds in the grant. The one exception is if the scope of a grant is unchanged and the only action is the deobligation of funds; an administrative amendment is used to process the grant modification. See Chapter III, Subsection 4.b., “Administrative Amendment,” above.

5. GRANT CLOSE-OUT. Grant close-out is the term used to signify the process by which FTA determines that all activities in a grant are complete and Federal funds have been expended. Grant closeout does not preclude FTA’s ability to seek repayment or other remedies for a grantee’s breach of grant terms and conditions.

a. Grantee’s Role and Responsibilities. The grantee must initiate close-out of a grant when all approved activities are completed and/or applicable Federal funds expended. All close-out documentation must be submitted within 90 days of the completion of all activities in the grant. This requires notifying FTA by letter or e-mail that the grant is ready for close-out. The grantee should electronically submit the following in TEAM as part of the grant close-out process:

(1) a final budget reflecting actual project costs by scope and activity;

(2) a final FSR;

- (3) a final narrative MPR indicating the actual completion date of each ALI; a discussion of each ALI contained in the final budget and list of project property purchased under the grant;
  - (4) a request to deobligate any unexpended balance of Federal funds; and
  - (5) any other reports required as part of the terms and conditions of the grant.
- b. Close-Out by FTA. FTA may unilaterally initiate grant close-out. Circumstances that could cause FTA to close-out a grant in whole or in part at any time before project completion include:
- (1) Grantee failure to comply with the terms or conditions of the Grant Agreement or other Federal requirements;
  - (2) Continuation of the project would not produce results commensurate with further expenditure of funds;
  - (3) Funds are no longer needed to accomplish the grant purpose;
  - (4) Failure by the grantee to make reasonable progress to complete approved grant activities; or
  - (5) Determination that the project has been essentially completed and/or approved funds have been substantially drawn down.
- c. Adjustments to Federal Share of Costs. Necessary adjustments to the Federal share of cost are made after FTA receives and reviews the required close-out information. Adjustments may also be necessary after the audit required by OMB Circular A-133 is performed. FTA funds are not available for audit or other grant activities after a grant has been closed. Additional information on the A-133 audit is contained in Chapter VI, Financial Management. Any Federal grant funds received by the grantee but not expended must be returned to FTA. For more information on returning funds to FTA, see Chapter VI, "Financial Management."

## 6. SUSPENSION AND TERMINATION.

- a. Suspension. The suspension of a grant is an action by FTA which temporarily suspends Federal assistance for a project pending corrective action by the grantee or pending a decision to terminate the grant by FTA. If FTA determines that the grantee has failed to comply with the terms and conditions of the Grant Agreement, including the civil rights requirements, FTA notifies the grantee in writing of its intent to suspend the grant. FTA may withhold further payments and/or prohibit the grantee from incurring additional obligations pending corrective action by the grantee or a decision to terminate the project for cause. This includes work being performed by third party contractors or consultants. Unless FTA notifies the grantee otherwise, suspension will

not invalidate obligations properly incurred by the grantee prior to the date of suspension to the extent that they cannot be cancelled.

- b. Termination for Cause. FTA may terminate a grant, in whole or in part, at any time before project completion, whenever it determines that the grantee failed to comply with the conditions of the grant including failure to make reasonable progress. FTA will promptly notify the grantee in writing of its intent to terminate and the reasons therefore and the effective date. Payments made to the grantee or recoveries by FTA are in accordance with the terms of the Grant Agreement and the legal rights and liabilities of both parties as defined in the agreement.
- c. Termination for Convenience. FTA or the grantee may terminate a grant in whole or part, when both parties agree that continuation of the project would not produce results commensurate with the further expenditure of funds. By signing the Grant Agreement, the grantee agrees at the outset to a termination for convenience in the event FTA makes such a finding. Both parties must agree upon the termination conditions, including the effective date and, in case of partial termination, the portions to be terminated. The grantee may not incur new obligations for the terminated portion after the effective date and must cancel as many outstanding obligations as possible. FTA evaluates each obligation to determine its eligibility for inclusion in project costs. Settlement is made in accordance with terms and conditions of the Grant Agreement. FTA allows full credit to the recipient for the Federal share of the obligations (that cannot be cancelled) properly incurred by the grantee prior to termination.
- d. Partial Termination. In some cases, FTA may deobligate funds in an approved grant before close-out because the funds are no longer needed to accomplish the grant purpose.

## 7. RETENTION AND ACCESS REQUIREMENTS FOR RECORDS.

- a. Applicability. This section applies to all financial and programmatic records, supporting documents, statistical records, and other records of grantees. Records retention and access requirements shall apply to grantee contractors, subcontractors, and subgrantees. Grantees shall include this requirement in grantee contracts and/or subgrants. These records are:
  - (1) Records required to be maintained by this circular or the terms of the Grant Agreement, or otherwise considered pertinent to FTA program requirements or the Master Agreement.
  - (2) Records executed electronically may be retained in that manner. Copies made by microfilming, photocopying, or similar methods may be substituted for the original records. Files must be accessible for possible review, audit, or down-loading to paper copy when required.
  - (3) This section does not apply to records maintained by contractors or subcontractors.

b. Length of Retention Period.

- (1) Except as otherwise specified, records must be retained for three years from the starting date specified in Chapter III, Subsection 7.c., below.
- (2) If any litigation, claim, negotiation, audit, or other action involving the records has been started before the expiration of the three-year period, the records must be retained for three years after completion of the action and resolution of all issues which arise from it.

To avoid duplicate record keeping, FTA may make special arrangements with grantees (including subgrantees, as appropriate) to retain any records which are continually needed for joint use. FTA will request transfer of records to its custody when it determines that the records possess long-term retention value. When the records are transferred to or maintained by FTA, the three-year retention requirement is not applicable to the grantee.

c. Starting Date of Retention Period.

- (1) General. The starting date for retention of records related to multi-year projects is the date of submission of the final FSR upon project completion or, if waived, the date it would have been due.
- (2) Equipment Records. The three year retention period for the equipment records starts from the date of the equipment's disposition or replacement or transfer at FTA's direction.
- (3) Records for Income Transactions after Grant Close-out. In some cases, grantees must report income after a grant is closed out. Where there is such a requirement, the retention period for the records pertaining to the earning of the income starts from the end of the grantee's FY in which the income is earned.
- (4) Indirect Cost Rate Proposals, Cost Allocation Plans (CAPs) and Similar Rate, and Rate Allocation Methods. This paragraph applies to the following types of documents, and their supporting records: indirect cost rate computations or proposals, CAPs, and any similar accounting computations or the rate at which a particular group of costs is chargeable (such as computer usage charge back rates or composite fringe benefit rates).
  - (a) If submitted for negotiation: If the proposal, plan, or other computation is required to be submitted to the Federal Government (or to the grantee) to form the basis for negotiation of the rate, then the three year retention period for its supporting records starts from the date of such submission.
  - (b) If not submitted for negotiation: If the proposal, plan, or other computation is not required to be submitted to the Federal Government (or to the grantee) for

negotiation purposes, then the three year retention period for the proposal, plan, or computation and its supporting records starts from the end of the FY (or other accounting period) covered by the proposal, plan, or other computation.

- (5) Contract Records. The retention period for all required contract records commences after the grantees or subgrantees make final payments, and all other pending matters are closed (49 CFR 18.36(i)(11)).
- d. Substitution of Photocopies. Copies of documents may be substituted for the originals.
- e. Access to Records.
  - (1) Records of Grantees and Subgrantees. FTA, DOT Office of Inspector General, and the Comptroller General of the United States, or any of their authorized representatives, have the right of access to any books, documents, papers, or other records of the grantee which are pertinent to the grant, in order to perform audits, or make examinations, excerpts, or transcripts.
  - (2) Expiration of Right of Access. The right of access in this section is not limited to the required retention period but continues as long as the records are retained.
- f. Restrictions on Public Access. The Federal Freedom of Information Act (FOIA)(5 U.S.C. 552) does not apply to grantee records owned and possessed by the grantee. Unless required by State or local law, grantees and subgrantees are not required to provide periodic public access to their records. However, FTA may request a grantee to provide access to those records the grantee maintains on behalf of FTA, (i.e., records required by Federal statute or regulation, such as Davis-Bacon wage records), or other records necessary to determine compliance with Federal requirements established as conditions of eligibility for recipients of Federal funding.

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## CHAPTER IV

### PROJECT MANAGEMENT

1. GENERAL. Real property, equipment and supplies, rolling stock, and facilities purchased or constructed for project purposes must be managed, used, and disposed of in accordance with applicable laws and regulations. This chapter provides guidance on the management, use, and disposition of Federal Transit Administration (FTA) funded real property, equipment, supplies, rolling stock, and facilities.
2. REAL PROPERTY. Real property must be acquired, managed, and used in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act or URA) (PL 91–646) and 49 CFR part 24, the implementing regulation. The following requirements govern the acquisition, use, or disposition of real property purchased with Federal funds. All regulatory references in this Section are to 49 CFR part 24, unless specified otherwise.
  - a. General. If a grantee is using Federal funds to acquire real property or provide relocation assistance necessary to secure property for a project, the grantee must comply with the requirements in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act or URA), as amended. The Uniform Act is implemented by regulation (49 CFR part 24).

The objective of the Uniform Act is to ensure equitable treatment of property owners of real property to be acquired for Federal and federally assisted projects; that people displaced by a federally supported project be treated fairly, consistently, and equitably; and that acquiring agencies implement the regulations in a manner that is efficient and cost effective. The regulations implementing the Uniform Act are very specific in naming the means to achieve those legislated objectives.

FTA must review and concur in appraisals and review appraisals for acquisitions over \$500,000 or in-kind contributions of any value before Federal funds are expended, or the value is used as local match. The requirements and processes for conducting appraisals, review appraisals, providing relocation assistance, and requesting FTA's concurrence are described as follows:

- (1) To ensure eligibility for Federal funding, the grantee should follow the typical process sequence when acquiring real property for a project:

National Environmental Policy Act (NEPA) Approval → Title Search →  
Appraisal → Appraisal Review → Just Compensation Determination → FTA  
Concurrence (if required) → Offer to Owner → Settlement.
- (2) If a grantee is considering leasing real property, whether facilities or equipment, rather than outright purchase of the same, and such lease is a capital not operating

lease, then the grantee must comply with 49 CFR part 639 including these specific procedures:

- (a) Section 639.11 requires the grantee to demonstrate that the lease of a capital asset is more cost effective than the purchase or construction of the asset.
- (b) Section 639.23 requires the calculation of the purchase or construction cost and Section 639.25 requires the calculation of the lease cost. These two calculations are used to determine which is the most cost effective approach.

b. Appraisal of Real Estate.

- (1) General. Except as discussed in Chapter IV, Subsections b.(2)–(4) below, an offer of just compensation will be established on the basis of a recent independently prepared appraisal that estimates a fair market value.
- (2) Appraisers. Appraisers must be certified or licensed with a State Appraisal Board as required by the URA regulations at Section 24.103(d)(2). However, staff employees may be exempt from this requirement. FTA recommends that appraisals and review appraisals be completed by appraisers experienced with State and Federal laws for valuing properties for public acquisitions under the threat of eminent domain. Appraisers and grantees making appraisal assignments should be familiar with the implementing regulations of the Uniform Act (49 CFR part 24), especially Subpart B—Real Property Acquisition. State subrecipients may use the State’s staff appraisers to prepare required independent appraisals and appraisal reviews.
- (3) Requirements. Appraisals must be fully compliant with all of the appraisal requirements as cited in Section 24.103(a). This includes compliance with the Scope of Work, i.e., defining the appraisal requirements and, as appropriate, a realty/personalty report. The appraiser will also appropriately address the requirements of Section 24.103 (b) and (c) in the report concerning the effects of project influence and owner retention of improvements.

Depending on the individual State Appraisal Board, certified/licensed appraisers may need to utilize the jurisdictional exception provisions of Uniform Standards of Professional Appraisal Practice (USPAP) in order to complete the assignment for a public agency in full compliance with the requirements of Section 24.103.

If the acquisition leaves the owner with an uneconomic remnant, the appraiser or review appraiser may be assigned the responsibility to make this determination and appraise the fair market value of the remnant. See Section 24.102(k).

The owner also has a right to accompany the appraiser during the inspection of the property pursuant to Section 24.102(c)(1).

When valuing properties that contain contamination or hazardous material, the appraiser must consider the effect, if any, the contamination's or material's presence has on the market value.

Grantees should update appraisals over six months old in an active real estate market before fair market value is determined and submit to the FTA Regional Office for review and concurrence, when required. If the documents are not updated, the letter of transmittal to FTA shall provide adequate justification explaining why the appraisal was not updated.

- (4) Exceptions. Full appraisal and/or negotiation procedures are not necessary in certain instances. While an appraisal of the property may not be required in some of the following instances, the agency must have some reasonable basis for its determination of fair market value in accordance with Section 24.101(b) and Appendix A. In the case of a donation an appraisal may not be required; however, an appraisal is required if the grantee proposes to use the property as an in-kind contribution as part of the local matching share. FTA should be contacted for further guidance when any one of the following situations occurs:
  - (a) The owner is donating the property, reference Sections 24.102(c)(2) and 24.108.
  - (b) The grantee does not have authority to acquire property by eminent domain as set out in Section 24.101(b).
  - (c) The property qualifies as a voluntary acquisition as defined in Section 24.101(b).
  - (d) The valuation is uncomplicated, and the fair market value is estimated at \$10,000 or less, based on a review of available data, using the waiver valuation provision found at Section 24.102(c) and Section 24.2(a)(33).
  - (e) State subrecipients may use the State's staff appraisers to prepare required independent appraisals.

c. Appraisal Review of Real Estate.

- (1) General. All appraisals for acquisition of real property are to be reviewed in accordance with the Uniform Act and 49 CFR 24.104. The review appraisal should determine the soundness of the report's value estimate. A qualified review appraiser (see Section 24.103(d)(1) and Appendix A thereof, and Section 24.104) shall examine the presentation and analysis of market information in all appraisals to assure that they meet the definition of an appraisal found in Section 24.2(a)(3), as well as other appraisal requirements found in Section 24.103 and other applicable State and local requirements.

The review appraiser is often expected to determine if the value conclusion is consistent with State laws as to what is compensable in eminent domain for public acquisitions and with the Uniform Act. The review appraiser is also responsible for assuring that value estimates are consistent when multiple parcels of property are needed for the project. The review appraiser cannot determine the soundness of a report's value estimate without possessing familiarity with the subject property, the comparable sales used, and other market factors; thus rarely will only a desk review be sufficient. The appraisal review report is expected to be a technical analysis of the appraisal, not merely an administrative review.

- (2) Requirements. In accordance with Section 24.104(a), the review appraiser shall prepare a written report identifying each appraisal report as:
  - (a) Recommended (as the basis for the establishment of the amount believed to be just compensation) or,
  - (b) Accepted (meets all requirements, but not selected as recommended or approved), or
  - (c) Not accepted.
- (3) Establishment of Just Compensation. If authorized by the grantee, a staff review appraiser may also establish the approved appraisal amount as the offer of just compensation. Under no circumstances can the establishment of the just compensation amount be delegated to a contractor (i.e., a fee review appraiser) who is not a governmental official of the agency.

If the review appraiser is unable to recommend (or approve) an appraisal as an adequate basis for the establishment of the offer of just compensation, and it is determined by the acquiring agency that it is not practical to obtain an additional appraisal, the review appraiser may, as part of the review, present and analyze market information in conformance with Section 24.103 to support a recommended (or approved) value (see Section 24 Appendix A related to Section 24.104(b)).

Review appraisers who are not staff employees must be State certified appraisers.

- d. Appraisal Concurrence Process. Prior FTA concurrence is required when the grantee's recommended offer of just compensation exceeds \$500,000, or when a property appraised at \$500,000 or more must be condemned. Appraisals under \$500,000, not requiring FTA concurrence, must follow the applicable appraisal standards (see Section 24.103). The grantee is required to maintain a parcel file with the proper support and documentation. Appraisals and Review Appraisals must be submitted to FTA for review and concurrence for acquisitions over \$500,000 or in-kind contribution of any value before Federal funds are expended, or the value is used as local match.

e. Acquisition of Real Estate and Concurrence Requirements.

- (1) General. In accordance with URA requirements every effort should be made to acquire real property by negotiation based on the approved just compensation amount that has been determined by the acquiring agency and considering the requirements described in the following:
- (2) Market Value. Before making an offer to the property owner, the grantee must first establish market value of the parcel to be purchased. Property acquisition activities will be conducted in compliance with the requirements of Section 24.101 and 102. Market value is to be established through a current appraisal and appraisal review accomplished in accordance with the requirements of Section 24.103 and 104 respectively. Once the appraisal and the appraisal review are complete, a determination of just compensation must be made by the grantee in accordance with Section 24.102(d).
- (3) Making an Offer. After the just compensation determination has been made by the agency, with FTA concurrence, if required, an offer can be made to the owner.

No owner shall be required to surrender possession of real property without either payment of the agreed purchase price to the owners or deposit of the established just compensation amount in condemnation court as set out in Section 24.102(j). The full amount of the deposit must be made available to the owner without prejudice pending the ultimate determination of just compensation by the judicial process. The grantee must expeditiously reimburse property owners for actual, reasonable, and necessary expenses incidental to transfer of title pursuant to Section 24.106.

- (4) Uneconomic remnant. If the acquisition leaves the owner with an uneconomic remnant, the grantee must offer to acquire that remnant; and its value will be presented as an element of the written offer that is made (see Section 24.102(k)).
- (5) Filing Condemnation. Additionally FTA concurrence is required before filing for condemnation if the appraised amount exceeds \$500,000.
- (6) Administrative Settlements. Any settlement in excess of the grantee's approved just compensation must be addressed as an administrative settlement (see definition, Chapter 1, Subsection 5.c. and Section 24.102(i). The term "administrative settlements" encompasses both negotiated settlements and legal settlements. Legal settlements are those arrived at prior to a trial on the merits.
  - (a) Requirements. Administrative settlements in excess of \$50,000 more than the current fair market value require prior FTA concurrence. Instead of using its power of eminent domain when a property cannot be purchased at appraised value, a grantee may propose acquisition through negotiated settlement, as explained previously in Chapter IV, Subsection 2.e.(6). The grantee must

document that reasonable efforts to purchase the property at the appraised amount have failed and prepare written justification supporting why the settlement is reasonable, prudent, and in the public interest. Such a settlement will be handled in accordance with administrative settlement requirements at Section 24.102(i). If the settlement request represents a significant increase over the just compensation and if trial risks are a key factor in the settlement justification, a litigation attorney for the agency must be consulted to provide advice in this regard. The decision to recommend a settlement should evaluate among other relevant matters, the risks of settling for the proposed amount versus the risks of trying the condemnation in court. **Note:** Any global settlements of a property acquisition that involve the inclusion of relocation payments based on other than relocation costs that are actual, reasonable, and necessary are not eligible for FTA reimbursement in accordance with Section 24.207(f) of the URA regulations.

- (b) Settlement Concurrence Process. All settlements must be justified in writing and be available in the project files. The justification shall be thorough, document the entire settlement process, demonstrate the logic and reason supporting the settlement, and be able to withstand the scrutiny of an independent review. If either type of settlement exceeds FTA's threshold for approval, it must be submitted to FTA for advance concurrence before the settlement is consummated.
  
- f. Relocation Assistance. The relocation assistance program provides a variety of advisory services and benefits to displaced people, businesses, and non-profit organizations. The highlights of this program element and FTA policies related to it are summarized in the following:
  - (1) Early provision of written notices and explanations of acquisition and relocation programs must be provided to displacees as required by 49 CFR part 24.
  - (2) No individual, family, business, farm, partnership, corporation, or association will be required to move without at least 90 days advance notice per Section 24.203(c).
  - (3) In the case of residential displacees, the 90-day notice must also include the availability of at least one comparable replacement dwelling. Rental assistance and replacement housing payments are provided to make the dwellings affordable and available at the time the notice is given. See Section 24.203(c)(3).
  - (4) All displacees, both business and residential, are reimbursed for certain moving expenses per Section 24.301 through Section 24.306.
  - (5) There must be as many residential dwellings available as there are families who will be displaced. The dwellings must be comparable to the ones from which the people are displaced. In addition, the comparable replacement dwellings must be decent, safe, and sanitary (DSS); located in the same area or in areas generally not

less desirable in regard to public utilities and public and commercial facilities; reasonably accessible to the displacees' places of employment and within the financial means of the displaced families; and adequate in size to accommodate the occupants in accordance with 49 CFR 24.204.

- (a) The definition of DSS at Section 24.2(a)(8) contains the following requirements regarding the number of rooms and area of living space for the displacee. "The number of persons occupying each habitable room used for sleeping purposes shall not exceed that permitted by local housing codes or, in the absence of local codes, the policies of the displacing Agency. In addition, the displacing Agency shall follow the requirements for separate bedrooms for children of the opposite gender included in local housing codes or in the absence of local codes, the policies of such agencies."
  - (b) In the absence of applicable housing codes, FTA's policy requires separate bedrooms and gender separation for children over 12 years of age.
  - (6) Replacement housing must be open to all people regardless of race, color, religion, sex, or national origin as required by Section 24.8 of the URA regulations.
  - (7) Any relocation benefits required by State or local law exceeding the specified limits in the Uniform Act will not be reimbursed by FTA.
  - (8) Any global type settlements of a property acquisition that involve the inclusion of relocation payments based on other than relocation costs that are actual, reasonable, and necessary are not eligible for FTA reimbursement in accordance with Section 24.207(f) of the URA regulations.
  - (9) Rental and for-sale dwellings used in the determination of replacement housing benefits must be actually and currently available for sale or rent. A rent schedule method cannot be used to calculate a rental differential payment, since the grantee is required to offer the displacee specific rental replacement properties that are actually available as explained in Chapter 1, Section 5., "Definitions," of this circular. FTA does not allow the use of rent schedules for the calculation of rental housing cost differentials as it is not compliant with Sections 24.2(a)(6), 24.204(a), 24.402(b)(1)(i), and 24.403(a) of the URA regulations that require that three comparable and currently available rental properties be identified and provided to the displacee.
- g. Special Real Estate Acquisition Program Strategies/Issues. Several real estate program strategies or issues are worthy of discussion in some detail as follows:
- (1) Alternative Procedure. A grantee with a qualified and fully staffed real estate department conducting a major capital project may request an alternative process, which permits higher dollar thresholds before FTA prior concurrence is needed.

An FTA real estate specialist will review the acquisition process and grantee capabilities. Grantees may request a review through the FTA Regional Office.

The request for the approval for alternative real property procedures at a minimum should include the following:

- (a) A statement providing an overall justification and reasoning for why the alternative procedure is requested;
  - (b) Copy of Real Estate department operating procedures;
  - (c) Real Estate department organization staffing chart; and
  - (d) Strategy for using and qualifying Real Estate services contractors, if used;
  - (e) Estimate of the number of transactions that may exceed requested threshold(s);
  - (f) Discussion of Real Estate acquisition schedule/status relative to the overall project schedule; and
  - (g) Discuss Real Estate department program Quality Assurance/Quality Control procedures that are in place to assure program delivery is in compliance with Uniform Act requirements and effective/efficient operational standards given the higher thresholds requested.
- (2) In-Kind Contributions. Grantees may use in-kind contributions of real property as part of the local matching share so long as the property to be donated is needed to carry out the scope of the approved project. The property can be owned and donated by the grantee or by a third party. The in-kind contribution allowance will be based on the current market value as independently appraised. Appraisals for property being donated, regardless of appraised value, must be submitted to the FTA regional or metropolitan office.

Credit can only be allowed for the value of the portion of real property used or consumed by the project. If part of a larger parcel is to be used as local match and the remaining sub-parcel is intended to be used at a future date for future match, the grantee is cautioned to clearly indicate the limits of the sub-parcel to be used as local match and the appraised amount associated with the sub-parcel. The remnant sub-parcel can then follow the same procedure for future local match. If the entire parcel is provided as a local match and no delineation is made related to possible use of the excess sub-parcel as over-match, eligibility of the over-match sub-parcel may be lost. If Federal funds were used to purchase the property, only the non-Federal share of such property may be counted as the value of the in-kind contribution, see 49 CFR 18.24(f).

- (3) Functional Replacement. Functional replacement provides a method of paying the cost necessary to replace a publicly owned facility (i.e., a fire station or public school) being acquired with a similar needed facility. The FTA regional or metropolitan office should be contacted for further information.

A determination to use functional replacement should be made early in the project development process. The use of this approach would usually be addressed during the environmental assessment (EA) phase of the project and be presented as a mitigation measure to be undertaken by the project.

- (4) Contaminated Property (including Brownfields). Appropriate due diligence for contamination is conducted as a part of the NEPA process and discussed in the NEPA document before selection of a contaminated property in a capital project. Appraisals should consider the effect, if any, contamination has on the market value of the property being valued. The terms, “contamination” and “hazardous material” should be interpreted broadly to include all contaminants that can affect property value.
- (a) The legal responsibility for hazardous material clean up and disposal rests with parties within the property title chain and with parties responsible for the placement of the material on the property. Grantees must attempt to identify and seek legal recourse from those potentially responsible parties or substantiate the basis for not seeking reimbursement.
  - (b) During the NEPA process, the grant applicant will have considered not only the estimated project cost of appropriate remediation (remediation being any action, developed in consultation with appropriate regulatory agencies, to reduce, remove, or contain contamination), the applicant will also have considered and taken action regarding the short and long-term liabilities associated with Brownfields, if applicable.
  - (c) To encourage the complete assessment of contamination prior to project decisionmaking, FTA generally will not participate in the remediation of contamination discovered during construction.
  - (d) The grantee should contact FTA for technical assistance regarding contaminated property.
- h. Real Estate Acquisition Management Plan (RAMP). A RAMP is required for all major capital projects as a part of the Project Management Plan (PMP) under 49 CFR 633.25 and in accordance with 49 CFR part 24. A full RAMP is not required for other capital projects with real estate acquisition; however, all capital projects must be in compliance with 49 CFR part 24, if real estate acquisition or relocation assistance is involved. The RAMP is a planning document for the acquiring agency and is a control document for FTA that includes real estate goals and methodology from the perspective of timing, staffing, statutory, and policy issues. The RAMP should be periodically reviewed for

needed changes. See Appendix B of this circular for a model in the development of a RAMP.

i. Property Management and Joint Development.

- (1) General. This area concerns the post construction management of property acquired for the facility during project development to ensure that it is properly maintained and operated efficiently for the benefit of the transit system.
- (2) Incidental Use and Joint Development. Title to real property is vested in the grantees or other public bodies. FTA's policy is to permit grantees maximum flexibility in determining the best and most cost-effective use of FTA-funded property. To this end, FTA encourages incidental uses and joint development of real property that can raise additional revenues for the transit system or, at a reasonable cost, enhance system ridership. For example, grantees may be able to encourage joint development of air rights at and over transit facilities and project areas. FTA approval is required for both joint development and for incidental uses of real property and must be compatible with the original purposes of the grant.

Incidental and joint development uses of real property are subject to the following considerations:

- (a) Needed Property. This policy applies only to property that continues to be needed and used for an FTA project or program. It is FTA's intention to assist only in the purchase of property that is needed for an FTA project.
- (b) Purpose & Activity. The use must not compromise the safe conduct of the intended purpose and activity of the initial public transit project activity.
- (c) Continuing Control. The use must not in any way interfere with the grantee's continuing control over the use of the property or the grantee's continued ability to carry out the project or program.
- (d) Non-Profit Use. While FTA is particularly interested in encouraging incidental use as a means of supplementing transit revenues, non-profit uses are also permitted under certain circumstances.
- (e) Income. Proceeds from licensing and leasing of air rights or other real property interest should be based on competitive market rents and rates of return based on the appraised fair market value. Income received from the authorized incidental or joint development uses of air rights may be retained by the grantees (without returning the Federal share) if the income is used for eligible transit capital, and operating expenses. This income cannot be used as part of the local share of the grant from which it was derived. However, it may be used as part of the local share of another FTA grant.

j. Disposition.

- (1) Excess Real Property Inventory and Utilization Plan. The grantee shall prepare and keep up to date an excess property inventory and utilization plan for all property that is no longer needed to carry out any transit purpose. The inventory list should include such things as property location; summary of any conditions on the title, original acquisition cost, and the Federal participation ratio; FTA grant number, appraised value and date; a brief description of improvements; current use of the property; and the anticipated disposition or action proposed.

Grantees are also required to notify FTA when property is removed from the service originally intended at grant approval and if property is put to additional or substitute uses. The grantee's plan should identify and explain the reason for excess property. Such reasons may include one or more of the following:

- (a) The parcel, when purchased, exceeded the grantee's need (uneconomic remnant, purchased to logical boundary, part of administrative settlement, etc.);
- (b) The property was purchased for construction staging purposes such as access, storage or underpinning, and construction is completed;
- (c) The intended use of the parcel is no longer possible because of system changes, such as alignment, or amendments to the project Grant Agreement;
- (d) Improvements to real property were damaged or destroyed, and therefore the property is not being used for project purposes, but it is still needed for the project. If so, the improvements may be renovated or replaced. In this case, applicable cost principles must be observed; and/or
- (e) A portion of the parcel remains unused, will not be used for project purposes in the foreseeable future, and can be sold or otherwise disposed.

Unless FTA and the grantee agree otherwise, the excess real property inventory and updated excess property utilization plan is to be retained by the grantee, available upon FTA request and during the triennial review process.

- (2) Disposition Alternatives. If the grantee determines that real property is no longer needed, FTA may approve use of the property for other purposes. This may include use in other Federal grant programs or in non-Federal programs that have consistent purposes with those authorized for support by FTA.
- (a) Valuation of Property Pending Disposal. For properties no longer needed for transit purposes, the grantee is expected to follow the valuation requirements of 49 CFR part 24 and obtain an appraisal to ascertain the value of the property considered for disposal.

- (b) Net Proceeds from Disposition. In those situations where a grantee or subgrantee no longer needs the real property for any transit purpose and is disposing of real property acquired with grant funds and acquiring replacement real property under the same program, FTA may permit the net proceeds from the disposition to be used as an offset to the cost of the replacement property.
- (c) Alternative Disposition Methods. When real property is no longer needed for any transit purpose, the grantee will request disposition instructions from FTA. The allowable alternative disposition methods are as follows:
- 1 Sell and Reimburse FTA. Competitively market and sell the property and pay FTA the greater of its share of the fair market value of the property or the straight line depreciated value of the improvements plus land value. FTA's share of the fair market value is the percentage of FTA participation in the original grant multiplied by the best obtainable price, net of reasonable sales costs.
  - 2 Offset. Sell property and apply the net proceeds from the sale to the cost of replacement property under the same program. Return any excess proceeds to FTA in accordance with 49 CFR 18.31.
  - 3 Sell and Use Proceeds for Other Capital Projects. Sell property and use the proceeds to reduce the gross project cost of another FTA eligible capital transit project. See 49 U.S.C., 5334(h)(4). The grantee is expected to record the receipt of the proceeds in the grantee's accounting system, showing that the funds are restricted for use in a subsequent capital project, and reduce the liability as the proceeds are applied to one or more FTA approved capital projects. FTA must approve the application of the proceeds to a subsequent capital grant, which should clearly show that the gross project cost has been reduced with proceeds from the earlier transaction.
  - 4 Sell and Keep Proceeds in Open Project. If the grant is still open, the grantee may sell excess property and apply the proceeds to the original cost of the total real property purchased for that project. This may reduce the Federal share of the grant.
  - 5 Transfer to Public Agency for Non-Transit Use. Follow procedures for publication in *Federal Register* to transfer property (land or equipment) to a public agency with no repayment to FTA. This is a competitive process, and there is no guarantee that a particular public agency will be awarded the excess property. See 49 U.S.C., 5334(h)(1)–(h)(3).
  - 6 Transfer to Other Project. Transfer property to another FTA eligible project. The Federal interest continues.

- 7 Retain Title With Buyout. Compensate FTA by computing percentage of FTA participation in the original cost. Multiply the current fair market value of the property by this percentage. The grantee must document the basis for value determination; typically, this is an appraisal or market survey. Alternatively, the grantee may pay the straight line depreciated value of improvements plus land value, if this is greater than FTA's share of the fair market value.
  - 8 Sales Procedure. Sales procedures shall be followed that provide for competition to the extent practicable and result in the highest possible return or at least payment of appraised fair market value.
  - 9 Joint Development. A transfer meeting the tests for joint development is not a disposition, and the proceeds are deemed program income. For additional information on use and eligibility of joint development projects see FTA Guidance (72 FR 5788, Feb. 7, 2007) as the final agency guidance on the "Eligibility of Joint Development Improvements Under Federal Transit Law." See also the definition of a capital project at 49 USC 5302(a)(1)(G).
- k. FTA Management and Project Oversight of Property Acquisition. FTA project stewardship includes various strategies, and in some cases involves the application of risk management techniques. Based on various conditions including dollar thresholds and the complexity of the property acquisitions involved, FTA may require the submission of all transactions meeting certain criteria for prior approval. Refer to the discussion of prior concurrence for certain appraisal, condemnation, and settlements issues discussed in Chapter IV of this circular.
- FTA may also conduct process or transactional reviews at any time during or after project implementation of the real estate acquisition program to ensure compliance with governing laws and regulations.
3. EQUIPMENT, SUPPLIES, AND ROLLING STOCK. Certain management standards apply to equipment, supplies, and rolling stock purchased with Federal funds. The term, project property, as used in this section, includes equipment, supplies, and rolling stock. Light duty vehicles such as vans, sedans, and pick-up trucks employed in administrative and maintenance purposes are considered equipment. Light duty vehicles employed to transport passengers are considered rolling stock. The following requirements are for the acquisition, use, management, and disposition of project property:

    - a. State Recipients. A State will use, manage, and dispose of project property acquired under a grant by the State in accordance with State laws and procedures (49 CFR 18.32(b)) as long as they comply with Federal requirements. Grantees, other than States, will follow FTA requirements and procedures outlined below.

- b. Title. Subject to the obligations and conditions, the grantee holds title to project property acquired under a grant.
- c. Federal Interest. FTA retains a Federal interest in any project property financed with Federal assistance until, and to the extent that, FTA relinquishes its Federal interest in that project property.
- d. Acquisition. Acquisition cost of project property means the purchase price of project property. This is the net invoice unit price, including the cost of modifications, attachment, accessories, or auxiliary apparatus necessary to make the project property usable for the intended purpose. Other charges such as the cost of inspection, installation, transportation, taxes, duty, or protective in-transit insurance should be treated in accordance with the grantee's regular accounting practices as separate line items. Grantees must follow procurement procedures set forth in the current version of Circular 4220.1; additional guidance is provided in FTA's Best Practices Procurement Manual. Two areas of particular importance for rolling stock procurements are:
  - (1) Buy America. With certain exceptions, FTA may not obligate funds for a public transportation project unless the steel, iron, and manufactured goods used in the project are produced in the United States (49 CFR part 661). FTA's Buy America requirements at 49 CFR part 661 differ from Federal Buy American regulations at 48 CFR part 25. The former applies to third party contracts funded by FTA. The latter applies to direct Federal procurements. FTA strongly advises recipients to review these regulations before undertaking any procurement.
  - (2) Pre-Award and Post Delivery Audits for Rolling Stock. FTA requires that grantees purchasing revenue passenger rolling stock undertake reviews of the rolling stock before award of the bid, during manufacture, and following vehicle delivery. Grant applicants seeking to acquire rolling stock must certify that they will comply with Pre-Award and Post-Delivery Review requirements.

The requirement to undertake the pre-award and post-delivery reviews arises from 49 U.S.C. 5323(m) and is implemented by FTA regulations at 49 CFR part 663. The reviews are intended to improve compliance with Buy America requirements, the grantee's bid specifications, and Federal motor vehicle safety standards. FTA has tried to carry out the intent of the law in a way that builds on current practices by many grantees and that improves the monitoring of compliance in the least burdensome manner. Reviews may be conducted by the grantee's staff or by a contractor for the grantee. The regulations require a resident inspector who is not an agent or an employee of the manufacturer to review specification compliance for the grantee at the manufacturing site, unless the procurement is for unmodified vans, 10 or fewer buses acquired by an operator serving an urbanized area with a population of over 200,000 persons, or 20 or fewer buses acquired by an operator serving other than urbanized areas or urbanized areas with populations of 200,000 or fewer. The grantee must keep on file and make available to FTA upon request

written reports resulting from the reviews. Compliance must be certified on the Annual List of Certifications and Assurances. FTA has published a handbook titled "Conducting Pre-Award and Post-Delivery Audits for Bus Procurements," which contains copies of all the required certifications to assist grantees in complying with this requirement. A copy of this handbook can be found at: [http://www.fta.dot.gov/laws/leg\\_reg\\_5423.html](http://www.fta.dot.gov/laws/leg_reg_5423.html).

- e. Use of Project Property. Project property is to be used by the grantee in the programs or project for the purpose it was acquired as long as needed, whether or not the program or project continues to be supported by Federal funds. When need no longer exists, see disposition requirements in Chapter IV, Subsection 3.1., "Disposition," of this circular.
  - (1) Continuing Control. The grantee agrees to maintain continuing control of the use of project property and constructed improvements to the extent satisfactory to FTA. The grantee agrees to use project property for appropriate project purposes for the duration of the useful life of that property, as required by FTA. If the grantee unreasonably delays or fails to use the project property during the useful life of that property, the grantee agrees that it may be required to return the entire amount of the Federal assistance expended on that property. The grantee further agrees to notify FTA immediately when any project property is withdrawn from project use or when any project property is used in a manner substantially different from the representations the grantee made in the Grant Agreement or Cooperative Agreement for the project.

The grantee may make project property available for use on other projects or programs currently or previously supported by the Federal Government, providing such use will not interfere with the work on the project or program for which it was originally acquired. FTA reserves the right in the Grant Agreement to require the grantee, with FTA approval, to transfer title to project property no longer needed or used for the purposes of the grant (or program) to the Federal Government or an otherwise eligible grantee. (49 CFR 18.32).

The grantee must not use project property acquired with grant funds to provide services to compete unfairly with private companies that provide equivalent services. Non-transit use of FTA financially assisted project property is acceptable so long as it is incidental, does not interfere with transit use (transit has priority), and income generated is retained by the grantee for transit use. See Chapter IV, Subsection 3.e.(3) below for more information on incidental use.

The grantee agrees that it will not execute any transfer of title, lease, lien, pledge, mortgage, encumbrance, third party contract, subagreement, grant anticipation note, alienation, innovative finance arrangement, or any other obligation pertaining to project property, that in any way would affect the continuing Federal interest in that project property, without written FTA approval.

- (2) Shared Use. Shared use of project property requires prior written FTA approval except when it involves coordinated public transit human services transportation. Shared use projects should be clearly identified and sufficient detail provided to FTA at the time of grant review to determine allocable costs related to non-transit use for construction, maintenance, and operation costs.
- (3) Incidental Use. Any incidental use of project property will not exceed that permitted under applicable Federal laws, regulations, and directives. Incidental use requires prior FTA approval except when it involves coordinated public transit human services transportation. Consult your FTA regional or metropolitan office prior to incorporating incidental use activities in projects. Incidental use will be permitted if:
  - (a) The incidental use does not interfere with the grantee's project or public transportation operations;
  - (b) The grantee fully recaptures all costs related to the incidental use from the non-transit public entity or private entity, including all applicable excise taxes on fuel for fueling facilities and wear and tear to capital improvements;
  - (c) The grantee uses revenues received from the incidental use for capital and/or operating expenses that were or will be incurred to provide the public transportation; and
  - (d) Private entities pay all applicable excise taxes on fuel.
- f. Useful Life of Project Property. FTA provides a useful life policy for rolling stock, trolleys, ferries, facilities, and some equipment. Where a useful life policy has not been defined by FTA, the grantee, in consultation with the FTA regional or metropolitan office shall "make the case" by identifying a useful life period for all equipment and facilities with an acquisition value greater than \$5,000 to be procured with Federal funds. In the grant application, the grantee shall propose and identify a useful life for the capital asset to be purchased with Federal funds. FTA approval of the grant represents FTA concurrence of the final determination of useful life for the purpose of project property acquisition. This in turn will identify the useful life of the Federal interest for the disposition of the project property in later years.
  - (1) Determining Useful Life for Project Property. The grantee should identify the method used to determine the useful life. Acceptable methods to determine useful life include but are not limited to:
    - (a) Generally accepted accounting principles.
    - (b) Independent evaluation.
    - (c) Manufacturer's estimated useful life.

- (d) Internal Revenue Service guidelines.
  - (e) Industry standards.
  - (f) Grantee experience.
  - (g) The grantee's independent auditor who needs to concur that the useful life is reasonable for depreciation purposes.
  - (h) Proven useful life developed at a Federal test facility.
- (2) Bus, Van, Trolley, Rail Rolling Stock, and Ferries Useful Life Policy. Useful life of rolling stock begins on the date the vehicle is placed in revenue service and continues until it is removed from revenue service. The useful life in years refers to total time in revenue transit service, not time spent stockpiled or otherwise unavailable for regular transit use.

Grant applicants need to specify the expected useful life category in requests for bids when acquiring new vehicles. Minimum useful life of rail rolling stock is 25 years. Minimum useful life for buses, vans, and trolleys is determined by years of service or accumulation of miles whichever comes first as follows:

- (a) Buses:
  - 1 Large, heavy-duty transit buses including over the road buses (approximately 35'–40', and articulated buses): at least 12 years of service or an accumulation of at least 500,000 miles.
  - 2 Small size, heavy-duty transit buses (approximately 30'): at least 10 years or an accumulation of at least 350,000 miles.
  - 3 Medium-size, medium-duty transit buses (approximately 25'–35'): at least seven years or an accumulation of at least 200,000 miles.
  - 10 Medium-size, light-duty transit buses (approximately 25'–35'): at least five years or an accumulation of at least 150,000 miles.
  - 11 Other light-duty vehicles used as equipment and in transport of passengers (revenue service) such as regular and specialized vans, sedans, and light-duty buses including all bus models exempt from testing in the current 49 CFR part 665: at least four years or an accumulation of at least 100,000 miles.
- (b) Trolleys: The term “trolley” is often applied to a wide variety of vehicles. Thus, the useful life depends on the type of “trolley.” FTA classifies “trolleys” and the suggested useful life as described in Chapter IV,

Subsections 3.f.(2)(b) 1–3 below. For disposition actions, FTA will use the following minimum useful life determinations:

- 1 A fixed guideway steel-wheeled “trolley” (streetcar or other light rail vehicle): at least 25 years.
  - 2 A fixed guideway electric trolley-bus with rubber tires obtaining power from overhead catenary: at least 15 years.
  - 3 Simulated trolleys, with rubber tires and internal combustion engine (often termed “trolley-replica buses”): please refer to bus useful life criteria in Chapter IV, Subsection 3.f.(2)(a) above.
- (c) Rail Vehicles: At least 25 years. At time of grant application, the grantee may propose an alternative useful life to be reviewed by FTA. A grantee that regularly measures lifespan by hours of operations, or by any other measure, may develop an appropriate methodology for converting its system to years of service. The reasonableness of such methodologies will be subject to examination, particularly if the grantee proposes to retire a rail vehicle before reaching FTA’s useful life.
- (d) Ferries: The useful life of a ferry depends on several factors, including the type and use of the ferry. FTA recommends using one of the methods outlined in Chapter IV, Subsection 3.f.(2)(a) above or offers the following suggested minimum service lives:
- 1 Passenger Ferries: 25 years
  - 2 Other Ferries (without refurbishment): 30 years
  - 3 Other Ferries (with refurbishment): 60 years
- (e) Facilities: Determining the useful life of a facility must take into consideration such factors as type of construction, nature of the equipment used, historical usage patterns, and technological developments. Based on any of methods identified in Chapter IV, Subsection 3.f.(2)(a) above, a railroad or highway structure has a minimum useful life of 50 years, and most other buildings and facilities (concrete, steel, and frame construction) 40 years.
- g. Rolling Stock Rebuilding Policies. FTA laws, regulations, policies, and procedures allow the use of capital funds for vehicle rebuilding programs that meet the vehicle requirements in Federal Motor Carrier Vehicle Safety Standards and Americans with Disabilities Act Accessibility Specifications for Transportation (49 CFR part 571 and 49 CFR part 38). Requirements for Bus and Rail fleets are summarized below:

- (1) Buses to be rebuilt should be at the end of the minimum useful life and in need of major structural and/or mechanical rebuilding. The age of the bus to be rebuilt is its years of service at the time the rebuilding begins. The eligibility of this major capital bus rebuild work is in addition to the eligibility of vehicle overhauls as described in Chapter IV, Subsection 3.h., “Rolling Stock Overhauls,” below. Grantees should contact the regional or metropolitan office to determine the extent which the useful life of the bus is affected by the rebuild. The minimum extension of useful life is four years.
- (2) Rail cars to be rebuilt must have reached the end of its minimum useful life (end-of-life rebuild). The minimum extension of useful life is ten years. The eligibility of this major capital rail rebuild work is in addition to the eligibility for vehicle overhauls as described in Chapter IV, Subsection 3.h., “Rolling Stock Overhauls,” below.

Depending upon the extent of rebuilding planned, the rebuild may be subject to the Americans with Disabilities Act (ADA) requirements.

- h. Rolling Stock Overhauls. Rolling stock overhauls are an eligible capital expense as preventive maintenance. This eligibility for capital assistance applies also to leasing and to contracted service. Overhauls are usually done to make sure rolling stock reaches its useful life. Overhaul does not extend the useful life of rolling stock. This eligibility is in addition to eligibility of rebuilding specifically discussed above in Chapter IV, Subsection 3.g. For rolling stock to be overhauled, it must have accumulated at least 40 percent of its useful life.
- i. Rolling Stock Spare Ratio Policies. Spare ratios will be taken into account in the review of projects proposed to replace, rebuild, or acquire additional vehicles. Spare ratio is defined as the number of spare vehicles divided by the vehicles required for annual maximum service. Spare ratio is usually expressed as a percentage, e.g., 100 vehicles required and 20 spare vehicles is a 20 percent spare ratio.
  - (1) Bus Fleet. The basis for determining a reasonable spare bus ratio takes local circumstances into account. The number of spare buses in the active fleet for grantees operating 50 or more fixed-route revenue vehicles should not exceed 20 percent of the number of vehicles operated in maximum fixed-route service.

For purposes of the spare ratio calculation, “vehicles operated in maximum fixed-route service” is defined as the total number of revenue vehicles operated to meet the annual maximum service requirement. This is the revenue vehicle count during the peak season of the year, on the week and day that maximum service is provided. It excludes atypical days and special events that do not accurately depict normal peak maximum service requirements. Whether vehicles are locally funded, FTA-funded, or have exceeded their service life, the vehicles are not relevant factors. Scheduled standby vehicles are permitted to be included as “vehicles operated in maximum service.”

Buses delivered for future expansion and buses that have been replaced, but are in the process of being disposed of, should not be included in the calculation of spare ratio.

For each grant application identified to acquire vehicles, a grant applicant must address the subjects of current spare ratio, the spare ratio anticipated at the time the new vehicles are introduced into service, disposition of vehicles to be replaced including information on age and mileage, and the applicant's conformance with FTA's spare ratio guideline. An applicant is required to notify FTA if the spare ratio computation on which the grant application is based is significantly altered prior to the grant award.

- (2) Rail Fleet. Because rail transit operations tend to be highly individualized, FTA has not established a specific number to serve as an acceptable spare ratio for rail transit operations. Nevertheless, rail operators should be aware that the grantee's rail vehicle spare ratio and the rationale underlying that spare ratio will be examined during the triennial review whenever FTA assistance is used to purchase or rebuild rail vehicles.

The following guidance should be used to support an operator's proposed rail vehicle spare ratio when the spare ratio is under review by FTA:

- (a) An operator of a rail system must have in its file available upon request by FTA a rail fleet management plan that addresses operating policies (level of service requirements, train failure definitions, and actions); peak vehicle requirements (service period and make-up, e.g., standby trains); maintenance and overhaul program (schedules, unscheduled, and overhaul); system and service expansions; rail car procurements and related schedules; and spare ratio justification.
- (b) Spare ratio justification should consider: average number of cars out of service for scheduled maintenance, unscheduled maintenance and overhaul program; allowance for ridership variation (historical data); ridership changes that affect car needs caused by expansion of system or services; contingency for destroyed cars; and car procurements for replacements and system expansions.
- (c) Cars delivered for future expansion and cars that have been replaced, but are in the process of being disposed of, should not be included in the calculation of spare ratio.
- (d) Peak Vehicle Requirement includes "standby" trains that are scheduled, ready for service, and have a designated crew.
- (e) Factors that may influence spare ratio are: equipment make-up (locomotive hauled trains; married pair units or single cars; equipment design, reliability

and age); environmental conditions (weather, above ground or underground operation, loading and track layout); operational policies (standby trains, load factors, headways); maintenance policies (conditions for removing cars from service, maintenance during nights and weekends, and labor agreement conditions); and maintenance facilities and staff capabilities.

- (3) Contingency Fleet. FTA recognizes two types of vehicles—active and contingency. Revenue rolling stock stockpiled in a contingency fleet in preparation for emergencies must have met their minimum normal service life requirements and must be properly stored, maintained, and documented in a contingency plan. These vehicles are not included in the calculation of spare ratio. Contingency plans are subject to review during triennial reviews and other FTA oversight reviews. Any rolling stock not supported by a contingency plan will be considered part of the active fleet.
  
- j. Leases. FTA and standard accounting rules distinguish between operating and capital leases. A grantee may enter into an operating lease as Lessee (the party leasing the property from another) without following any special rules if it receives no Federal operating assistance. If it receives Federal operating assistance, it is FTA's policy that this business opportunity be competed. A grantee may enter into a capital lease as a Lessee as described below in Chapter IV, Subsection 3.j (2). In all instances in which the grantee is a Lessor (the party leasing an asset to another), the grantee must obtain FTA's written concurrence (as described in Section 2(a) of this Chapter) before leasing FTA-funded assets to others. In addition, for equipment leasing, grantees must comply with both the Charter Rule and with requirements below:
  - (1) Leasing FTA-funded Assets to Others for Transit Service. The grantee may enter into a contract for leasing its project property to a private operator (the lessee). The lease shall be subject to and incorporate by reference the terms and conditions of the FTA grant. Under this arrangement, the grantee (the lessor) should include the following provisions in the proposed lease agreement:
    - (a) The project property shall be operated by the lessee to serve the best interest and welfare of the project sponsor lessor and the public. The terms and conditions for operation of service imposed by the grantee shall be evidenced in a service agreement.
    - (b) The lessee shall maintain project property at a high level of cleanliness, safety, and mechanical soundness under maintenance procedures outlined by the project sponsor. The project sponsor lessor and/or FTA shall have the right to conduct periodic maintenance inspections for the purpose of confirming the existence, condition, and the proper maintenance of the project property.
    - (c) The lease needs to cross reference a service agreement. A default under the lease is a default under the service agreement and vice versa.

- (2) Capital Lease. A capital lease is any transaction whereby the grantee acquires the right to use a capital asset. If a lease does not have the following characteristics, it is an operating lease:
- (a) the lease cannot be cancelled; and
  - (b) any one of the following is true:
    - 1 the term of the lease is equal to or greater than 75 percent of the useful life of the asset;
    - 2 the grantee will become the owner of the asset at the end of the lease term;
    - 3 the lease contains a bargained for option date;
    - 4 the present value of the rent is equal to 90 percent of the value of the property.
  - (c) Based on standard FTA project management guidelines, grantees must maintain an inventory of assets acquired through capital leasing and must maintain on their accounting records the lease liability. Eligible lease costs may include: charges including interest, legal fees, and financial advisor fees; ancillary costs such as delivery and installation charges; and maintenance costs. The purchase calculation should include an estimate of residual value. A lease may qualify for capital assistance if it meets the following criteria:
    - 1 The capital asset to be acquired by lease is eligible for capital assistance;
    - 2 There is or will be no existing Federal interest in the capital asset as of the date the lease will take effect; and
    - 3 Leasing the capital asset is more cost-effective than purchase or construction of the asset.
- (3) Cost Effectiveness. Grantees shall obtain FTA review of the cost-effectiveness determination prior to entering into any capital lease. Grantees should reference Circular A-94 for cost-effectiveness calculations and to obtain the most recent discount rate for the purpose of calculating the net present value of a future benefit.
- (4) Calculation of Lease Cost. The estimated lease costs must be reasonable, based on realistic market conditions applicable to the grantee and must be expressed in present value terms. The lease cost of the asset or operations function is the cost to lease the asset or operations function for the same use and the same time period as that time specified in any purchase or construction documents or scope of any operations activity. The lease cost also includes any ancillary costs, such as

delivery and installation costs, and it includes the net present value of the estimated future cost to provide any other service or benefit.

- (5) Calculation of Purchase/Construction Cost or Operations Cost. The purchase/construction or operations cost is the estimated costs for that activity plus ancillary costs such as delivery and installation costs plus the net present value of the estimated future cost to provide any other service or benefit for that activity. The estimated cost must be reasonable, based on realistic current market conditions and based on the expected useful life of the item to be utilized.
- k. Project Property Management. Rolling stock and equipment management procedures include the following minimum requirements:
- (1) Rail systems are required to submit a rail fleet management plan that addresses operating policies (level of service requirements, train failure definitions, and actions); peak vehicle requirements (service period and make-up, e.g., standby trains); maintenance and overhaul program (scheduled, unscheduled, and overhaul); system and service expansions; rail car procurements and related schedules; and spare ratio justification.
  - (2) A transit system with a fixed guideway system must also submit a Bus Fleet Management Plan along with its PMP for approval of funding through the Section 5309 New Starts program. This requirement is applicable to all transit agencies that are expanding an existing fixed guideway system or planning a new fixed guideway system to be funded with Section 5309 New Starts funding. This requirement is explained in detail in the current FTA Circular 5200.1, "Full-Funding Grant Agreements Guidance."
  - (3) Equipment records must be maintained by the grantee. Records must include:
    - (a) a description of the asset,
    - (b) identification number,
    - (c) source of property (the grant project number under which it was procured),
    - (d) acquisition date,
    - (e) cost,
    - (f) percentage of Federal participation in the cost,
    - (g) location,
    - (h) use and condition,
    - (i) useful life ,

- (j) any disposition data, including the date of disposal and sale price, or, where applicable, method used to determine its fair market value, and
  - (k) who holds title to the equipment including rolling stock.
- (4) A physical inventory of equipment must be taken and the results reconciled with equipment records at least once every two years. Any differences must be investigated to determine the cause of the difference.
  - (5) A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of project property. Any loss, damage, or theft must be investigated and documented by the grantee.
  - (6) Tagging or otherwise identifying property as government property.
  - (7) Adequate maintenance procedures must be developed and implemented to keep the project property in good condition. These procedures should be consistent with the maintenance plan required of grantees for equipment funded under 49 U.S.C. 5309 and 5307 and should be documented and available during an audit or triennial review.
  - (8) Warranty standards, when part of rolling stock and equipment contracts, should provide for correction of defective or unacceptable materials or workmanship. These should specify coverage and duration and meet currently available industry standards. General warranty incorporating industry standards and extended warranty are eligible capital costs. FTA's Best Practices Procurement Manual encourages grantees to evaluate the cost of an extended warranty in an analysis separate from the equipment's acquisition cost, in order to make a good business decision. Grantees are responsible for:
    - (a) Establishing and maintaining a system for recording warranty claims. This system should provide information needed by the grantee on the extent and provisions of coverage and on claims processing procedures;
    - (b) Identifying and diligently enforcing warranty system for recording warranty claims; and
1. Disposition.
    - (1) Replacement at End of Minimum Useful Life. Project property to be replaced must have achieved at least the minimum useful life. For purposes of bus replacement projects, the age of the bus to be replaced is its years of service or mileage at the time the proposed new bus is introduced into service. For purposes of a rail vehicle replacement project, the age of the vehicle to be replaced is its age at the time the new vehicle is introduced into service. Official property records (or a

Rolling Stock Status Report), in which future needs (expansion and replacement) are discussed, must be available upon request by FTA.

- (2) Disposition Before the End of Useful Life. Any disposition of project property before the end of its useful life requires prior FTA approval. FTA is entitled to its share of the remaining Federal interest. The Federal interest is determined by calculating the fair market value of the project property immediately before the occurrence prompting the withdrawal of the project property from appropriate use. If project property is being removed from service before the end of its useful life, the Federal interest and the return to FTA is the greater of FTA's share of the unamortized value of the remaining service life per unit, based on straight line depreciation of the original purchase price, or the Federal share of the sales price (even though the unamortized value is \$5,000 or less). The following example is provided to determine the straight-line depreciation of a vehicle: for a 12-year, 500,000 mile minimum service life, the vehicle's value decreases each year by one-twelfth of its original purchase price. Alternatively, the value decreases for each mile driven  $1/500,000$  of its original purchase price. The unamortized value of the remaining service life per unit is the greater value obtained by calculating the straight line depreciation based on either miles or years, whichever is more advantageous to the grantee.
- (3) Retain and Use Elsewhere. After the minimum useful life of project property is reached and is no longer needed for the original project or program, it may be used by the grantee for other transit projects or programs. FTA prior approval of this alternative is not required. FTA retains its interest if the fair market value of the project property is over \$5,000.
- (4) Fair Market Value of Over \$5,000. After the service life of project property is reached, rolling stock and equipment with a current market value exceeding \$5,000 per unit, or unused supplies with a total aggregate fair market value of more than \$5,000, may be retained or sold. Reimbursement to FTA shall be an amount calculated by multiplying the total aggregate fair market value at the time of disposition, or the net sale proceeds, by the percentage of FTA's participation in the original grant. The grantee's transmittal letter should state whether the equipment will be retained or sold. Use of sales proceeds are discussed elsewhere in Chapter IV of this circular.
- (5) Fair Market Value of Less than \$5,000 Value. After the service life of project property is reached, rolling stock and equipment with a unit market value of \$5,000 or less, or supplies with a total aggregate market value of \$5,000 or less, may be retained, sold, or otherwise disposed of with no obligation to reimburse FTA. Records of this action must be retained.
- (6) Like-Kind Exchange Policy. With prior FTA approval, a vehicle may be traded in or sold before the end of its minimum normal service life, if a grantee so chooses.

In lieu of returning the Federal share to FTA, a grantee may elect to use the trade-in value or the sales proceeds from the vehicle to acquire a replacement vehicle of like kind. "Like-Kind" is defined as a bus for a bus with a similar service life and a rail vehicle for a rail vehicle. Under the Like-Kind Exchange Policy, proceeds from the vehicle sales are not returned to FTA; instead, all proceeds are re-invested in acquisition of the like-kind replacement vehicle. If sales proceeds are less than the amount of the Federal interest in the vehicle at the time it is being replaced, the grantee is responsible for providing the difference, along with the grantee's local share of the cost of the replacement vehicle. If sales proceeds are greater than the amount of the Federal interest of the vehicle traded in or sold, the investment of all proceeds in acquisition of the like-kind replacement vehicle results in reduction of the gross project cost. An example of like-kind exchange is:

- (a) A recipient purchased a new bus in 2002 for \$220,000; 80 percent of the total price, or \$176,000, was Federal funding while 20 percent, or \$44,000, was local. Thus, there was an initial \$176,000 "Federal interest" in the new vehicle.
- (b) Instead of keeping the bus in service for 12 years, the useful life under FTA guidelines, the recipient chose to sell the bus after six years and replace it with a new vehicle.
- (c) Since the bus had a minimum useful life of 12 years and its depreciation was determined on a "straight-line" basis, the depreciated value of the vehicle after six years was half the original price, or \$110,000. The remaining Federal interest was 80 percent of that figure, \$88,000.
- (d) Assume, for example, the recipient realized \$80,000 from the sale of the six-year-old bus, or \$30,000 less than the straight-line depreciated value of the original vehicle. The recipient then purchased a new bus in 2008 for \$240,000. The transaction looked like this:

Net project cost calculation:

Gross project cost of new bus	\$240,000
Less straight-line depreciated value of replaced bus.	- 110,000
Net project cost	\$130,000
Federal share 80%	104,000
Local share 20%	26,000

Sources of funds for new bus:

Net sales proceeds from replaced bus	\$ 80,000
New local cash	
Straight-line depreciated value shortfall	- 30,000
Local share of net project cost	26,000

Federal share	<u>104,000</u>
TOTAL	\$240,000

The Federal interest in the new bus is \$192,000 (\$88,000 transferred from the old vehicle and \$104,000 in the new).

(7) Transfer of Rolling Stock—Grantee-to-Grantee. For property where the useful life has been met and with prior FTA approval, a grantee may transfer rolling stock to another grantee. In such event that transfer of rolling stock is desired prior to the end of useful life, the Federal interest of the vehicles will be transferred, and therefore, there is no obligation to reimburse FTA. However, no additional FTA funds may be used to acquire the vehicles. Both grantees should coordinate with their FTA Regional Office and the following information should be submitted:

- (a) A written request for approval to transfer/receive vehicles. The request should include the transferor/transferee grantee name, list of vehicles (year, make, model), date placed in revenue service, date removed from revenue service, grant number which originally funded the vehicle, mileage, remaining useful life, Federal share of remaining useful life, reasons for transfer.
- (b) A Board Resolution (or other appropriate legal action) from each grantee. The transferring grantee's board resolution (or other appropriate legal action) should identify the receiving grantee, a statement that the vehicles are no longer required, a list of the vehicles to be transferred including VINs, and the remaining Federal interest that is transferred to the receiving grantee.

The receiving grantee's board resolution (or other appropriate legal action) should identify the transferring grantee, a statement that the vehicles are needed for revenue service, a list of the vehicles to be acquired including VINs, the remaining Federal interest for each vehicles, agreement that the vehicles will be maintained in accordance and in compliance with FTA requirements, and that the transferred vehicles will be included in its equipment inventory records.

- (c) A Rolling Stock Status Report. Each grantee should provide a Rolling Stock Status Report that includes all information as identified in Chapter IV, Subsection 3.1.(1). The Rolling Stock Status report should reflect the impact that the transfer/addition of the vehicles will have on the grantee's total fleet and spare ratio.

If approved, the receiving grantee will be directed to include the transferred vehicles in its next grant application.

(8) Transfer of assets no longer needed [49 U.S.C. 5334(h)(1)–(3)]. For property that has not met its useful life and with prior FTA approval, the grantee may follow

procedures for publication in the *Federal Register* to transfer project property (including land or equipment) to a public agency for non-public transportation use and can be approved if FTA confirms:

- (a) the asset will remain in public use for at least five years after the date the asset is transferred;
- (b) there is no purpose eligible for assistance for which the asset should be used;
- (c) the overall benefit of allowing the transfer is greater than the FTA interest in liquidation and return of the FTA remaining Federal interest in the asset, after considering fair market value and other factors; and
- (d) through an appropriate screening or survey process (usually by following procedures for publication in the *Federal Register*), that there is no interest in acquiring the asset for the Federal Government use if the asset is a facility or land.

Additional information regarding this type of disposition is available from the FTA regional or metropolitan office.

- (9) Sell and Use Proceeds for Other Capital Projects [49 U.S.C. 5334(h)(4)]. After the useful life is met and with prior FTA approval, the grantee may sell project property for which there is no longer any public transportation purposes and use the proceeds to reduce the gross project cost of other FTA eligible capital transit grants. The grantee is expected to record the receipt of the proceeds in the grantee's accounting system, showing that the funds are restricted for use in a subsequent capital grant, and reduce the liability as the proceeds are applied to one or more FTA approved capital grants. The subsequent capital grant application should contain information showing FTA that the gross project cost has been reduced with proceeds from the earlier transaction.
- (10) Unused Supplies. For the disposition of supplies for which there is no transit use with a total aggregate fair market value that exceeds \$5,000, the grantee shall compensate FTA for its share, or transfer the sales proceeds to reduce the gross project cost of other capital project(s). (49 U.S.C. 5334(h)(4)).
- (11) Casualty, Fire, Natural Disaster, and Misused Property. When project property is lost or damaged by fire, casualty, or natural disaster, the fair market value shall be calculated on the basis of the condition of the equipment or supplies immediately before the fire, casualty, or natural disaster, irrespective of the extent of insurance coverage. If any damage to project property results from abuse or misuse occurring with the grantee's knowledge and consent, the grantee agrees to restore the project property to its original condition or refund the value of the Federal interest in that property. The grantee may fulfill its obligations to remit the Federal interest by either:

- (a) With prior FTA approval, investing an amount equal to the remaining Federal interest in like-kind property eligible for assistance, if the like-kind property is within the scope of the project that provided Federal assistance for the property prematurely withdrawn from use; or
  - (b) Returning to FTA an amount equal to the remaining Federal interest in the withdrawn project property.
- (12) Insurance Proceeds. If the grantee receives insurance proceeds when project property has been lost or damaged by fire, casualty, or natural disaster, the grantee agrees to:
- (a) Apply those proceeds to the cost of replacing the damaged or destroyed project property taken out of service (Listed below are two examples of the application of insurance proceeds.), or
  - (b) Return to FTA an amount equal to the remaining Federal interest in the lost, damaged, or destroyed project property.

The Federal interest is not dependent on the extent of insurance coverage or on the insurance adjustment received.

**Application of Insurance Proceeds:**

**Example 1:**

Insurance Proceeds **Greater than** the Remaining Federal Interest in the Damaged or Destroyed Property.

The remaining Federal interest in the damaged or destroyed property is \$1,800. The grantee receives insurance proceeds in the amount of \$2,500. The grantee is required to apply \$1,800 of the \$2,500 insurance proceeds towards the Federal share of replacing the destroyed property.

Cost of replacement property:	\$6,000
Less Federal Share of Insurance Proceeds:	< 1,800>
The remaining funds needed :	\$4,200

If the funding ratio for this property were 80 percent Federal and 20 percent local, the replacement property could be purchased for \$4,800 Federal/\$1,200 Local funds. The insurance proceeds of \$1,800 needed to cover the remaining Federal interest in the damaged and destroyed property must be applied to the Federal share of the replacement property. The grantee could use an additional \$3000 in Federal funds. The grantee must provide \$1,200 in local match to replace the property.

**Example 2:**

Insurance Proceeds **Less than** the Remaining Federal Interest in the Damaged or Destroyed Property:

If the Federal interest in the damaged or destroyed property is \$1,800 and the grantee receives insurance proceeds in the amount of \$500, the grantee is required to apply the \$500 of insurance proceeds and \$1,300 of non-Federal funds to equal the remaining Federal interest, towards the cost of the replacement property.

Cost of replacement property: \$6,000

Less: Insurance Proceeds: \$500

Non-Federal Funds to cover: \$1,300  
the rest of the Federal Interest

The remaining funds needed: \$4,200

If the funding ratio for this property were 80 percent Federal and 20 percent local, the replacement property could be purchased for \$4,800 Federal/\$1,200 Local funds. The insurance proceeds of \$500 plus an additional \$1,300 in non-Federal funds are needed to cover the remaining Federal interest in the damaged and destroyed property. These funds must be applied to the Federal share of the replacement property. The grantee could use an additional \$3,000 in Federal funds, and an additional \$1,200 in other local match, to replace the property.

- m. Maintenance. The grantee agrees to maintain project property in good operating order and in compliance with any applicable Federal regulations or directives that may be issued, except to the extent that FTA determines otherwise in writing. The grantee agrees to keep satisfactory records pertaining to the use of project property, and to submit to FTA upon request such information as may be required to assure compliance with Federal requirements. The grantee is required to have a written vehicle maintenance plan and facility/equipment maintenance plan. These plans should describe a system of periodic inspections and preventive maintenance to be performed at certain defined intervals.
- n. Insurance. At a minimum, the grantee agrees to comply with the insurance requirements normally imposed by its State and local laws, regulations, and ordinances, except to the extent that the Federal Government determines otherwise in writing. This includes the requirements of Section 102(a) of the Flood Disaster Protection Act of

1973, 42 U.S.C. Section 4012a.(a), related to flood insurance provisions for any project activity involving construction or an acquisition having an insurable cost of \$10,000 or more.

4. **DESIGN AND CONSTRUCTION OF FACILITIES.** Grantees are encouraged to consult FTA's website to review the Project and Construction Management Guidelines and the Construction Project Management Handbook for guidance on the development and management of construction projects. The two resources can be found at **[http://www.fta.dot.gov/funding/oversight/grants\\_financing\\_104.html](http://www.fta.dot.gov/funding/oversight/grants_financing_104.html)**. The Project and Construction Management Guidelines have been developed to assist those involved in advancing transit capital projects to achieve implementation success in terms of the project scope, function, schedule, cost, and quality. Use of the Project and Construction Management Guidelines should contribute to effective project management on the part of the grantee, and effective oversight and guidance by FTA and the Project Management Oversight (PMO) contractor. Each project phase should: 1) start with inputs or a baseline, 2) have a process that refines the project definition and generates outputs that, 3) become the inputs or baseline for the subsequent phase. By defining the requirements for each phase and sound approaches to their accomplishment, the Project and Construction Management Guidelines allow grantees to define project requirements, allocate resources, perform project activities, monitor progress, and make adjustments, as required, to obtain the proper information and assure decisions are made at the appropriate time. Adherence to the guidelines should minimize scope changes, schedule slippages, cost overruns, and quality problems, and contribute to fully meeting all the performance objectives of the transit capital project.

The purpose of the Construction Project Management Handbook is to provide guidelines for use by public transit agencies undertaking substantial construction projects, either for the first time or with little prior experience with construction project management. The handbook provides a comprehensive introduction to construction project management, including the applicability of the principles of project management and of all phases of project development—from project initiation through planning, environmental clearance, real estate acquisition, design, construction, commissioning, and closeout. The handbook provides guidance tailored more to agencies that are constructing maintenance and operational facilities, intermodal terminals, park-and-ride stations, and other similar supporting transit facilities.

- a. **Environmental Mitigation.** Many Federal environmental statutes and Executive Orders establish requirements for transit projects that must be considered before FTA and the grantee take any action that limits the choice of reasonable alternatives or that have an adverse environmental impact. FTA tends to refer to the multiplicity of Acts and Orders as the "NEPA Process." More specifically, NEPA is the National Environmental Policy Act (42 U.S.C. Section 4321). FTA's implementing procedures for environmental reviews (23 CFR part 771) require that the environmental effects of proposed transit projects be documented and that environmental protection be considered before a decision can be made to proceed with a project. According to 49

U.S.C. Section 5324(b), FTA is required to take into account the economic, social, and environmental interests affected, and requires that alternatives be considered to avoid those effects. If there is no feasible and prudent alternative which avoids the adverse environmental effects, then all reasonable steps must be taken to minimize those effects. If effects cannot be avoided or minimized, they must be mitigated.

Measures to avoid or mitigate environmental harm are described in the environmental documents prepared for projects. These measures are developed jointly by FTA and the grantee to respond to State and local as well as Federal environmental requirements. The mitigation measures in final environmental documents are expressed as commitments on the part of the grantee which must be implemented if the project receives Federal funding. When a grant is made, the mitigation measures are incorporated by reference in the Grant Agreement for construction and become legally binding terms and conditions of the grant which cannot be withdrawn or substantively changed without FTA's approval.

The progress in implementing adopted mitigation measures is monitored by FTA regional staff through periodic project reviews, on-site inspections, and special meetings when necessary. The grantee has the responsibility to apprise FTA at the earliest possible time of any problems in implementing the adopted measures and any need for changes. Where mitigation options are being considered, FTA will maintain a role in the decision-making process to ensure continuing compliance with Department of Transportation (DOT) Regulation 23 CFR part 771 implementing 49 U.S.C. Section 5324 (b).

Information about FTA's environmental review process is available through the FTA Regional Office.

- b. Project Management Plan. A written PMP is required by 49 U.S.C. 5327 for all major capital projects. Grantees are required to develop and implement a PMP for all major capital projects funded by FTA as part of the PMO Program. This plan covers a grantee's detailed project management strategy to control the project scope, budget, schedule, and quality (49 CFR part 633). The requirements for PMP can be found in the most recent version of Project Management Oversight Rule and FTA's website at <http://fta.dot.gov>.

As a general rule, if the project meets the definition of major capital project, the grantee must submit the PMP during the grant application review process. FTA may also request that a PMP must be submitted for other projects as deemed appropriate. If FTA determines the project is major capital project after the grant has been approved or if FTA determines that a PMP be submitted for other projects after the grant has been approved, FTA will inform the grantee of its determination and will require submission of the plan. An approval of a PMP can be made after grant approval.

c. Utility Relocation.

- (1) General. The construction of transit systems may require the relocation and/or rearrangement of privately and publicly owned utilities. These utilities include, but are not limited to, systems and physical plants for producing, transmitting, or distributing communications, electricity, gas, oil, crude oil products, water, steam, waste storm water, or other substances; publicly owned fire and police signal systems; and railroads and streets which directly or indirectly serve the public. Relocating and/or rearranging utilities and facilities necessary to accommodate an FTA-funded transit project may be considered an eligible expense as part of the project. Exceptions to this include those situations where State and local law expressly prohibit the financing of such by the public entity.
- (2) Eligibility for FTA Funding. In order to qualify for FTA funding, the grantee must execute an agreement for relocating or rearranging facilities with the entity responsible for the facilities prescribing the procedures for the relocation and/or rearrangement of the facilities for the purpose of accommodating the construction of the FTA funded project. Prior FTA approval is not required in reaching a utility relocation agreement.
- (3) Utility Relocation Agreement. These agreements are distinguishable from third party contracts in that:

Only actual allowable, allocable, and reasonable costs are reimbursable. Where the work is to be performed by the public utility's forces, no profit is allowed; and reimbursement is limited to the amount necessary to relocate and/or rearrange the facilities to effect a condition equal to the existing utility facilities. Generally, reimbursement would not provide for greater capacity, capability, durability, efficiency or function, or other betterments or enhancements to the existing utility system, except for meeting current State and local codes. Indirect costs of governmental entities incurred under a utility relocation agreement are eligible for FTA reimbursement only in accordance with an approved Cost Allocation Plan (CAP) as prescribed in OMB Circular A-87.

- d. Force Account. One of four conditions may warrant the use of a grantee's own labor forces. These are: (1) cost savings, (2) exclusive expertise, (3) safety and efficiency of operations, and (4) union agreement. Force account is the use of a grantee's own labor force to carry out a capital grant project. Force account work may consist of design, construction, refurbishment, inspection, and construction management activities, if eligible for reimbursement under the grant. Incremental labor costs from flagging protection, service diversions, or other activities directly related to the capital grant may also be defined as force account work. Force account work does not include grant or project administration activities which are otherwise direct project costs. Force account can include major capital project work on rolling stock. An example of this is preventive maintenance activities.

FTA prior review of a force account plan and justification are required where the total estimated cost of force account work to be performed under the grant is greater than \$10,000,000. When work to be performed is less than \$10,000,000 but over \$100,000, a force account plan is required to be in the grantee's file, but does not require prior FTA approval. When work to be performed using force account is less than \$100,000, a detailed plan is not required.

- e. Basis for Reimbursement. To be eligible for reimbursement for force account work, the grantee must provide the following before incurring costs:
- (1) Justification for using grantee forces;
  - (2) Preparation of a force account plan;
  - (3) A description of the Scope of Work;
  - (4) A copy of the construction plans and specifications which includes:
    - (a) A detailed estimate of costs;
    - (b) A detailed schedule and budget; and
    - (c) A copy of the proposed Cooperative Agreement when another public agency is involved.
  - (5) Submit documentation equivalent to a sole source justification stating the basis for a determination that no private sector contractor has the expertise to perform the work. In addition, the required documentation must provide the basis for the grantee decision to use force account labor including the following information;
  - (6) Provide the present worth of the estimated cash drawdown for both the force account and private sector contract options. In the analysis, use the current interest rate paid on one-year Treasury Bills as the discount rate;
  - (7) Include the cost of preparing documents; cost of administration and inspection; cost of labor, materials and specialized equipment; cost of overhead; and profit for private contract;
  - (8) Include the unit prices for labor; materials and equipment; overhead; and profit, if applicable for private contract;
  - (9) Provide certification that costs presented are fair and reasonable;
  - (10) Provide an analysis of force account labor availability, considering normal operations and maintenance activities as well as other programmed and existing capital projects. This must be consistent with costs of labor, material, and specialized equipment; and

- (11) Provide relevant citations from labor union agreements and an analysis of how it pertains to the work in question.

Base the present value calculation on the midpoint of construction; and if the time for completion of the work differs for force account and a private sector contract, include an estimate of the cost of not using the completed improvement in the present worth calculation. For example, if the work is to replace leased facilities, the cost of continuing the lease until the work is complete should be taken into account in the cost estimate for each option considered.

Safety considerations may be addressed by a statement of the transit operator's safety officer that performing the work with private sector contractors would have an adverse effect on public safety. Efficiency concerns may be addressed by a present worth calculation, including an estimate of the value of lost transit operation efficiency.

Special care must be taken to ensure that requirements of OMB Circular A-87 are followed, especially for charging expendable property to force account projects and making sure that allowable costs are assigned to the correct activity codes.

Most general purpose equipment and tools can be used in force account work and thereby benefit more than one project. Therefore, the cost of these items normally should not be treated as a direct charge to the project. However, an appropriate use or depreciation charge is an allowable indirect cost if otherwise provided for in the project budget. Unusual circumstances may call for purchase of specialized equipment that is unique to the force account work that is being performed. If such equipment is required, prior FTA approval must be obtained. The usual FTA equipment disposition requirements apply.

The progress and status of force account activities should be separately discussed in milestone/project reports, with emphasis on schedule and budget.

- f. Seismic Standards and Reporting. New federally funded buildings, and additions to existing buildings and bridges, built with Federal assistance must be designed and constructed in accordance with State, local, and industry required standards or codes. The applicant is responsible for determining before accepting delivery that the building complies with the seismic design and construction requirements and certifies to the same through the annual Certifications and Assurances, as required by 49 CFR part 41.
- g. Value Engineering. Value Engineering (VE) is the systematic, multi-disciplined approach designed to optimize the value of each dollar spent. To accomplish this goal, a team of architects/engineers identifies, analyzes, and establishes a value for a function of an item or system. The objective of VE is to satisfy the required function at the lowest total costs (capital, operating, and maintenance) over the life of a project consistent with the requirements of performance, reliability, maintainability, safety, and esthetics.

- (1) Applicability.
  - (a) Major Capital Projects. VE must be used on major capital projects. A major capital project is usually identified during the grant application process. (See, Chapter IV, Subsection 4.b., “Project Management Plan,” for a definition of major capital project.)
  - (b) Non-Major Capital Projects. Grantees are encouraged to conduct VE on all construction projects including but not limited to bus maintenance and storage facilities, intermodal facilities, transfer facilities, revenue railcar acquisition and rehabilitation, and offices, with the level of VE study to be commensurate with the size of the project.
- (2) Timing. VE on a project should be performed early in the design process before major decisions have been completely incorporated into the design, at or near the end of preliminary engineering (PE) or prior to final design. Some large or complex projects may need to conduct two VE studies.
- (3) Reporting. Grantees with major capital projects are required to submit a VE report to the appropriate FTA Regional Office at the end of each Federal fiscal year (FY) (October 1) indicating the results of their VE efforts. Copies of the VE report form are available in each Regional Office.
- h. Constructability and Design Peer Reviews. Peer review is a process used by the grantee in the planning, design, and implementation of capital projects. The concept of peer review can be applied to any problem or situation where a second opinion can be useful to decision makers. FTA encourages the grantee to confer with other transit operations and maintenance experts in order to benefit from their experience. These reviews have been used to review rail extensions, New Starts projects, and transit facilities. These reviews have provided an in-depth critique of designs at the preliminary and final engineering stages. They have provided operations and maintenance information with respect to a variety of subsystems and have validated the process used by a grantee’s planning staff to locate bus facilities. The purpose of constructability and design peer reviews is to improve the performance of the process or product being reviewed and optimize the design and subsequent construction of the project. The review should be able to answer such questions as: Can this be constructed? Is there a better process that could be employed to achieve the desired results? Is the product safe? Although the grantee is encouraged to conduct peer reviews with all capital projects, in some instances it may be required by FTA, and the process should be fully documented through the recipient’s document control process.
- i. Crime Prevention and Security Review. Grantees are encouraged to develop, refine, and train on security and emergency response plans. Emergency response drills should be conducted with public transportation agencies and fully coordinated with local first response agencies. Other security training should be provided for public transportation employees that will serve to better prepare an agency during an emergency including

such things as bomb threats, detection of chemical and biological agents, and other disruptive incidents. Grantees are encouraged to perform crime prevention reviews during the design phase of all FTA funded transit facilities with particular focus on the incorporation and use of crime prevention through environmental design techniques. This review should serve to improve and increase the safety and security of an existing or planned transit system or facility for both transit patrons and transit employees. The level of review should be commensurate with the project size and scope. Local crime prevention professionals should be included in the review process. Review documentation should remain on file by the grantee and be available for FTA review upon request. Safety and security publications and training information can be found at <http://transit-safety.volpe.dot.gov/Publications> and at <http://transit-safety.volpe.dot.gov/Training>.

- j. Concurrent Non-Project Activities. Concurrent Non-Project Activities, also known as betterments, are improvements to the transit project desired by the grant recipient that are not part of the base functioning of the Federal transit project. They are not integral to the base functioning of the transit project and are viewed as enhancements or upgrades to a level beyond what is normally required for the base functioning of the transit project. The concurrent non-project activities are performed in conjunction with grant-funded project work to afford the opportunity to have the non-project work performed economically and efficiently in conjunction with grant-funded project work. Examples of betterments include; increased utility pipe sizes, road widening projects for local reasons, environmental mitigation measures not identified in an environmental document, increased landscaping, signal upgrades beyond the base requirements of the transit project, etc. Costs for Concurrent Non-Project Activities are to be paid for by the grantee. Related but different than Concurrent Non-Project Activities are activities involving an overbuild situation. Guidance should be obtained from the FTA Regional Office related to any overbuild situation to determine the Federal eligibility of such an activity. An example of an over-build situation is over-designing the foundation and base stories of a multi-story facility in order to better accommodate future vertical expansion of the project. Outside of a joint development project, such an over-build is generally not an allowable grant cost.
- k. FTA Technical and Construction Oversight Review. The grantee agrees to permit FTA to review, as deemed necessary by FTA, the technical plans and specifications and requirements to the extent FTA believes necessary to ensure project execution, consistency with scope and need, and incorporation of FTA requirements. The grantee agrees to comply with any FTA request pertaining to its review of construction plans and specifications. The FTA Regional Office should be consulted to determine if FTA review of construction plans and specifications is necessary to advance the project to the next level of design. The grantee agrees to provide and maintain competent and adequate engineering supervision at the construction site to ensure that the completed work conforms to the plans and specifications and that the intent of the scope of the project is carried out. To the extent applicable, the grantee agrees to comply with FTA PMO regulations, 49 CFR part 633.

- l. Energy Conservation. The grantee agrees to comply with applicable mandatory energy efficiency standards and policies of applicable State energy conservation plans issued in accordance with the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6321 *et seq.* The grantee, to the extent applicable, agrees to perform an energy assessment for any building constructed, reconstructed, or modified with FTA assistance, as provided in FTA regulations, “Requirements for Energy Assessments,” 49 CFR part 622, Subpart C. FTA assistance for the construction, reconstruction, or modification of buildings for which applications are submitted to FTA will be approved only after the completion of an energy assessment. An energy assessment shall consist of an analysis of the total energy requirements of a building, within the scope of the proposed construction activity and at a level commensurate with the project size and scope. The Energy Assessment should consider: overall design of the facility or modification; materials and techniques used in construction or rehabilitation; special innovative conservation features that may be used; fuel requirements for heating, cooling, and operations essential to the function of the structure, projected over the life of the facility and including projected costs of this fuel; and energy to be used.
- m. Intelligent Transportation System (ITS). Grantees that have transportation projects that include ITS must be participants in a regional or statewide ITS Architecture process and their ITS projects must be included in the locally approved Regional ITS Architecture. Grantees are required to use a Systems Engineering process for the development of ITS projects.

The project level requirements include undergoing a Systems Engineering Analysis for the ITS and communications components of the project or grant, and developing ITS Project Architectures for all Major ITS Projects (prior to the adoption of the regional ITS architecture). The ITS components and FTA National ITS Architecture Consistency Policy for Transit Projects conformity status also should be included in FTA grant applications within TEAM. The policy can be found at:  
**[http://www.fta.dot.gov/documents/FTA ITS Policy.pdf](http://www.fta.dot.gov/documents/FTA_ITS_Policy.pdf)**

A systems engineering analysis is a “structured process for arriving at a final design of a system,” and is a method for identifying needs and developing/procuring the best possible configuration for a particular situation. The Policy requires that the systems engineering analysis includes how the project fits into the regional (or National) ITS architecture, how the system will be implemented and operated (roles, requirements), and analyses of alternatives for system configuration, financing, and procurement. Applicable (DOT-developed and supported) ITS standards also must be identified.

Prior to the adoption of a regional ITS architecture, all Major ITS Projects must also include the development of a project level architecture. Major ITS Projects are any projects that implement part of a regional ITS initiative that is multi-jurisdictional, multi-modal, or otherwise affects regional integration of ITS systems. Examples include regional traveler information, regional electronic payment, new AVL systems that may set the standard for the region, or transit signal priority systems. A project

architecture is similar to a regional ITS architecture but focuses on the project and its implementation. Again, all agreements that are needed to implement and operate the ITS systems must be included as part of the project architecture.

- n. Americans with Disabilities Act (ADA). New facilities and any/all additions and/or alterations to existing facilities are required to comply with regulations issued by DOT implementing the transportation provisions of ADA (49 CFR parts 27, 37 & 38). Compliance is a condition of eligibility for Federal funding under 49 CFR part 27, but is required whether or not the facility or alteration is federally funded. Depending upon the nature of the facility, compliance with implementing regulations issued by other Federal agencies with ADA responsibilities may also be required. The applicant is responsible for ensuring that new facilities and additions/alterations to existing facilities are designed in accordance with DOT and ADA regulations and related guidance in effect as of the date construction begins and for verifying compliance prior to accepting delivery.

## CHAPTER V

### FTA OVERSIGHT

1. GENERAL. The Federal Transit Administration (FTA) evaluates grantee adherence to program and administrative requirements through a comprehensive oversight program. FTA's Master Agreement, which each grantee receives, specifies these requirements. FTA determines compliance through self-certification, oversight review, audits, and site visits. On an annual basis, FTA completes an individual Grantee Oversight Assessment Questionnaire, which serves as baseline information for each grantee's capacity to comply and determines the risk the grantee's program may represent for the Federal program. Based on this information, FTA makes decisions about which grantees will receive oversight reviews during the coming year. Regional staff use the information to develop regional oversight plans and to allocate oversight resources within the region for the upcoming fiscal year (FY), which may include oversight reviews, regional meetings, and/or regional site visits. FTA's Oversight Review Program includes 15 review areas. They are:
  - a. Grant Oversight Assessment
  - b. Triennial Review
  - c. State Management Review
  - d. State Safety Oversight Program
  - e. Planning Certification Review
  - f. Financial Management Reviews
  - g. Procurement System Review
  - h. Americans with Disabilities Act (ADA)
  - i. Title VI
  - j. Disadvantaged Business Enterprise (DBE)
  - k. Equal Employment Opportunity (EEO)
  - l. Safety and Security Industry Guidance
  - m. Drug and Alcohol Audit
  - n. Research and Cooperative Agreements
  - o. Oversight Guidance

FTA oversight reviews are categorized by general, program-specific, and project specific. The general reviews are the triennial reviews of grantees receiving Section 5307 Urbanized Area Formula Grants and the State Management Reviews of grantees receiving Section 5311 Non-Urbanized Area Formula Grants and Section 5310 Elderly Individuals and Individuals with Disabilities Programs. Program-specific reviews assess grantees compliance in a particular program, such as Financial Management Systems, Procurement, Civil Rights, or Safety and Security. Project level oversight includes the assignment of a Project Management Oversight (PMO) consultant and is applied to major capital projects and/or projects participating in the New Starts Program.

FTA may conduct on-site inspections of projects to evaluate the grantee's effectiveness in implementing the project in conformance with the Grant Agreement. Inspection visits may be made, for example, to follow up on information received from the grantee about an event with significant impact on a project, or to determine whether the grantee has adequately complied with civil rights laws, regulations, and agreements. Inspection and concurrence by FTA in project work does not relieve the grantee of its responsibilities and liabilities as the responsible party for carrying out the grant.

## 2. GENERAL REVIEWS.

- a. Triennial Review. FTA is required by law to perform reviews and evaluations of Urbanized Area Formula Program (Section 5307) grantees to evaluate formula grant management performance and grantee compliance with current FTA requirements. The reviews must be conducted for each formula grant recipient at least once every three years and integrated into FTA's grant management functions. The reviews are conducted by teams formed by FTA staff and outside contractors following an annual work program. Desk reviews are followed by a site visit. The team documents its findings and recommendations in a draft triennial review report, which is furnished to the grantee for comment before it is released in final form to interested local, State, and Federal officials. The triennial reviews use a process of taking samplings of various practices and actions of a grantee in complying with the Federal requirements. As such, it is not an exhaustive review and should not be considered by the grantee as FTA's full and complete review of compliance by the grantee of any particular Federal requirement. FTA reserves the right to conduct compliance reviews and make findings of non-compliance. When appropriate, corrective actions are recommended to resolve a grantee's program management deficiencies. FTA monitors the grantee's actions until compliance with identified program requirements is achieved. If needed, FTA can invoke sanctions to assure that the grantee acts to correct any noted program deficiencies.
- b. State Management Review. The State Management Review assesses a State's implementation and management of the Elderly Individuals and Individuals with Disabilities (Section 5310) and the Nonurbanized Area Formula Programs (Section 5311) to ensure the programs meet FTA requirements and program objectives. The review follows a format similar to the triennial review and is conducted every three

years. For more information on these programs, please reference the latest version of FTA Circulars 9040.1 and 9070.1.

### 3. PROGRAM-SPECIFIC REVIEWS.

- a. Financial Management Oversight (FMO) Program. Under the FMO program, FTA conducts several types of reviews:
  - (1) The Full Scope Systems (Full Scope) review determines that the grantee's financial management system meets the requirements of the Common Rule (49 CFR 18.20). The intent of the review is to assure FTA that the grantee has in place proper financial controls and checks and balances to manage and track Federal funds. FMO contractors conduct a series of interviews, full transaction review, and appropriate substantive tests. The contractors then express an objective, external, independent, professional opinion to FTA, in accordance with established public accounting standards, on the effectiveness of the grantees internal control environment. An average review takes three to four weeks at the grantee's site.
  - (2) Follow-ups to a Full Scope review are primarily performed to ensure those recommendations resulting from full scope reviews are implemented and working properly. If FTA conducts this type of review, it will normally occur between 12–18 months after the Full Scope review.
  - (3) Cost Allocation Plan (CAP) review purpose is to determine whether the methodology for allocating indirect cost to a Federal grant is calculated in a manner consistent with the applicable OMB circular. The CAP is a financial document which is used to distribute the cost of a State or local government's executive and central level support functions to those operating organizations within the government that benefit from them. If a grantee wishes to be reimbursed for its indirect costs under an FTA grant, it must substantiate those costs with an indirect cost calculation.
  - (4) On a case-by-case basis, FTA conducts Financial Management Oversight Special Assignments or also called special reviews related to grantees' financial management issues. FTA may request special analyses, special reviews, meeting attendance, audits, presentations, and reports. These special reviews are developed based on particular issues. The reviews could encompass financial reporting and general accounting; internal control—fixed assets; allowable cost—procurement; allowable cost—payroll; cash management; allowable cost—overhead; and /or project change—grant management.
- b. Procurement Reviews. A procurement system review ensures that the requirements and standards of the Common Rule on administrative requirements for grants, 49 CFR 18.36 and the most recent version of FTA C 4220.1 as it specifically applies to procurements, are met. These reviews are conducted on site and involve review of

previous typical procurement as well as documentation of policies, processes, and controls.

- c. Civil Rights Reviews. Civil rights compliance is required by recipients and subrecipients of Federal assistance. FTA's Master Agreement specifies that compliance is required, and sets forth the terms and conditions governing the administration of a transit project or projects supported with FTA financial assistance. FTA grantees should be aware, however, that they may be subject to civil rights requirements established and enforced by other Federal agencies that may not recognize the FTA Master Agreement as dispositive of their responsibilities, and that some responsibilities exist independent of FTA or other Federal funding. FTA retains the right to review grantee compliance status at any time during the life of the project. Civil Rights reviews include Title VI, DBE, ADA, and EEO.
- d. Safety and Security Reviews.
  - (1) Drug and Alcohol Program. To support compliance with Department of Transportation (DOT) Drug and Alcohol requirements, FTA conducts audits to assess grantee and State implementation of 49 CFR part 655. These audits provide in-depth reviews of grantee and State programs, and include a detailed examination of records and interviews with appropriate grantee personnel and their contractors and service agents, such as collection sites, medical review officers, substance abuse professionals, and third party administrators. FTA assigns its own staff, plus contractor support, to audit grantees' drug and alcohol testing programs. FTA monitors based on data collected and analyzed from the Drug and Alcohol Management Information System (DAMIS). FTA monitors industry drug and alcohol testing rates and results. These audits are scheduled based on analysis of DAMIS information and annual grantee evaluation. FTA manages this program using a Web-based auditing and reporting system.
  - (2) Security and Emergency Management Technical Assistance Reviews. In partnership with the Department of Homeland Security (DHS), Transportation Security Administration (TSA) and the Federal Emergency Management Agency (FEMA), National Preparedness Directorate, FTA may provide on-site technical assistance and reviews to assess grantee activities to enhance the personal security of passengers and employees and to support core emergency response capabilities. FTA also coordinates with DHS regarding reviews it conducts with grantees.
    - (a) FTA Safety Oversight Audit Program. FTA is required to monitor and evaluate compliance with FTA's State Safety Oversight Rule (49 CFR part 659). FTA conducts triennial audits of each State designated to implement FTA's State Safety Oversight Rule for the rail transit agencies operating in its jurisdiction. For each audit, FTA assigns its own staff, plus contractor support, to review each State's program. These audits are scheduled based on analyses of annual reporting information provided by the States and use the

grantee assessment. These audits provide in-depth reviews of each State's program, and include a detailed examination of records and interviews with appropriate personnel and their contractors, at both the State Oversight Agency and the regulated rail transit agencies. The audits also provide a forum to recommend improvements to the effectiveness of the oversight program established by each State.

- (b) Safety and Security Management Plan Review. Historically, recipients of FTA funding with projects covered under 49 CFR part 633 described their safety and security management strategies and controls as sub-elements of other required Project Management Plan (PMP) sections. Some recipients performed specific safety and security activities, such as safety and security certification or pre-revenue operational readiness assessments, while other recipients did not. There was no consistent approach to safety and security in projects covered under 49 CFR part 633.

FTA Circular 5800.1, "Safety and Security Management Guidance for Major Capital Projects," explains FTA safety and security requirements for major capital projects. With this circular, FTA addresses the shortcomings and strengthens the role of safety and security oversight and management in all phases of project development. FTA requires grantees to develop a Safety and Security Management Plan (SSMP), as a chapter or plan within the PMP. Before approving each PMP, FTA reviews the SSMP submission, and conducts site assessments at grantees that include records review, interviews, and on-site observation. This review must be completed before FTA can approve a grantee's PMP.

- (3) FTA Voluntary Bus Transit Safety and Security Reviews. To implement the terms of the Memorandum of Agreement (MOU) signed by FTA, the American Association of State Highway and Transportation Officials (AASHTO), the American Public Transportation Association (APTA), and the Community Transportation Association of America (CTAA), FTA conducts voluntary safety and security reviews at bus agencies throughout the country. These reviews assess each bus agency's safety and security activities against FTA's technical assistance baseline, and provide recommendations, effective practices, and model materials to support improvements in critical safety and security functions. The Transit Bus Safety and Security Program is based on objectives designed to improve safety and security for passengers, employees, and others that share the roadways with America's urban and rural public transit bus operations. The Program encompasses public transit bus agencies of all sizes, including urban, small urban, rural, and community transit, and FTA is committed to the broadest possible implementation of Program strategies and tools.

- (a) The mission of the program is:

- 1 Emphasize coordination and collaboration with industry stakeholders to identify an effective and comprehensive set of techniques and strategies to implement Program objectives.
- 2 Promote an approach of incremental innovation through a cycle of implementation, evaluation, revision, and communication to reach optimal Program performance.
- 3 Strive for ongoing improvement in industry safety and security through the advancement of technical assistance that is practical, effective, and targeted to meet the needs of transit bus agencies implementing the Program.

(b) Bus Transit Safety and Security Reviews strategies include:

- 1 Collaborate through a Program Working Group to leverage its expertise to speed initiatives into action.
- 2 Effectively communicate the Program's mission so that the grantee can move from "why" to "how" more effectively.
- 3 Enhance distribution of safety and security-related technical assistance materials to public transit bus providers via easy-to-use electronic means.
- 4 Establish a performance culture from which we evaluate Program implementation and effectiveness by conducting voluntary on-site technical reviews and promote self-assessment checklists.
- 5 Use available safety and security data and risk assessment models to target the most frequent and/or catastrophic risks to passengers and employees.

4. PROJECT LEVEL REVIEWS.

- a. Project Management Oversight (PMO). FTA conducts PMO for major capital projects, using its own staff or a combination of FTA and contractor staff. For general guidance, grantees are required to provide all needed information about each project selected for this oversight. PMO begins as early in project implementation as practical, usually during the preliminary engineering process. FTA may assign its own or contractor staff to provide special oversight or monitoring of major construction or equipment acquisition projects. Contractor staff is generally used for major projects.
- b. Financial Capacity. FTA conducts these reviews during the New Starts evaluation process and includes the results in the Annual Report on Funding Recommendations.

A more detailed Financial Capacity Assessment (FCA) review determines the financial capacity and condition of the grantee to manage FTA Full-Funding Grant Agreement

(FFGA) obligations and maintain its existing and planned transit operation. In cases where projects have progressed into construction, the contractors evaluate the financial capacity of grantees to complete the undertaking according to the terms, conditions, budgets, schedules, and commitments in the FFGA. FCAs analyze plans to mitigate the risks associated with:

- (1) provision of the required local share,
  - (2) the ability to complete the project on schedule in the face of delayed or reduced Congressional appropriations, unanticipated conditions, or budget overruns, and
  - (3) the ability to operate and maintain the existing system as well as the project.
- c. Specialized Oversight Strategies. From time to time, FTA has determined that a grantee presents the need for additional specialized oversight. In a few cases, FTA has designated a grantee as a high-risk grantee under 49 CFR 18.12. In these cases, FTA may impose specific requirements as a condition to receive FTA funding. These conditions are usually the result of specialized review provided by one or more or a combination of FTA contractors.
- d. Quarterly Project Management Meetings. Quarterly project management meetings may be instituted with selected grantees. These meetings provide a forum for management briefings, status/progress reports, discussion of accomplishments and problems, and, as appropriate, an opportunity for site inspection. The quarterly meetings do not replace quarterly written reports unless a specific exemption is granted by FTA.
- e. Other Project Management Meetings. Other project management meetings may be instituted with select grantees on other time intervals at the discretion of the Regional Office. These meetings provide a forum for management briefings, status/progress reports, discussion of accomplishments and problems, and, as appropriate, an opportunity for site inspection. The quarterly meetings do not replace quarterly written reports unless a specific exemption is granted by FTA.

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## CHAPTER VI

### FINANCIAL MANAGEMENT

1. GENERAL. This chapter discusses the proper use and management of Federal funds the Federal Transit Administration (FTA) expects from its grantees. Financial management is one of the most important practices in the management of Federal funds.
2. INTERNAL CONTROLS.
  - a. Definition. Internal controls are the organization plan, methods, and procedures adopted by the grantee to ensure that effective control and accountability is maintained for all grants and subgrants, cash, real and personal property, and other assets. Grantees and subgrantees must ensure that resources are properly used and safeguarded, and that they are used solely for authorized purposes.
  - b. General. FTA payments to a grantee are made electronically to meet the Federal share of eligible expenses incurred under a grant.

The grantee's acceptance of an FTA grant obligates the grantee to use funds it receives as specified in the Grant Agreement. This creates a vested interest by the Federal Government in unused grant balances, any improperly applied funds and property, or facilities purchased or otherwise acquired under the grant, whether funds are received by the grantee as an advance or by reimbursement.

Grantees and subgrantees are responsible for establishing and maintaining adequate internal controls over all their functions that affect implementation of a grant.

For proper management of grants, these controls must be used by each grantee in all its operating, accounting, financial, and administrative systems. To ensure proper accountability for grant funds, internal controls must be integrated with the management systems used by the grantee to regulate and guide its operations.

- c. Objectives. Resources must be used in accordance with applicable State, local, and Federal laws, regulations and policies, and the grant assistance agreement. Resources must be safeguarded against waste, loss, and misuse. Reliable data on resource use and safeguards must be accumulated, maintained, and fairly disclosed in reports to grantee management and FTA. A proper system of internal controls will help the grantee to:
  - (1) Operate efficiently and economically;
  - (2) Keep obligations and costs within the limits of authorizations and legal requirements, consistent with accomplishing the purpose of the grant;
  - (3) Safeguard assets against waste, loss, and misuse;

- (4) Ensure timely collection and proper accounting of the grantee's operating and other revenues; and
  - (5) Ensure accuracy and reliability in financial, statistical, and other reports.
- d. Necessary Elements. Certain elements are necessary to achieve the objectives mentioned in Chapter VI, Subsection 2.c. above and meet the standards discussed in Chapter VI, Subsection 2.e. below. The following objectives and standards facilitate the grantee's use of internal controls:
- (1) Reasonable assurance that internal controls are an integral part of the grantee's management systems;
  - (2) Existence of a positive and supportive attitude among grantee managers and employees;
  - (3) Assignment of internal control functions to competent and experienced employees;
  - (4) Identification of specific internal control objectives to ensure that needs are identified and that valid controls are planned and implemented;
  - (5) Adoption of internal control policies, plans and procedures that reasonably ensure their effectiveness, such as organizational separation of duties and physical arrangements, such as locks and fire alarms; and
  - (6) Regular program of testing to identify vulnerabilities in the internal control system.
- e. Standards of Internal Control and Audit Resolutions.
- (1) General.
    - (a) Grantee management policies that govern grant implementation must be clearly stated, understood throughout the organization, and conformed to applicable legislative and administrative requirements.
    - (b) The grantee's formal organization structure must clearly define, assign, and delegate appropriate authority for all duties.
    - (c) Responsibility for duties and functions must be segregated within the organization to ensure that adequate internal checks and balances exist. Grantees should pay particular attention to authorization, performance, recording, inventory control, and review functions to reduce the opportunity for unauthorized or fraudulent acts.
    - (d) A system of organizational planning should exist to determine financial, property, and personnel resource needs.

- (e) Written operating procedures must exist and be simply stated, yet meet the grantee's operating, legal, and regulatory requirements. In developing its procedures, the grantee should consider such factors as feasibility, cost, risk of loss or error, and availability of suitable personnel. Other important considerations are the prevention of illegal or unauthorized transactions or acts.
  - (f) The grantee's information system must reliably provide needed operating and financial data for decisionmaking and performance review.
  - (g) The grantee must provide proper supervision and performance must be subject to review of an effective internal audit program.
  - (h) All personnel must be properly qualified for their assigned responsibilities, duties, and functions. Education, training, experience, competence, and integrity should be considered in assigning work. All must be held fully accountable for the proper discharge of their assignments.
  - (i) Expenditures must be controlled so that construction, equipment, goods, and services are acquired and received as contracted for (as to quality, quantity, price, and time of delivery). Authorizations for expenditures must conform to applicable statutes, regulations, and policies.
  - (j) All real property, equipment, expendables, and funds must be safeguarded to prevent misuse, misappropriation, waste, or unwarranted deterioration or destruction.
- (2) Internal Control Self-Assessment. Grantees should evaluate its internal control and financial management systems to ensure that it has effective internal controls and financial management systems. To assist with the evaluation, FTA developed an example of an Internal Control Self-Assessment Form. The optional form is designed to provide transit agency management staff with the information necessary to evaluate the agency's internal control and financial management system. The form is based on the criteria for effective internal control as set forth in Internal Control—Integrated Framework published by the Committee of Sponsoring Organizations of the Treadway Committee (the COSO Report), as well as the criteria for effective financial management systems established by FTA, based on 49 CFR part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments (the "Common Rule"). Grantees may access Internal Control Self-Assessment Form at the following website: [http://www.fta.dot.gov/documents/FTA Internal Control Self-Assessment Tool.pdf](http://www.fta.dot.gov/documents/FTA%20Internal%20Control%20Self-Assessment%20Tool.pdf).

(3) Financial Management Systems.

- (a) States: A State must expend and account for grant funds in accordance with State laws and procedures for expending and accounting for its own funds. Fiscal control and accounting procedures of the State, as well as its subgrantees and cost-type contractors, must be sufficient to:
- 1 Permit preparation of reports required by the Common Rule, 49 CFR part 18 and the statutes authorizing the grant, and
  - 2 Permit the tracing of funds to a level of expenditures adequate to establish that such funds have not been used in violation of the restrictions and prohibitions of applicable statutes.
- (b) Entities Other than a State: The financial management systems of other grantees and subgrantees must meet the following standards:
- 1 Financial Reporting. Accurate, current, and complete disclosure of the financial results of financially assisted activities must be made in accordance with financial reporting.
  - 2 Accounting Records. Grantees and subgrantees must maintain records which adequately identify the source and application of funds provided for financially-assisted activities. These records must contain information pertaining to grant or subgrant awards and authorizations, obligations, unobligated balances, assets, liabilities, outlays or expenditures, and income.
  - 3 Internal Control. Effective control and accountability must be maintained for all grant and subgrant cash, real and personal property, and other assets. Grantees and subgrantees must adequately safeguard all such property and must ensure that it is used solely for authorized purposes.
  - 4 Budget Control. Actual expenditure or outlays must be compared with budgeted amounts for each grant or subgrant. Financial information must be related to performance or productivity data, including the development of unit cost information whenever appropriate or specifically required in the grant or subgrant agreement. If the unit cost data are required, estimates based on available documentation will be accepted whenever possible.
  - 5 Allowable Cost. Applicable Office of Management and Budget (OMB) cost principles, or stated in 2 CFR parts 225 and 230, agency program regulations, and the terms of grant and subgrant agreements will be followed in allowability and allocability of costs.

- 6 Source Documentation. Accounting records must be supported by such source documentation as cancelled checks, paid bills, payrolls, time and attendance records, contracts, and subgrant award documents.
- 7 Cash Management. Procedures for minimizing the time elapsing between the transfer of funds from the Treasury and disbursement by grantees and subgrantees must be followed whenever advance payment procedures are used. Grantees must establish reasonable procedures to ensure the reports on subgrantees' cash balances and cash disbursements are received in sufficient time to enable them to prepare complete and accurate cash transactions reports to the awarding agency. When advances are made by electronic transfer of funds methods, the grantee must make drawdowns as close as possible to the time of making disbursements. Grantees must monitor cash drawdowns by their subgrantees to ensure that they conform substantially to the same standards of timing and amount that apply to advances to the grantees. Payment received from FTA must be disbursed within three business days. If not disbursed within three days, funds become excess funds and must be returned to FTA with interest.
3. LOCAL MATCH. The grantee agrees to provide sufficient funds or approved in-kind resources to serve as local match for all federally assisted projects in compliance with 49 U.S.C. Chapter 53. The grantee certifies that it has or will have available the proportionate amount of local share promptly as project costs are incurred or become due, except to the extent that the Federal Government determines in writing that the local share may be deferred. The grantee may not use an amount as match for more than one grant.
4. FINANCIAL PLAN. Upon request from FTA, the grantee agrees to provide a financial plan delineating the source of local share, the amounts applicable to the different sources, and the time frame for acquisition of local share. (See Category 15 in Annual Certifications and Assurances.) Grantees shall have multi-year financial plans (3–5 years) that project operating and capital revenues and expenses. The financial plans should indicate adequate revenues to maintain and operate the existing system and to complete the annual program of projects (POP). If grantees are involved in a New Starts project, the financial plan must have a 20-year horizon.
5. GENERAL PRINCIPLES FOR DETERMINING ALLOWABLE COSTS.

  - a. General. A grantee must follow the applicable cost principles circulars, currently in Title 2 of the Code of Federal Regulations, in determining whether project costs are allowable or unallowable. Title 2 CFR part 225, also known as OMB Circular A–87, establishes principles and standards for determining costs applicable to grants, contracts, and other agreements with State and local governments and federally recognized Indian tribal governments. Title 2 CFR part 230 also known as OMB Circular A–122 establishes cost principles for nonprofits.

Project costs must specifically relate to the purpose of the grant contract and the latest approved project budget. Grantees may incur costs of both a direct and indirect nature. Direct costs are costs that can be identified specifically with a particular cost objective and may be charged directly to a grant, contracts, or to other programs. All direct costs, even for project administration activities, must be adequately supported with proper documentation. For example, all labor charges must be supported with T&A records. Indirect costs are costs incurred for a common or joint purpose benefiting more than one cost objective. Indirect costs must be supported by an approved Cost Allocation Plan (CAP) and/or Indirect Cost Rate Proposal.

Care must be exercised when incurring costs to ensure that all expenditures meet the criteria of eligible costs. Failure to exercise proper discretion may result in expenditures for which use of project funds cannot be authorized.

- b. Allowable Costs. The criteria that govern the eligibility of project costs are listed below. These criteria come from 2 CFR part 225, also known as OMB Circular A-87. To be allowable under a grant program, costs must meet the following general criteria:
- (1) Be necessary and reasonable for proper and efficient administration of the grant program, be allowable under the principles contained in the OMB circulars and except as specifically provided in this circular, not be general expenses required to carry out the overall responsibilities of State or local governments;
  - (2) Be authorized or not prohibited under State or local laws or regulations;
  - (3) Be able to conform to any limitation or exclusions set forth in the principles, Federal laws, or other governing limitations as to types or amounts of cost items;
  - (4) Be consistent with policies, regulations, and procedures that apply uniformly to both federally assisted and other activities of the unit of government of which recipient is a part;
  - (5) Be treated consistently. A cost may not be assigned to a Federal grant as a direct cost if any other cost incurred for the same purpose in like circumstances has been allocated to the Federal grant as an indirect cost;
  - (6) Be determined in accordance with generally accepted accounting principles (GAAP) appropriate to the circumstances;
  - (7) Not be allocable to or included as a cost of any other federally financed program in either current or prior periods;
  - (8) Be net of all applicable credits;
  - (9) Be adequately documented, and

- (10) Not be incurred prior to grant award unless specifically provided for in a Letter of No Prejudice (LONP) or equivalent document approved by FTA, or in the pre-award authority as described in the *Federal Register* listing of the Annual Apportionments.
- c. Disallowed Costs. In determining the amount of Federal assistance FTA will provide, FTA will exclude:
- (1) Any project costs incurred by the grantee prior to the date of either the approved grant or the approved project budget (whichever is earlier), unless specifically provided for in a LONP or equivalent document approved by FTA, or in the pre-award authority as described in the *Federal Register* listing of the Annual Apportionments; and
  - (2) Any costs attributable to goods or services received under a contract or other arrangement that is required to be, but has not been, concurred in or approved in writing by FTA.

The grantee agrees that reimbursement of any cost in accordance with indicated payment methods for an approved grant or Cooperative Agreement does not constitute a final FTA decision about the allowability of that cost and does not constitute a waiver of any violation by the grantee of the terms of approved grant or Cooperative Agreement. If the government determines that the grantee is not entitled to receive any part of the Federal funds requested, the government will notify the grantee stating the reasons. Project closeout will not alter the recipient's obligation to return any funds due to FTA as a result of later refunds, corrections, or other transactions. Nor will project closeout alter FTA's right to disallow costs and recover funds on the basis of a later audit or other review. Unless prohibited by law, FTA may offset any Federal assistance funds to be made available under a grant necessary to satisfy any outstanding monetary claims that FTA may have against the grantee. Exceptions pertaining to disallowed costs are set forth in FTA directives or in other written Federal guidance.

## 6. INDIRECT COSTS.

- a. General. Title 2 CFR part 225, also known as, OMB Circular A-87, "Cost Principles for State, Local, and Indian Tribal Governments," requires grantees who intend to seek payment for indirect costs to prepare a CAP or an Indirect Cost Rate Proposal. CAPs and/or Indirect Cost Rate Proposals must be approved by FTA or another cognizant Federal agency.
- b. Definitions. Indirect costs, as defined in 2 CFR part 225, are costs that are:
  - (1) Incurred for a common or joint purpose benefiting more than one cost objective;
  - (2) Not readily assignable to the cost objectives specifically benefited, without effort disproportionate to the results achieved; and

- (3) Originating in the grantee department as well as those incurred by other departments in supplying goods, services, and facilities to the grantee department.

Examples of indirect costs are administrative, operational, and expenses of unit heads and their immediate staff. Principles and standards for determining costs applicable to grants and contracts with grantees or other State or local agencies are presented in 2 CFR part 225, and the appropriate Department of Health and Human Services (DHHS) publication, ASMB C-10.

- c. Cognizant Federal Agency. Cognizance is generally assigned to the Federal agency that provides the predominant amount of dollar involvement with a grantee organization within a given State or locality. (OMB has assigned cognizant audit agencies for State and local governments. See *Federal Register* (51 FR 552, Jan. 6, 1986). In those cases where a grant recipient is not assigned a cognizant agency, these grantees will be under the general oversight of the Federal agency that provides them the most funds; which will also be identified as the “lead” Federal agency.
- d. Types of Plans. The following two types of cost plans are discussed in 2 CFR part 225:
  - (1) The first type of plan covers a CAP that distributes the costs of a State/local government’s executive and central level support functions to those operating organizations (usually at a lower tier level) within the government which benefit from them. These documents are also referred to as a Statewide or local-wide cost allocation plans (SWCAPs/LWCAPs). All SWCAPs must be submitted annually to DHHS for approval. DHHS is the cognizant agency for all States. Unless required by FTA or the cognizant agency, the LWCAPs do not have to be submitted for review and approval. However, they must be updated annually and kept for audit purposes. The costs approved under these plans may, at the option of the State or local government, be incorporated in the Indirect Cost Rate Proposals of a grantee agency within the government.
  - (2) The second type of plan covers an Indirect Cost Rate Proposal which is a financial document that is updated annually, at the operating agency level, which distributes the administrative support and/or overhead costs of that agency to the programs (and the grants and contracts) which benefit from them. An Indirect Cost Rate Proposal may include the allocable portion of State or local central service costs approved in the SWCAP/LWCAP.

As required by 2 CFR part 225, DHHS has issued an implementing guide, ASMB C-10, for State, local, and Indian tribal governments. This guide was developed in coordination with OMB, and can be ordered from the Government Printing Office (GPO), Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328, telephone: 202-512-1800, or, on the DHHS website at: <http://rates.psc.gov/fms/dca/asmb%20c-10.pdf>.

Refer to Appendix E of this circular regarding additional information on CAP and/or Indirect Cost Rate Proposal development.

7. PROGRAM INCOME.

a. General. FTA's program income policy for State, local governments, and Indian tribes are in the Common Rule at 49 CFR 18.25. Although similar, the program income requirements for non-profit organizations are in 49 CFR 19.24. Grantees are encouraged to earn income to defray program costs. Program income means:

- (1) gross income received by the grantee or subgrantee directly generated by a grant supported activity, or
- (2) earned only as a result of the Grant Agreement during the grant period (the time between the effective date of the grant and the ending date of the grant reflected in the final financial report).

b. Program income includes income:

- (1) from fees for services performed,
- (2) from the use or rental of real or personal property acquired with grant funds,
- (3) from the sale of commodities or items fabricated under a Grant Agreement, and
- (4) from payments of principal and interest on loans made with grant funds.

Except as otherwise provided in regulations of the Federal agency, program income does not include interest on grant funds, rebates, credits, discounts, refunds, etc., and interest earned on any of them.

- c. Cost of generating program income. If authorized by Federal regulations or the Grant Agreement, costs incident to the generation of program income may be deducted from gross income to determine program income.
- d. Governmental revenues. Taxes, special assessments, levies, fines, and other such revenues raised by a grantee or subgrantee are not program income unless the revenues are specifically identified in the Grant Agreement or Federal agency regulations as program income.
- e. Property. Proceeds from the sale of real property or equipment will be handled in accordance with the requirements of Sections 18.31 and 18.32.
- f. Use of program income. FTA allows its grantee to keep program income and use it for capital and operating expenses. Program income may not be used to reduce the local share of the grant from which it was earned, but may be used in future grants.

If grantees choose not to use program income for public transportation purposes, then it shall be deducted from total allowable costs to determine the net allowable costs.

- g. Income after the grant period. There are no Federal requirements governing the disposition of program income earned after the end of the grant period (i.e., after the ending date of the final financial report), unless the terms of the agreement or the Federal agency regulations provide otherwise.

8. ANNUAL AUDIT.

- a. General. OMB Circular A-133, “Audits of States, Local Governments, and Non-Profit Organizations” and the current OMB Circular A-133 Compliance Supplement provide the requirements for annual audits of grant recipients. Both documents are available on the OMB website at: <http://www.whitehouse.gov/omb/circulars/a133/a133.html>.
- b. Requirement. Grantees that expend \$500,000 or more in a year in Federal funds from all sources shall have a single audit conducted, except when they elect to have a program-specific audit conducted. The audit must be completed within nine months of the end of the grantee’s fiscal year (FY).

FTA grantees are required to obtain the services of an independent auditor to conduct a single audit each year in conformance with OMB Circular A-133, except where a State constitution or statute provides for a single biennial audit.

Grantees are required to submit one copy of their annual single audit report to FTA if the audit report contains any findings and recommendations related to the FTA program or other Department of Transportation (DOT) program findings; or in those cases where the audit report does not contain any FTA findings or recommendations, a copy of only Federal Clearinghouse transmittal sheet “the Data Collection Form for Reporting on Audits of States, Local Governments, and Non-Profit Organizations, OMB Form SF-SAC” should be submitted to the FTA regional or metropolitan office.

Grantees shall keep one copy of the data collection form and one copy of the audit reporting package on file for three years from the date of submission to the Federal clearinghouse. Pass-through entities shall keep subrecipients’ submissions on file for three years from date of receipt.

- c. Purpose. The purpose of the single annual audit report is to determine whether the grantee:
  - (1) Prepared financial statements that fairly present its financial position and the results of its financial position and the results of its financial operations in accordance with generally accepted accounting principles;

- (2) Has in place internal accounting and other control systems to provide reasonable assurance that it is managing Federal financial assistance programs in compliance with applicable laws and regulations; and
- (3) Has complied with laws and regulations that may have material effect on its financial statements and on each of its major Federal assistance programs.

The annual single audit is to be performed by an independent auditor who is required to determine and report on whether the grantee has internal control systems that reasonably assure it is managing Federal assistance programs in compliance with applicable laws and regulations.

Grantees are required to determine whether certain subgrantees spend Federal assistance funds they receive in accordance with applicable laws and regulations. Audit judgment concerning the grantee's determination is left to the independent auditor.

- d. Resolution of Audit Findings. Grantees and subgrantees are responsible for prompt resolution of all audit findings and recommendations. This responsibility requires that the grantee:
  - (1) Promptly evaluate the report;
  - (2) Determine the appropriate follow-up actions and establish a date for their completion; and
  - (3) Complete all required actions within the established period of time.

Deficiencies or opportunities for improvement identified in an audit must be resolved by the grantee. The resolution of audits begins with FTA's report to the grantee and continues until the grantee corrects identified deficiencies, implements needed improvements, or demonstrates that the findings or recommendations are not valid or do not warrant management action.

The audit cannot be closed until FTA concurs in the documentation of steps taken to implement any needed corrective actions. The status of outstanding audit findings and recommendations should be monitored and reported by the grantee in quarterly progress reports and, where appropriate, significant events reported.

## 9. PAYMENT PROCEDURES.

- a. General. Provisions in 49 CFR 18.21 and 19.22 and 31 CFR part 205 govern payments to recipients for financing operations under Federal grant and other programs. These regulations require that payment to a grantee be limited to the minimum amounts needed and timed so as to be in accord only with the actual, immediate cash requirements of the grantee in carrying out the approved project.

Before a potential grantee requests funds, it should verify in TEAM that funds are available for the project. Funds should not be requested in amounts greater than the “Available Funds” reported in TEAM.

- b. Payment Methods. FTA makes all payments by the Treasury’s Automated Clearing House (ACH) method of payment, regardless of the dollar amount involved. ACH electronically sends payment to a payee’s bank for deposit to its bank account. The payments to grantees are made using various methods of payments.
  - (1) Electronic Clearing House Operation (ECHO) Payment. ECHO is a personal computer (PC) based application that processes drawdown requests and makes payments to FTA grantees. ECHO consists of a Web-based application which grantees can access via the Internet to submit their drawdown data. ECHO then transmits requests approved for payment to the Grantee’s financial institution through Treasury’s ACH process. For further information, see FTA’s “ECHO System Users Manual for Grantees,” at: <http://www.fta.dot.gov/documents/ECHOWebGranteeUserManual.pdf>.
  - (2) Requisition Payment. If the requisition payment method is used, the Standard Form 270 (SF–270), “Request for Advance or Reimbursement” form is required to be submitted to the Federal Aviation Administration, Enterprise Service Center (ESC) in Oklahoma City. Instructions for completing SF–270 and the ESC’s mailing address can be found in Appendix F.
- c. Policy for ECHO Payments. If payment is made under ECHO, by means of an ECHO Control Number (ECN), the grantee agrees to comply with the requirements of 49 CFR 18.21 and 19.22, and 31 CFR part 205, and as described in FTA’s ECHO System User Manual for Grantees.

Disbursement guidelines are in accordance with policies established in Department of Treasury Circular 1075, part 205, “Withdrawal Of Cash From The Treasury For Advances Under Federal Grant And Other Programs,” and by FTA financing agreements. These guidelines state that the recipient organization shall commit itself to:

- (1) Initiating cash drawdowns for immediate disbursement needs meaning three business days. Excess Federal funds held more than three days must be returned to FTA along with any interest earned. See Chapter VI, Subsection 9.e., “Repayment to FTA,” below for detailed information on requirements to remit interest.
- (2) Large disbursements must be reported to the appropriate FTA Regional Office in advance of the transaction settlement date. A minimum of two business days notice is required for disbursements totaling \$50 million or more. If a disbursement of over \$500 million is anticipated, a minimum of five business days is required. When specific information has not been finalized, inform the FTA Regional Office of approximate amount(s) and approximate deposit date(s). The

FTA Headquarters Accounting Office should be notified by the Regional Office due to the requirement that FTA must provide the Treasury 48 hours prior notification to drawdown funds exceeding \$50 million.

- (3) Timely reporting of cash disbursements and balances as required by the Federal program agency, which is FTA.
- (4) Imposing the same standards of timing and amount upon any secondary recipient organizations.
- (5) Limiting drawdowns to eligible project costs, which would include NOT drawing down funds for a project in an amount that would exceed the sum obligated by FTA or the current available balance for that project.
- (6) Providing control and accountability for all project funds consistent with FTA requirements and procedures for use of the ECHO System.
- (7) Furnishing reports of cash disbursements and balances, when required by means of the Financial Status Report (FSR).

d. Excessive or Premature Withdrawals.

- (1) General. For excess payments made by the Federal Government to the grantee that do not qualify as a “claim” for purposes of the Debt Collection Act of 1982, as amended, 31 U.S.C. 3701 *et seq.*, the recipient agrees that the amount of interest owed to the Federal Government depends on whether the recipient is a State or State instrumentality.
  - (a) A recipient that is a State or State instrumentality agrees that interest owed to the Federal Government will be determined in accordance with Treasury regulations, “Rules and Procedures for Efficient Federal State Funds Transfers,” 31 CFR part 205 that implements Section 5(b) of the Cash Management Improvement Act of 1990, as amended, 31 U.S.C. 6503(b).
  - (b) A recipient that is neither a State nor a State instrumentality agrees that common law interest owed to the Federal Government will be determined in accordance with joint Treasury/DOJ regulations, “Standards for the Administrative Collection of Claims,” at 31 CFR 901.9(i).
- (2) Exceptions. The only exceptions to the requirement for prompt refunding are when the funds involved:
  - (a) Will be disbursed by the grantee within seven calendar days; or
  - (b) Are less than \$10,000 and will be disbursed within 30 calendar days.

These exceptions to the requirement for prompt refunding should not be construed as approval for a grantee to maintain excessive funds. They are applicable only to excessive amounts of funds which are erroneously drawn.

- (3) Return of Funds. The return of funds is accomplished as follows:
  - (a) FTA requests the recipients to electronically remit the excessive cash and any interest to FTA using the U.S. Treasury's Pay.Gov Financial Collection System (<https://www.Pay.Gov>).
  - (b) Although paper checks are discouraged, grantees may mail refund checks to FAA (FTA's Accounting Service Center) in Oklahoma City. If a single check is used to remit the premature withdrawal and the interest, the amount of each must be separately identified and accompanied by a letter explaining the purpose of the check(s) and identifying the project number. A copy of the check and the letter should be sent to the grantee's Regional Office. Additional information pertaining to the mailing of checks is located below in Chapter VI, Subsection 9.f.
- e. Repayment to FTA. FTA program managers will be alert to any information which may indicate a potential repayment. The following are possible reasons for payments becoming due to FTA:
  - (1) insufficient non-Federal funds to match Federal payments;
  - (2) the sale of project equipment; or
  - (3) excessive Federal funds in the project account.
- f. Repayment Procedure. Required repayments must be made promptly to FTA. Grantees can submit repayments through the Treasury's Pay.Gov Financial Collection System (<https://www.Pay.Gov>) for all refunds and repayments. Refunds by check should be processed using the following steps:
  - (1) Make the check payable to "Federal Transit Administration."
  - (2) Mail all checks to the FAA/Federal Transit Account.
  - (3) Specify applicable project number(s) on the check.
  - (4) Provide written explanation as to purpose of payment.
  - (5) Send a copy of the check and the explanatory letter to the grantee's regional or metropolitan office.
  - (6) If the grantee is on ECHO-Web, the amount may be repaid through a credit on the FTA drawdown message. This credit must be shown in full and not netted against

any amount being claimed on the same project, unless an appropriate credit is shown for the original project, with a charge to the new project or FPC (financial purpose code) whichever is applicable. In addition, documentation for credits through FTA ECHO-Web should be forwarded to the FTA Accounting Office within three business days after the drawdown. Documentation not received within the specified period of time, could result in the grantee's project being suspended for reimbursement.

- g. Requirement to Remit Interest. Under Section 9b(1)(h) of FTA's Master Agreement, company or grantee organizations shall be required to remit any interest earned on excess Federal funds drawn down and failed to spend for eligible project activities, or were held in excess of three calendar days. Payments of interest must be made by using the Pay.Gov Financial Collection System.

Unless waived by FTA, interest will be calculated at rates imposed by the Department of the Treasury (<http://fms.treas.gov/>) beginning on the fourth day after the funds were deposited in the company or grantee organization's bank or other financial depository. Upon notice by FTA to the company or grantee organization of specific amounts due, the company or grantee organization shall promptly remit to FTA any excess Federal fund payments, including any interest due.

10. DE-OBLIGATION OF FUNDS. FTA reserves the right to deobligate unspent Federal funds prior to project closeout.
11. DEBT SERVICE RESERVE. Transit agencies that use debt financing in the form of bonds are often required by the terms of the Bond Indenture to establish Debt Service Reserve (DSR). The Bond Trustee is required to establish a DSR with the proceeds of the bond issue. Usually, the DSR remains untouched for the term of the bonds, and is used to make a subsequent debt service payment ONLY if the recipient has insufficient funds to do so. If the DSR is used in this way, the recipient must replenish the DSR from its own funds and within the time frames outlined in the Bond Indenture or be in default. When there is no default, the balances remaining in the DSR are used to make the last debt service payment to the extent of such balances. Required DSRs may now be funded with FTA grant funds. However to the extent of FTA funding, any particular DSR may only be used to pay principal and/or interest on the bonds. Therefore, grantees intending to fund a DSR with FTA funds may also wish to include some non-FTA funds if the terms of the Bond Indenture allow use of DSR for other items, such as late fees or Bond Trustee expenses related to default.
12. RIGHT OF FTA TO TERMINATE. The grantee agrees that, upon written notice, FTA may suspend or terminate all or part of the financial assistance provided herein if the grantee is, or has been, in violation of the terms of the approved grant, or if FTA determines that the purposes of the statute under which the project is authorized would not be adequately served by continuation of Federal financial assistance for the project. Any failure to make reasonable progress or other violation of the approved grant that

significantly endangers substantial performance of the project shall be deemed to be a breach of the approved grant.

In general, termination of any financial assistance under the approved grant will not invalidate obligations properly incurred by the grantee and concurred in by FTA before the termination date, to the extent those obligations cannot be canceled. However, if FTA determines that the grantee willfully misused FTA assistance funds by failing to make adequate progress; to make reasonable use of the project real property, facilities, or equipment; or to honor the terms of the approved grant, FTA reserves the right to require the grantee to refund the entire amount of Federal funds provided herein or any lesser amount as may be determined by FTA.

Expiration of any project time period established for this project, does not, by itself constitute an expiration or termination of the approved grant.

Neither the receipt by the grantee of any Federal funds for the project nor the closeout of Federal financial participation on the project shall constitute a waiver of any claim that FTA may otherwise have arising out of the approved grant.

**APPENDIX A**

**TABLE OF FTA CIRCULARS**

<b>Circular</b>	<b>Topic</b>	<b>Date</b>	<b>Title</b>
C 2710.1A	Accounting	07-18-88	Sampling Procedures for Obtaining Fixed-Route Bus Operating Data Required Under the Section 15 Reporting System
C 2710.2A	Accounting	07-22-88	Sampling Procedures for Obtaining Demand-Responsive Bus System Operating Data Required Under the Section 15 Reporting System
C 2710.4A	Accounting	07-22-88	Revenue Based Sampling Procedures for Obtaining Fixed-Route Bus Operating Data Required Under the Section 15 Reporting System
C 2710.6	Accounting	07-01-88	Section 15 Accounting and Reporting Release Number 1
C 2710.7	Accounting	07-01-88	Section 15 Accounting and Reporting Release Number 2
C 4220.1F	Procurement	10-01-08	Third Party Contracting Guidance
C 4702.1A	Civil Rights	05-13-07	Title VI and Title VI-Dependent Guidelines for FTA Recipients
C 4704.1	Civil Rights	07-26-88	Equal Employment Opportunity Program Guidelines for Grant Recipients
C 4715.1A	Civil Rights	07-26-88	Human Resource Programs (Section 20) Application and Project Management Guidelines
C 5010.1D	Grants Management—General	11-01-08	Grant Management Requirements
C 5200.1A	Grants Management—General	12-05-02	Full-Funding Grant Agreements Guidance
C 5620.1	Grants Management—General	10-16-79	Guidelines for Preparing Environmental Assessments
C 5800.1	Safety and	08-01-07	Safety and Security Management Guidance for

<b>Circular</b>	<b>Topic</b>	<b>Date</b>	<b>Title</b>
	Security for Major Capital Projects		Major Capital Projects
C 6100.1C	Technology Development and Deployment	05-02-03	Transit Research And Technology Programs: Application Instructions And Program Management Guidelines
C 7008.1A	Policy and Program Development	01-30-02	Financial Capacity Policy
C 7020.1	Policy and Program Development	04-26-90	Cross-Border Leasing Guidelines
C 8100.1C	Planning	09-01-08	Program Guidance for Metropolitan Planning and State Planning and Research Program Grants
C 9030.1C	Capital Facilities and Formula Grant Programs	10-01-98	Urbanized Area Formula Program: Grant Application Instructions
C 9040.1F	Capital Facilities and Formula Grant Programs	04-01-07	Nonurbanized Area Formula Program Guidance and Grant Application Instructions
C 9045.1	Formula Grant Programs	05-01-07	New Freedom Program Guidance and Application Instructions
C 9050.1	Formula Grant & Direct Apportionment Programs	05-01-07	The Job Access and Reverse Commute (JARC) Program Guidance and Application Instructions
C 9070.1F	Capital Facilities and Formula Grant Program	05-01-07	Elderly Individuals and Individuals with Disabilities Program Guidance and Application Instructions
C 9300.1B	Capital Facilities and Formula Grant Programs	10-01-08	Capital Investment Program Guidance and Application Instructions

<b>Circular</b>	<b>Topic</b>	<b>Date</b>	<b>Title</b>
C 9400.1A	Capital Facilities and Formula Grant Programs	06-09-95	Federal Transit Administration Design and Art in Transit Projects
C 9500.1	Capital Facilities and Formula Grant Programs	03-30-84	Intergovernmental Review of FTA Planning, Capital and Operating Programs and Activities

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## **APPENDIX B**

### **REAL ESTATE ACQUISITION MANAGEMENT PLAN**

#### **A Model for the development of a Real Estate Acquisition Management Plan (RAMP)**

1. **GENERAL**. The purpose of a RAMP is to guide the assessment of real estate goals and the methodology for real estate acquisition. RAMPs are the grantee's planning tool. If done correctly, they will identify schedule issues, difficult parcels, the need for expanded advisory assistance, and staff issues. For projects participating in the New Starts or Small Starts programs, RAMPs are required as part of the Project Management Plan (PMP).
2. **RAMP CONTENT**.
  - a. **Introduction**.
    - (1) Short history of pertinent elements of project
    - (2) Control agreements; intergovernmental contracts, pending solicitations, etc.
    - (3) Legal requirements; Uniform Act, various State laws, local requirements, etc.
    - (4) Geographical description of project
    - (5) Physical description of proposed acquisitions; number of parcels, total acquisitions, partial acquisitions, anticipated number of relocations; etc.
    - (6) General outline of process; and authority to condemn
  - b. **Organizational Structure**.
    - (1) Identification of staff functions
    - (2) Identification of contractual functions
    - (3) Identification of plan source; process for plan changes, corrections, modifications as a result of negotiations, etc.
    - (4) Party who can establish offer of just compensation
    - (5) Party who can authorize condemnation
  - c. **Acquisition Schedule**.
    - (1) Set out the timeframe for acquisition and relocation; total length of time needed
    - (2) Date for initiation of negotiations for project

- (3) Difficulties and potential delays
  - (4) How will progress reporting be handled; who will receive this information
  - (5) Identification of a critical path for right-of-way
- d. Real Estate Cost Estimate.
- (1) Background of estimate; when was it done; what was the basis of the estimate
  - (2) Need for any update of cost estimate
  - (3) How will estimate be compared to actual costs as project progresses
- e. Acquisition Process.
- (1) Plans—who prepares, who can modify, what is process for considering property owner’s request to modify, etc.
  - (2) Ownership and title information—how is this gathered, what is the contractual requirements, are those contracts in place, what is the process to update and correct errors and omissions
  - (3) Appraisal—who will do appraisals, what are the contracting requirements if necessary, what is the estimate duration of this task, how many copies of appraisals will be obtained, will appraisals be shared with property owners
  - (4) Appraisal Review process—who will do this task, what is the scope of the task in general, what is the turn around time for this work, will review handle updates of appraisals, will review handle modification of appraisals based on owner claims, will review be used to support administrative settlements
  - (5) Establishment of offer of Just Compensation—who does this, what is the basis of this offer
  - (6) Negotiations—who will negotiate, what is their authority, who must approve administrative settlements and other concessions to property owners, what documentation is required for the negotiations’ process, who signs letter of offer, will negotiator also handle relocation payments, how is interface between negotiations and condemnation handled, what documents will negotiator be expected to provide to legal for settlement and condemnation, will negotiator be present at closing
  - (7) Closing/Escrows—who will provide this service, how will it function, what is the estimated length of time to deposit funds to escrow for closing, what documents will be necessary, how will closings be conducted, what form of deeds will be used, how will property taxes be paid and exempted

- (8) Condemnation—who will authorize suits, who will file, what is relationship between grantee and its legal personnel, what authority does attorney have for settlement, what are the progress reporting requirements

f. Relocation.

- (1) Staffing and Administration—how will the relocation function be staffed, who is authorized to compute payments, who will approve payments, what is the relocation process to be utilized in the project, what level of advisory services will be needed, who will provide advisory services, what is the claims payment process, what is the time to pay a relocation claim, what authority and controls will be needed for advanced claims, what documentation will be retained in the files, what forms will be used
- (2) Appeals—what are the legal requirements for administrative appeals, how will the agency establish and staff an appeal function, who is the recipient of appeal requests, what is the appeal process

g. Other Components.

- (1) Document Control—How are documents filed, what length of time will original paper documents be maintained, what is the organization of parcel files, condemnation files, etc., what is the contents of a typical file
- (2) Property management—who will perform property management, what is included in the Scope of Work for property management, who contracts for demolition, what are contracting requirements, what are reporting requirements, what is the statement of policy regarding rental property for extended possession by tenants and owners
- (3) Excess property inventory and utilization plan—who will prepare and track excess parcels, what is the process to evaluate these tracts, who will determine when to sell excess, what is the disposition of proceeds, what are agency, State, or local restrictions on the sale of public property

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## APPENDIX C

### **GUIDE FOR PREPARING AN APPRAISAL SCOPE OF WORK**

1. **GENERAL**. The Scope of Work is a written set of expectations that form an agreement or understanding between the appraiser and the agency as to the specific requirements of the appraisal, resulting in a report to be delivered to the agency by the appraiser. It includes identification of the intended use and intended user; definition of market value; statement of assumptions and limiting conditions; and certifications. It should specify performance requirements, or it should reference them from another source, such as the agency's approved Right-of-Way or Appraisal Manual. The Scope of Work must address the unique, unusual, and variable appraisal performance requirements of the appraisal. Either the appraiser or the agency may recommend modifications to the initial Scope of Work, but both parties must approve changes.
2. **EXAMPLE**. The example below is intended to be a guide for agencies preparing a Scope of Work for real estate appraisals.
  - a. **Scope of Work**: The appraiser must, at a minimum:
    - (1) Provide an appraisal meeting the agency's definition of an appraisal, or, at a minimum, the definition must be compatible with the definition found at 49 CFR 24.2(a)(3).
    - (2) Afford the property owner or the owner's designated representative the opportunity to accompany the appraiser on the inspection of the property.
    - (3) Perform an inspection of the subject property. The inspection should be appropriate for the appraisal problem, and the Scope of Work should address:
      - (a) The extent of the inspection and description of the neighborhood and proposed project area,
      - (b) The extent of the subject property inspection, including interior and exterior areas, and
      - (c) The level of detail of the description of the physical characteristics of the property being appraised (and, in the case of a partial acquisition, the remaining property).
    - (4) In the appraisal report, include a sketch of the property and provide the location and dimensions of any improvements. Also, it should include adequate photographs of the subject property and comparable sales and provide location maps of the property and comparable sales.
    - (5) In the appraisal report, include items required by the acquiring agency, usually including the following list:

- (a) The property right(s) to be acquired, e.g., fee simple, easement, etc.,
  - (b) The value being appraised (usually fair market value), and its definition,
  - (c) Appraised as if free and clear of contamination (or as specified),
  - (d) The date of the appraisal report and the date of valuation,
  - (e) The realty/personalty report required at 49 CFR 24.103(a)(3)(i)–(v),
  - (f) The known and observed encumbrances, if any,
  - (g) Title information,
  - (h) Location,
  - (i) Zoning,
  - (j) Present use, and
  - (k) At least a 5-year sales history of the property.
- (6) In the appraisal report, identify the highest and best use. If highest and best use is in question or different from the existing use, provide an appropriate analysis identifying the market-based highest and best use.
- (7) Present and analyze relevant market information. Specific requirements should include research, analysis, and verification of comparable sales. Inspection of the comparable sales should also be specified.
- (8) In developing and reporting the appraisal, disregard any decrease or increase in the fair market value of the real property caused by the project for which the property is to be acquired or by the likelihood that the property would be acquired for the project. If necessary, the appraiser may cite the Jurisdictional Exception or Supplemental Standards Rules under Uniform Standards of Professional Appraisal Practice (USPAP) to ensure compliance with USPAP while following this Uniform Act requirement.
- (9) Report his or her analysis, opinions, and conclusions in the appraisal report.
- b. Additional Requirements for a Scope of Work:
- (1) Intended Use: This appraisal is to estimate the fair market value of the property, as of the specified date of valuation, for the proposed acquisition of the property rights specified (i.e., fee simple, etc.) for a federally assisted project.

- (2) Intended User: The intended user of this appraisal report is primarily the acquiring agency, but its funding partners may review the appraisal as part of their program oversight activities.
- (3) Definition of Market Value: This is determined by State law, but includes the following:
  - (a) Buyer and seller are typically motivated;
  - (b) Both parties are well informed or well advised, each acting in what he or she considers his or her own best interest;
  - (c) A reasonable time is allowed for exposure in the open market;
  - (d) Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
  - (e) The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.
- (4) Certification: The required certification should be in the State's approved Appraisal Procedures or part of State law.
- (5) Assumptions and Limiting Conditions: The appraiser shall state all relevant assumptions and limiting conditions. In addition, the acquiring agency may provide other assumptions and conditions that may be required for the particular appraisal assignment, such as:
  - (a) The data search requirements and parameters that may be required for the project.
  - (b) Identification of the technology requirements, including approaches to value, to be used to analyze the data.
  - (c) Need for machinery and equipment appraisals, soil studies, potential zoning changes, etc.
  - (d) Instructions to the appraiser to appraise the property "As Is" or subject to repairs or corrective action.
  - (e) As applicable include any information on property contamination to be provided and considered by the appraiser in making the appraisal.

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## APPENDIX D

### ROLLING STOCK STATUS REPORT

1. GENERAL. When an agency is disposing of vehicles that have met the minimum useful life that have a fair market value greater than \$5,000 or disposing of vehicles before they reach the minimum useful life, or requesting a budget revision affecting vehicles, the Rolling Stock Status Report (see example on next page) should include the following information:
  - a. Vehicle Number
  - b. Year
  - c. Make/Model
  - d. Vehicle Identification Number (VIN)
  - e. Date Placed in Revenue Service
  - f. Date Removed from Revenue Service
  - g. Minimum Useful Life (Years and Miles)
  - h. Mileage (At the time Removed from Revenue Service)
  - i. Total Number of Vehicles
  - j. Total Number of Peak Vehicle Requirements
  - k. Total Number of Spare Vehicles
2. REPLACEMENTS AT THE END OF MINIMUM USEFUL LIFE. Rolling Stock Status Reports must accompany a request for a replacement vehicle that has met its minimum useful life. The report will be used to verify that a vehicle has met the minimum useful life and that there is no remaining Federal interest. **Note:** Though the remaining Federal interest might be zero, if the asset's value exceeds \$5,000, FTA may still be entitled to reimbursement. See Chapter IV, Subsection 3.1., "Disposition," for more information about project property valued over \$5,000.
3. EARLY DISPOSITION. Rolling Stock Status Reports must accompany a request for early disposition of vehicles. The report will be used to verify the remaining Federal interest in the vehicles.

4. EXAMPLE. An example of a Rolling Stock Status Report for vehicles pending disposal with and without remaining Federal interest or budget revision affecting vehicles is shown below.

**Rolling Stock Status Report**  
**TransAmerica Buses**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Veh #	Vehicle Year	Make/Model or Vehicle Description	Date in Service	Out of Service	Fed Useful Life (yr)	Actual Service (yr)	Remaining yrs	Remaining % based on yrs	Actual Mileage	Minimum Useful life Mileage	Remaining % based on miles	Total Federal Share	Remaining Fed Share based on yrs	Remaining Fed Share based on miles
151	2000	30' New Flyers	09/01/00	09/01/07	7	7.0	0.00	-0.04%	200,000	200,000	0.00%	\$120,000	-	-
152	2000	30' New Flyers	09/01/00	09/03/07	7	7.0	-0.01	-0.12%	200,000	200,000	0.00%	\$120,000	-	-
154	2000	30' New Flyers	09/01/00	09/02/07	7	7.0	-0.01	-0.08%	210,000	200,000	-5.00%	\$120,000	-	-
155	2000	30' New Flyers	09/01/00	09/02/07	7	7.0	-0.01	-0.08%	205,000	200,000	-2.50%	\$120,000	-	-
156	2000	30' New Flyers	03/01/01	03/01/06	7	5.0	2.00	28.53%	140,851	200,000	29.57%	\$120,000	\$34,239	\$35,489
157	2000	30' New Flyers	03/01/01	03/01/06	7	5.0	2.00	28.53%	154,649	200,000	22.68%	\$120,000	\$34,239	\$27,211
158	2000	35' Flexible	03/01/01	06/03/06	10	5.3	4.74	47.40%	200,000	350,000	42.86%	\$120,000	\$56,877	\$51,429
159	2001	35' Flexible	03/01/01	06/03/06	10	5.3	4.74	47.40%	300,000	350,000	14.29%	\$195,000	\$92,425	\$27,857
160	2001	35' Flexible	03/01/01	11/02/07	10	6.7	3.32	33.23%	300,000	350,000	14.29%	\$195,000	\$64,804	\$27,857
161	2001	35' Flexible	03/01/01	07/02/07	10	6.3	3.66	36.60%	325,000	350,000	7.14%	\$195,000	\$71,375	\$13,929
163	2001	35' Flexible	03/01/01	11/02/07	10	6.7	3.32	33.23%	325,000	350,000	7.14%	\$195,000	\$64,804	\$13,929
164	1996	40' Buses	03/21/96	04/03/06	12	10.0	1.96	16.32%	425,000	500,000	15.00%	\$295,000	\$48,156	\$44,250
165	1996	40' Buses	06/19/96	04/03/07	12	10.8	1.21	10.05%	435,000	500,000	13.00%	\$295,000	\$29,635	\$38,350
166	1996	40' Buses	06/19/96	04/03/07	12	10.8	1.21	10.05%	450,000	500,000	10.00%	\$295,000	\$29,635	\$29,500
167	1996	40' Buses	06/20/96	06/02/07	12	11.0	1.04	8.70%	450,000	500,000	10.00%	\$295,000	\$25,661	\$29,500
168	1996	40' Buses	06/23/96	06/02/07	12	10.9	1.05	8.77%	450,000	500,000	10.00%	\$295,000	\$25,863	\$29,500

## **APPENDIX E**

### **COST ALLOCATION PLANS**

1. **REQUIREMENTS**. Grantees who intend to seek Federal Transit Administration (FTA) reimbursement for indirect costs must prepare a Cost Allocation Plan (CAP) and/or Indirect Cost Rate Proposal. The following are basic requirements for preparing a CAP.
  - a. CAPs and Indirect Cost Rate Proposals must be updated annually.
  - b. The updated plans must be retained and made available for review at the grantees' annual single audit.
  - c. Updated CAPs may be used on a provisional basis for the following fiscal year (FY) with the provision that year-end adjustments must be made to actual costs.
  - d. The initial plan must be approved by FTA or another cognizant Federal agency. For subsequent approvals, please refer to Appendix E, Section 4., of this circular.
  - e. Additionally, all costs in the plan must be supported by formal accounting records to substantiate the propriety of eventual charges. The allocation plan of the grantee should cover all applicable costs. It should also cover costs allocated under plans of other agencies or organizational units which are to be included in the costs of other federally sponsored programs. To the extent feasible, CAPS of all agencies rendering assistance to the grantee should be presented in a single document.
2. **CONTENT**. The CAP should contain, but need not be limited to the following:
  - a. Nature and extent of services provided and their relevance to federally sponsored programs;
  - b. Items of expense to be included;
  - c. Methods to be used in distributing cost; and
  - d. Appropriate Civil Rights data.
3. **PURPOSE OF THE PLAN**. The purpose of the plan is to guide the grantees' allocation of costs. The plan should ensure:
  - a. All activities of local government departments or State agencies have been considered;
  - b. Distribution of indirect costs is based on a method(s) reasonably indicative of the amount of services provided;
  - c. Services provided are necessary for successful conduct of Federal programs;

- d. Level of costs incurred are reasonable;
  - e. Costs of State of local centralized government services may be charged in conformance with government-wide cost allocations plans; and
  - f. Costs claimed are allowable in accordance with the Office of Management and Budget (OMB) Circular A-87, as applicable.
4. DEVELOPMENT OF COST ALLOCATION PLAN. In planning the development of a CAP, grantees should develop a CAP that identifies costs of supporting service units and allocates those costs to benefiting units on an equitable basis. The following is a list of components that should be included in a CAP:
- a. An Organization Chart;
  - b. Financial Statements;
  - c. Cost Allocation Methodology;
  - d. Cost Allocation Rate Proposal:
    - (1) Identification of costs of each type of service to be claimed,
    - (2) Determination of the method for allocating each type of service cost to users,
    - (3) Identification of units rendering/receiving service and associated costs,
    - (4) Description of services,
    - (5) Description of Allocation Base (Consistency is important), and
    - (6) Summary Allocation Schedule for each service.
  - e. Proposal Reconciliation with Financial Statements. (**Note:** Allocated costs must be reasonable and trackable to the financial Statements);
  - f. Identification of Federal Award Direct Cost Base; and
  - g. Certification of Conformance with OMB Circular A-87. A proposal to establish a CAP or an Indirect Cost Rate Proposal will be unacceptable if the CAP Certificate of or Certificate of Indirect Costs is omitted. The certificate must be signed on behalf of the governmental unit by an individual at a level no lower than chief financial officer of the governmental unit that submits the proposal or component covered by the proposal.

5. SUBMISSION OF COST ALLOCATION PLAN/INDIRECT COST RATE PROPOSALS. OMB Circular A-87 requires that the plan (called a proposal) be submitted to a grantee's Federal Cognizant Agency for approval. The CAP/Indirect Cost Rate Proposal should be submitted to the "cognizant" or "lead" Federal Agency when:
  - a. The grantee is working on its first assistance project or has not previously had a CAP/Indirect Cost Rate Proposal reviewed and accepted;
  - b. The grantee has made a change in its accounting system, thereby affecting the previously approved CAP/Indirect Cost Rate Proposal and its basis of application;
  - c. The grantee's proposed CAP/Indirect Cost Rate Proposal exceeds the amounts and rate approved for the previous year(s) by more than 20 percent; or
  - d. The grantee changes the CAP/Indirect Cost Rate Proposal methodology.
6. PLAN APPROVAL. Most transit agencies are under the cognizance of the Department of Transportation (DOT). Whenever the cognizant agency gives prior approval to a government-wide CAP or an Indirect Cost Rate Proposal, such approval is formalized, distributed to all interested Federal agencies, and applicable to all Federal grants in accordance with OMB Circular A-87.

An approved CAP or Indirect Cost Rate Proposal must be updated annually. The update should be retained and made available for review at the time of the grantee's organization-wide audit.

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## APPENDIX F

### **REQUEST FOR ADVANCE OR REIMBURSEMENT (SF-270)**

1. **GENERAL.** If the requisition method of payment is used, the grantee agrees to:

- a. Complete and submit “ACH Vendor/Miscellaneous Payment Enrollment Form” (See Appendix F, Section 3., “Exhibit-1,” of this circular) to FTA’s Accounting Division.
- b. Complete and submit an original Standard Form 270, “Request for Advance or Reimbursement,” (See Appendix F, Section 3., “Exhibit-2,” of this circular) to the Federal Aviation Administration, Enterprise Service Center (ESC), FTA’s designated Accounting Service Center at: FAA Mike Monroney Aeronautical Center; Library, AMA-300A; 6500 S. MacArthur Blvd.; Oklahoma City, OK 73169. All supporting documentation needed to support and justify the reimbursement of funds and satisfy the FTA Project Manager must accompany the SF 270.

Upon receipt of the SF 270 payment request, FTA will authorize payment by Automated Clearing House (ACH) deposit if the grantee is complying with its obligations under the approved grant; has satisfied FTA that it needs the requested Federal funds during the requisition period; and is making adequate progress toward the timely completion of the project. If all these circumstances are present, FTA may reimburse apparent allowable costs incurred (or to be incurred during the requisition period) by the grantee up to the maximum amount of Federal funds payable through the fiscal year (FY) in which the requisition is submitted, as stated in the project budget.

2. **INSTRUCTIONS.** Instructions for completing an SF-270 are printed on its reverse side. In addition, the following instructions should assist grantees in completing this form:

- a. Only the total column on this form should be completed, unless the project involves more than one funding ratio. In such instances, the other columns are also to be used.

In addition, grantees should round all figures to the nearest dollar, i.e., amounts of \$.50 or over would be rounded to the higher dollar. For example, if the non-Federal share is computed to be \$2,572.70, the amount reported would be \$2,573.

- b. Block #5—All requisitions should be numbered consecutively beginning with #1 as the first requisition. Suggested format should include the FY and sequential number for each individual voucher. For example, the payment request number for the Grantee’s first voucher submitted in FY 2007 would appear on the SF 270 as follows: 2007-001.
- c. Block #8—The first requisition covers the date the grant was awarded, (unless the grant had pre-award authority), through the end of the period for which reimbursement is requested. When a requisition requests reimbursement only, the “ending” date will be the same date on which outlays are reported on line 11a of this form. If the

reimbursement and/or an advance is being requested, the “ending” date should reflect the period through which the advance funds are needed.

All requisition report periods should run consecutively. For example, if a requisition is submitted for the period 1/1/07 to 3/31/07, the next requisition will begin 4/1/07.

- d. Block #9—The name of the grantee should be exactly as indicated on the Grant Agreement. Grantees should not use abbreviations but spell out the entire name of the organization.
- e. Block #11—Line A—The “as of” date should be the date for which the grantee has actual costs recorded. This date should be the same as the “to” date, Block #8, unless the grantee is requesting an advance.

Line B—Represents the amount applicable to program income that was required to be used for the project or program by terms of the grant or other agreement.

Line D—Represents the estimated expenditures for the advance period, both FTA share and the local share.

Line F—Non-Federal share of line E, depending on the funding ratio of a particular project.

Line G—Federal share of line E, depending on the funding ratio for a particular project.

Line H—Total of previous requisition(s) submitted. This line should not represent actual payment received because the grantee may have submitted a requisition that is in the process of being paid. Requisition #1 on this line should be zero.

**Note:** Grantees should only complete the “total” column of Block #11, unless the Grant Agreement specified that there is more than one funding source supporting the project. In such cases, separate columns should be utilized for each funding source.

Line I—Federal share now requested represents the total amount of the SF 270 reimbursement that will be forwarded to the grantee.

- 3. REVIEW OF THE SF-270. Each SF-270 for funds will be reviewed in light of the periodic progress reports and financial reports required for each project. Changes requiring grant amendments or prior approval of a budget revision must be approved before funds for these changes are requisitioned.

**EXHIBIT 1**

**ACH VENDOR/MISCELLANEOUS PAYMENT  
ENROLLMENT FORM**

OMB No. 1510-0056

This form is used for Automated Clearing House (ACH) payments with an addendum record that contains payment-related information processed through the Vendor Express Program. Recipients of these payments should bring this information to the attention of their financial institution when presenting this form for completion.

<b>PRIVACY ACT STATEMENT</b>
The following information is provided to comply with the Privacy Act of 1974 (P.L. 93-579). All information collected on this form is required under the provisions of 31 U.S.C. 3322 and 31 CFR 210. This information will be used by the Treasury Department to transmit payment data, by electronic means to vendor's financial institution. Failure to provide the requested information may delay or prevent the receipt of payments through the Automated Clearing House Payment System.

AGENCY INFORMATION	
FEDERAL PROGRAM AGENCY <b>DOT, Federal Transit Administration</b>	
AGENCY IDENTIFIER:	AGENCY LOCATION CODE (ALC):
	<b>69-08-0001</b>
ACH FORMAT: <input checked="" type="checkbox"/> CCD+ <input type="checkbox"/> CTX <input type="checkbox"/> CTP	
ADDRESS: <b>1200 New Jersey Avenue S.E., East Building, Fifth Floor (E-54)</b>	
<b>Washington, DC 20590</b>	
CONTACT PERSON NAME: <b>Millie Fields</b>	TELEPHONE NUMBER: <b>(202 ) 366-6685</b>
ADDITIONAL INFORMATION: <b>Mail completed ACH form, with original signatures, to the above address.</b>	

PAYEE/COMPANY INFORMATION	
NAME	SSN NO. OR TAXPAYER ID NO.
ADDRESS	
CONTACT PERSON NAME: <b>Note: Contact name will be verified with the FTA Project Lead</b>	TELEPHONE NUMBER: (       )

FINANCIAL INSTITUTION INFORMATION	
NAME:	
ADDRESS:	
ACH COORDINATOR NAME:	TELEPHONE NUMBER: (       )
NINE-DIGIT ROUTING TRANSIT NUMBER: _____	
DEPOSITOR ACCOUNT TITLE:	
DEPOSITOR ACCOUNT NUMBER:	LOCKBOX NUMBER:
TYPE OF ACCOUNT: <input type="checkbox"/> CHECKING <input type="checkbox"/> SAVINGS <input type="checkbox"/> LOCKBOX	
SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL: (Could be the same as ACH Coordinator)	TELEPHONE NUMBER: (       )

## INSTRUCTIONS FOR COMPLETING SF 3881 FORM

### Instructions for Completing SF 3881 Form

1. Agency Information Section - Federal agency prints or types the name and address of the Federal program agency originating the vendor/miscellaneous payment, agency identifier, agency location code, contact person name and telephone number of the agency. Also, the appropriate box for ACH format is checked.
2. Payee/Company Information Section - Payee prints or types the name of the payee/company and address that will receive ACH vendor/miscellaneous payments, social security or taxpayer ID number, and contact person name and telephone number of the payee/company. Payee also verifies depositor account number, account title, and type of account entered by your financial institution in the Financial Institution Information Section.
3. Financial Institution Information Section - Financial institution prints or types the name and address of the payee/company's financial institution who will receive the ACH payment, ACH coordinator name and telephone number, nine-digit routing transit number, depositor (payee/company) account title and account number. Also, the box for type of account is checked, and the signature, title, and telephone number of the appropriate financial institution official are included.

### Burden Estimate Statement

The estimated average burden associated with this collection of information is 15 minutes per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestions for reducing this burden should be directed to the Financial Management Service, Facilities Management Division, Property and Supply Branch, Room B-101, 3700 East West Highway, Hyattsville, MD 20782 and the Office of Management and Budget, Paperwork Reduction Project (1510-0056), Washington, DC 20503.

**EXHIBIT 2**

<b>REQUEST FOR ADVANCE OR REIMBURSEMENT</b>  <i>(See instructions on back)</i>		OMB APPROVAL NO. <b>0348-0004</b>		PAGE _____ OF _____ PAGES
		1. TYPE OF PAYMENT REQUESTED a. "X" one of both boxes <input type="checkbox"/> ADVANCE <input type="checkbox"/> REIMBURSEMENT b. "X" the applicable box <input type="checkbox"/> FINAL <input type="checkbox"/> PARTIAL		2. BASIS OF REQUEST  <input type="checkbox"/> CASH  <input type="checkbox"/> ACCRUAL
3. FEDERAL SPONSORING AGENCY AND ORGANIZATIONAL ELEMENT TO WHICH THIS REPORT IS SUBMITTED		4. FEDERAL GRANT OR OTHER IDENTIFYING NUMBER ASSIGNED BY FEDERAL AGENCY		5. PARTIAL PAYMENT REQUEST NUMBER FOR THIS REQUEST
6. EMPLOYER IDENTIFICATION NUMBER	7. RECIPIENT'S ACCOUNT NUMBER OR IDENTIFYING NUMBER	8. PERIOD COVERED BY THIS REQUEST FROM (month, day, year) _____ TO (month, day, year) _____		
9. RECIPIENT ORGANIZATION  Name:  Number and Street:  City, State and ZIP Code:		10. PAYEE (Where check is to be sent if different than item 9)  Name:  Number and Street:  City, State and ZIP Code:		

11. COMPUTATION OF AMOUNT OF REIMBURSEMENTS/ADVANCES REQUESTED				
PROGRAMS/FUNCTIONS/ACTIVITIES ▶	(a)	(b)	(c)	TOTAL
a. Total program outlays to date <i>(As of date)</i>	\$	\$	\$	\$ 0.00
b. Less: Cumulative program income				0.00
c. Net program outlays <i>(Line a minus line b)</i>		0.00	0.00	0.00
d. Estimated net cash outlays for advance period				0.00
e. Total <i>(Sum of lines c &amp; d)</i>		0.00	0.00	0.00
f. Non-Federal share of amount on line e				0.00
g. Federal share of amount on line e				0.00
h. Federal payments previously requested				0.00
i. Federal share now requested <i>(Line g minus line h)</i>		0.00	0.00	0.00
j. Advances required by month, when requested by Federal grantor agency for use in making prescheduled advances	1st month			0.00
	2nd month			0.00
	3rd month			0.00

12. ALTERNATE COMPUTATION FOR ADVANCES ONLY	
a. Estimated Federal cash outlays that will be made during period covered by the advance	\$
b. Less: Estimated balance of Federal cash on hand as of beginning of advance period	
c. Amount requested <i>(Line a minus line b)</i>	\$ 0.00

AUTHORIZED FOR LOCAL REPRODUCTION (Continued on Reverse) STANDARD FORM 270 (Rev. 7-97)  
Prescribed by OMB Circulars A-102 and A-110

13. CERTIFICATION		
I certify that to the best of my knowledge and belief the data on the reverse are correct and that all outlays were made in accordance with the grant conditions or other agreement and that payment is due and has not been previously requested.	SIGNATURE OR AUTHORIZED CERTIFYING OFFICIAL	DATE REQUEST SUBMITTED
	TYPED OR PRINTED NAME AND TITLE	August 13, 2007
		TELEPHONE (AREA CODE, NUMBER, EXTENSION)

This space for agency use

Public reporting burden for this collection of information is estimated to average 60 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0004), Washington, DC 20503.

**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

## INSTRUCTIONS FOR COMPLETING SF-270 FORM

### INSTRUCTIONS

Please type or print legibly. Items 1, 3, 5, 9, 10, 11e, 11f, 11g, 11i, 12 and 13 are self-explanatory; specific instructions for other items are as follows:

<i>Item</i>	<i>Entry</i>
2	Indicate whether request is prepared on cash or accrued expenditure basis. All requests for advances shall be prepared on a cash basis.
4	Enter the Federal grant number, or other identifying number assigned by the Federal sponsoring agency. If the advance or reimbursement is for more than one grant or other agreement, insert N/A; then, show the aggregate amounts. On a separate sheet, list each grant or agreement number and the Federal share of outlays made against the grant or agreement.
6	Enter the employer identification number assigned by the U.S. Internal Revenue Service, or the FICE (institution) code if requested by the Federal agency.
7	This space is reserved for an account number or other identifying number that may be assigned by the recipient.
8	Enter the month, day, and year for the beginning and ending of the period covered in this request. If the request is for an advance or for both an advance and reimbursement, show the period that the advance will cover. If the request is for reimbursement, show the period for which the reimbursement is requested.
<p>Note: The Federal sponsoring agencies have the option of requiring recipients to complete items 11 or 12, but not both. Item 12 should be used when only a minimum amount of information is needed to make an advance and outlay information contained in item 11 can be obtained in a timely manner from other reports.</p>	
11	The purpose of the vertical columns (a), (b), and (c) is to provide space for separate cost breakdowns when a project has been planned and budgeted by program, function, or
11a	activity. If additional columns are needed, use as many additional forms as needed and indicate page number in space provided in upper right; however, the summary totals of all programs, functions, or activities should be shown in the "total" column on the first page.
11b	Enter in "as of date," the month, day, and year of the ending of the accounting period to which this amount applies. Enter program outlays to date (net of refunds, rebates, and discounts), in the appropriate columns. For requests prepared on a cash basis, outlays are the sum of actual cash disbursements for goods and services, the amount of indirect expenses charged, the value of in-kind contributions applied, and the amount of cash advances and payments made to subcontractors and subrecipients. For requests prepared on an accrued expenditure basis, outlays are the sum of the actual cash disbursements, the amount of indirect expenses incurred, and the net increase (or decrease) in the amounts owed by the recipient for goods and other property received and for services performed by employees, contracts, subgrantees and other payees.
11d	Enter the cumulative cash income received to date, if requests are prepared on a cash basis. For requests prepared on an accrued expenditure basis, enter the cumulative income earned to date. Under either basis, enter only the amount applicable to program income that was required to be used for the project or program by the terms of the grant or other agreement.
13	Only when making requests for advance payments, enter the total estimated amount of cash outlays that will be made during the period covered by the advance.
13	Complete the certification before submitting this request.

**APPENDIX G****REFERENCES**

- a. Federal Transit Laws, Title 49, United States Code, Chapter 53.
- b. Federal-aid highway and surface transportation laws, Title 23, United States Code.
- c. Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, (SAFETEA-LU) (Pub. L. 109-59, 119 Stat. 1144, Aug. 10, 2005).
- d. Transportation Equity Act for the 21st Century (TEA-21) (Pub. L. 105-178, 112 Stat. 107, June 9, 1998).
- e. Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) (Pub. L. 102-240, 105 Stat. 1914, Dec. 18, 1991).
- f. Federal Public Transportation Act of 1978 (Pub. L. 95-599, Nov. 6, 1978).
- g. Americans with Disabilities Act (ADA) of 1990, as amended, 42 U.S.C. 12101 *et seq.*
- h. Section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. 794.
- i. Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. 2000d.
- j. Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. 2000e.
- k. National Environmental Policy Act (NEPA), 42 USC Section 4321-4370d.
- l. Energy Policy and Conservation Act, as amended, 42 U.S.C. 6321 *et seq.*
- m. Clean Air Act, as amended, 42 U.S.C. 7401 *et seq.*
- n. Section 102(a) of the Flood Disaster Protection Act of 1973, 42 U.S.C. Section 4012a.
- o. Section 404 of the Clean Water Act, as amended, 33 U.S.C. 1344.
- p. Policy on Lands, Wildlife, and Waterfowl Refuges, and Historic Sites, 49 U.S.C. 303.
- q. Section 106 of the National Historic Preservation Act, 16 U.S.C. 470f.
- r. Section 3 of the Alaska Native Claims Settlement Act (ANCSA), 43 U.S.C. 1601 *et seq.*

- s. Internal Revenue Code, Non-profit Organizations, 26 U.S.C. 501.
- t. The Rehabilitation Act of 1973, 29 U.S.C. Section 794, as amended.
- u. Lobbying Restrictions, 31 U.S.C. 1352.
- v. Disadvantaged Business Enterprises, 23 U.S.C. 101 note.
- w. Money and Finance, 31 U.S.C. 6304.
- x. Congressional Declaration of Policy Respecting Insular Areas, 48 U.S.C. 1469a.
- y. Program Fraud Civil Remedies Act, 31 U.S.C. 3801 *et seq.*
- z. Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended, 42 U.S.C. 4601, *et seq.*
- aa. Age Discrimination Act of 1975, as amended, 42 U.S.C. 6101 *et seq.*
- bb. Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. 1681 *et seq.*
- cc. National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4321 *et seq.*
- dd. Federal Funding Accountability and Transparency Act of 2006 (Pub. L 109–282, 120 Stat. 1186, Sept. 26, 2006).
- ee. Davis-Bacon Act, as amended, 40 U.S.C. 3141 *et seq.*
- ff. Drug-Free Workplace Act of 1988, as amended, 41 U.S.C. 701 *et seq.*
- gg. DOT regulations, “Organization and Delegation of Powers and Duties,” 49 CFR part 1.
- hh. DOT regulations, “Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments,” 49 CFR part 18.
- ii. DOT regulations, “Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations,” 49 CFR part 19.
- jj. DOT regulations, “New Restrictions on Lobbying,” 49 CFR part 20.
- kk. DOT regulations, “Nondiscrimination in Federally-Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964,” 49 CFR part 21.

- ll. DOT regulations, “Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs,” 49 CFR part 24.
- mm. DOT regulations “Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance,” 49 CFR part 25.
- nn. DOT regulations, “Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs,” 49 CFR part 26.
- oo. DOT regulations, “Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance,” 49 CFR part 27.
- pp. DOT regulations, “Governmentwide Debarment and Suspension (Nonprocurement),” 49 CFR part 29.
- qq. DOT regulations, “Governmentwide Requirements for Drug-Free Workplace (Financial Assistance),” 49 CFR part 32.
- rr. DOT regulations, “Transportation Services for Individuals with Disabilities (ADA),” 49 CFR part 37.
- ss. DOT regulations, “Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles,” 49 CFR part 38.
- tt. DOT regulations, “Procedures for Transportation Workplace Drug and Alcohol Testing Programs,” 49 CFR part 40.
- uu. FTA regulations, “Requirements for Energy Assessments,” 49 CFR part 622, Subpart C.
- vv. FTA regulations, “Clean Fuels Grant Program,” 49 CFR part 624.
- ww. FTA regulations, Project Management Oversight, 49 CFR part 633.
- xx. FTA regulations, State Safety Oversight, 49 CFR part 659.
- yy. Joint Federal Highway Administration/FTA regulations, “Planning Assistance and Standards,” 23 CFR part 450 and 49 CFR part 613.
- zz. Architectural and Transportation Barriers Compliance Board regulations, “Electronic and Information Technology Accessibility Standards,” 36 CFR part 1194.

- aaa. Health and Human Services regulations, “Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance,” 45 CFR part 90.
- bbb. Equal Employment Opportunity Commission regulations, “Age Discrimination in Employment Act,” 29 CFR part 1625.
- ccc. Office of Management and Budget Circular A–87, “Cost Principles for State, Local, and Indian Tribal Governments,” codified at 2 CFR part 225, Aug. 31, 2005.
- ddd. Office of Management and Budget Circular A–94, “Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs,” Oct. 29, 1992.
- eee. Office of Management and Budget Circular A–122, “Cost Principles for Non-Profit Organizations,” codified at 2 CFR part 230, Aug. 31, 2005.
- fff. Office of Management and Budget Circular A–133, “Audits of States, Local Governments, and Non-Profit Organizations,” June 23, 2003.
- ggg. U.S. Department of Transportation Order to Address Environmental Justice in Minority Populations and Low-Income Populations, 62 FR 18377 (Apr. 15, 1997).
- hhh. DOT Policy Guidance Concerning Recipients’ Responsibilities to Limited English Proficient (LEP) Persons, 70 FR 74087 (Dec. 14, 2005).
- iii. FTA Circular 4220.1E, “Third Party Contracting Requirements,” June 19, 2003.
- jjj. FTA Circular 4702.1, “Title VI and Title VI-Dependent Guidelines for FTA Recipients,” May 13, 2007.
- kkk. FTA Circular 4704.1, “Equal Employment Opportunity Program Guidelines for Grant Recipients,” July 26, 1988.
- lll. FTA Circular 5010.1C, “Grant Management Guidelines,” Oct. 1, 1998.
- mmm. FTA Circular 5800.1, “Safety and Security Management Guidance for Major Capital Projects,” Aug. 1, 2007.
- nnn. FTA Circular 8100.1C, “Program Guidance for Metropolitan Planning and State Planning and Research Program Grants,” Sept. 1, 2008.
- ooo. FTA Circular 9030.1C, “Urbanized Formula Program Guidance and Application Instructions,” Oct. 1, 1998.
- ppp. FTA Circular 9040.1F, “Nonurbanized Area Formula Program Guidance and Grant Application Instructions,” April 1, 2007.

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- qqq. FTA Circular 9045.1, “New Freedom Program Guidance and Application Instructions,” May 1, 2007.
- rrr. FTA Circular 9300.1B, “Capital Program: Grant Application Instructions,” Nov. 1, 2008.
- sss. FTA Circular 4220.1F “Third Party Contracting Guidance”, Nov. 1, 2008.
- ttt. FTA Master Agreement FTA MA(14), Oct. 1, 2007.
- uuu. FTA Guidance, “Eligibility of Joint Development Improvements Under Federal Transit Law,” 72 FR 5788, February 7, 2007.
- vvv. FTA ITS Policy, [http://www.fta.dot.gov/documents/FTA\\_ITS\\_Policy.pdf](http://www.fta.dot.gov/documents/FTA_ITS_Policy.pdf).
- www. FTA ECHO-Web System Operations Manual  
<http://www.fta.dot.gov/documents/ECHOWebGranteeUserManual.pdf>.

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**APPENDIX H**

**FTA REGIONAL AND METROPOLITAN CONTACT INFORMATION**

<b><u>Office</u></b>	<b><u>Area Served</u></b>	<b><u>Contact Information</u></b>
Region I	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont	Transportation Systems Center Kendall Square 55 Broadway, Suite 920 Cambridge, MA 02142-1093 Phone: 617-494-2055 Fax: 617-494-2865
Region II	New York and New Jersey	One Bowling Green Room 429 New York, NY 10004-1415 Phone: 212-668-2170 Fax: 212-668-2136
Region III	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia	1760 Market St Suite 500 Philadelphia, PA 19103-4124 Phone: 215-656-7100 Fax: 215-656-7260
Region IV	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee, and U. S. Virgin Islands	230 Peachtree Street NW Suite 800 Atlanta, GA 30303 Phone: 404-865-5600 Fax: 404-865-5605
Region V	Illinois, Indiana, Minnesota, Michigan, Ohio, and Wisconsin	200 W Adams St Suite 320 Chicago, IL 60606 Phone: 312-353-2789 Fax: 312-886-0351
Region VI	Arkansas, Louisiana, New Mexico, Oklahoma, and Texas	819 Taylor St Room 8A36 Forth Worth, TX 76102 Phone: 817-978-0550 Fax: 817-978-0575
Region VII	Iowa, Kansas, Missouri, and Nebraska	901 Locust, Suite 404 Kansas City, MO 64106 Phone: 816-329-3920 Fax: 816-329-3921

<b>Office</b>	<b>Area Served</b>	<b>Contact Information</b>
Region VIII	Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming	12300 W Dakota Ave. Suite 310 Lakewood, CO 80228-2583 Phone: 720-963-3300 Fax: 720-963-3333
Region IX	Arizona, California, Hawaii, Nevada, Guam, American Samoa, and Northern Mariana Islands	201 Mission St Room 1650 San Francisco, CA 94105-1839 Phone: 415-744-3133 Fax: 415-744-2726
Region X	Alaska, Washington, Oregon, and Idaho	Jackson Federal Building 915 Second Ave, Suite 3142 Seattle, WA 98174-1002 Phone: 206-220-7954 Fax: 206-220-7959
Lower Manhattan Recovery Office	Lower Manhattan	One Bowling Green, Room 436 New York, NY 10004 Phone: 212-668-1770 Fax: 212-668-2505
New York Metropolitan Office	New York Metropolitan Area	One Bowling Green, Room 428 New York, NY 10004-1415 Telephone: 212-668-2201 Fax: 212-668-2136
Philadelphia Metropolitan Office	Philadelphia Metropolitan Area	1760 Market Street, Suite 510 Philadelphia, PA 19103-4124 Telephone: 215-656-7070 Fax: 215-656-7269
Chicago Metropolitan Office	Chicago Metropolitan Office	200 West Adams Street Suite 2410 (24th floor) Chicago, IL 60606 Telephone: 312-886-1616 Fax: 312-886-0351
Los Angeles Metropolitan Office	Los Angeles Metropolitan Area	888 S. Figueroa, Suite 1850 Los Angeles, CA 90012 Telephone: 213-202-3950 Fax: 213-202-3961
Washington, DC Metropolitan Office	Washington, DC Metropolitan Area	1990 K Street NW Suite 510 Washington, DC 20006 Telephone: 202-219-3562/3565 Fax: 202-219-3545

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U.S. Department  
of Transportation

**Federal Transit  
Administration**

# CIRCULAR

**FTA C 4220.1F**

November 1, 2008

**Subject: THIRD PARTY CONTRACTING GUIDANCE**

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1. **PURPOSE.** This circular provides contracting guidance for recipients of Federal assistance awarded by the Federal Transit Administration (FTA) when using that Federal assistance to finance its procurements (third party contracts). This revision incorporates the new procurement provisions of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), and includes the most current available guidance for the Federal public transportation program as of the date of publication.
2. **CANCELLATION.** This circular cancels FTA Circular 4220.1E, "Third Party Contracting Requirements," dated 06-19-03.
3. **AUTHORITY.** Federal Transit Laws, Title 49, United States Code, Chapter 53.
4. **WAIVER.** FTA reserves the right to waive any provision of this circular to the extent permitted by Federal law or regulation.
5. **FEDERAL REGISTER NOTICE.** In conjunction with publication of this circular, a *Federal Register* notice was published on September 30, 2008 (73 FR 56896), addressing comments received during the development of the circular.
6. **AMENDMENTS TO THE CIRCULAR.** FTA reserves the right to update this circular due to changes in other revised or new guidance and regulations that undergo notice and comment, without further notice and comment on this circular. FTA will post updates on our Web site: <http://www.fta.dot.gov/>. The Web site allows the public to register for notification when FTA issues *Federal Register* notices or new guidance; visit the Web site and click on "Sign-up for e-mail updates."
7. **ACCESSIBLE FORMATS.** This document is available in accessible formats upon request. To obtain paper copies of this circular as well as information regarding these accessible formats, telephone FTA's Administrative Services Help Desk, 202-366-4865. Individuals with hearing impairments may contact the Federal Relay Service, 1-800-877-8339 for assistance with the call.

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James S. Simpson

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## **THIRD PARTY CONTRACTING GUIDANCE**

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## CHAPTER I

### INTRODUCTION AND ROLE OF THE FEDERAL TRANSIT ADMINISTRATION

1. THE FEDERAL TRANSIT ADMINISTRATION (FTA). FTA is one of ten modal administrations within the U.S. Department of Transportation (DOT) and is headed by an Administrator who is appointed by the President of the United States. FTA administers its programs and carries out its other activities through its headquarters office in Washington, DC, ten regional offices, and five metropolitan offices that assist public transportation agencies in all 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, Northern Mariana Islands, American Samoa, and in federally recognized Indian tribal areas.

Public transportation includes, but is not limited to, transportation by buses, subways, light rail, commuter rail, monorail, passenger ferry boats, trolleys, inclined railways, people movers, and vans. Public transportation may be either fixed-route or demand-response service. The Federal Government, through FTA, provides financial assistance to develop new public transportation systems and improve, maintain, and operate existing systems. FTA oversees thousands of federally assisted projects to hundreds of State and local public transportation providers, primarily through its ten regional offices. Each FTA recipient is responsible for managing its programs and projects in compliance with applicable Federal requirements, and FTA is responsible for ensuring that recipients comply with those requirements.

2. AUTHORIZING LEGISLATION. Most Federal transit laws are codified at 49 U.S.C. Chapter 53. Authorizing legislation is substantive legislation enacted by Congress that establishes or continues the legal operation of a Federal program or agency. Congress has amended FTA's authorizing legislation every four to six years. FTA's most recent authorizing legislation is the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Public Law 109-59, August 10, 2005, as amended by the SAFETEA-LU Technical Corrections Act, 2008, Public Law 110-244, June 6, 2008. SAFETEA-LU authorizes FTA programs from Federal Fiscal Year 2006 through Federal Fiscal Year 2009. Revisions to this edition of the circular encompass the SAFETEA-LU changes to Federal transit law and changes required by other laws that have become effective since FTA last issued this circular in 2003.
3. HOW TO CONTACT FTA. FTA's regional and metropolitan offices are responsible for providing financial assistance to FTA recipients and overseeing the implementation of most FTA programs. Certain programs, however, are the responsibility of FTA headquarters. You should direct inquiries to either the regional or metropolitan office responsible for the geographic area in which you are located. *See*, Appendix B for contact information.

For further information, visit the FTA Web site: <http://www.fta.dot.gov/>, or contact FTA headquarters at the following address and phone number:

Federal Transit Administration  
Office of Communication and Congressional Affairs  
1200 New Jersey Avenue, SE  
Washington, DC 20590  
Phone: 202-366-4043  
Fax: 202-366-3472

4. BACKGROUND. Because FTA awards such a substantial amount of Federal assistance to support public transportation through its grants and cooperative agreements, Federal laws and regulations require FTA to ensure that its recipients use that Federal assistance prudently and in compliance with all applicable Federal requirements. While FTA's enabling legislation includes several provisions governing recipient procurements financed with FTA assistance (third party contracts), other government-wide Federal requirements seek to ensure fair and economical procurements when Federal assistance is expended.
5. DEFINITIONS. All definitions in 49 U.S.C. Section 5302 apply to this circular. The following additional definitions are provided:
  - a. Approval, Authorization, Concurrence, Waiver means a deliberate written statement (transmitted in typewritten hard copy or in an electronic format or medium) of a Federal Government official authorized to permit the recipient to take or omit an action required by the Grant Agreement or Cooperative Agreement for the Project, Master Agreement, or this circular, which action may not be taken or omitted without such permission. Except to the extent that FTA determines otherwise in writing, such approval, authorization, concurrence, or waiver permitting the performance or omission of a specific action does not constitute permission to perform or omit other similar actions. An oral permission or interpretation has no legal force, authority, or effect.
  - b. Best Value describes a competitive, negotiated procurement process in which the recipient reserves the right to select the most advantageous offer by evaluating and comparing factors in addition to cost or price such that a recipient may acquire technical superiority even if it must pay a premium price. A "premium" is the difference between the price of the lowest priced proposal and the one that the recipient believes offers the best value. The term "best value" also means the expected outcome of an acquisition that, in the recipient's estimation, provides the greatest overall benefit in response to its material requirements. To achieve best value in the context of acquisitions for public transportation purposes, the evaluation factors for a specific procurement should reflect the subject matter and the elements that are most important to the recipient. While FTA does not mandate any specific evaluation factors, the recipient must disclose those factors in its solicitation. Evaluation factors may include, but are not limited to, technical design, technical approach, length of delivery schedules, quality of proposed personnel, past performance, and management plan. This definition is intended neither to limit nor to dictate qualitative measures a recipient may employ, except that they must support the purposes of the Federal public transportation program.

- c. Cardinal Change means a major deviation from the original purpose of the work or the intended method of achievement, or a revision of contract work so extensive, significant, or cumulative that, in effect, the contractor is required to perform very different work from that described in the original contract.
- d. Change Order means an order authorized by the recipient directing the contractor to make changes, pursuant to contract provisions for such changes, with or without the consent of the contractor.
- e. Common Grant Rules, for purposes of this circular, means:
  - (1) DOT regulations, “Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments,” 49 CFR Part 18, which apply to Federal grants and cooperative agreements with governmental recipients of Federal assistance including Indian tribal governments, and
  - (2) DOT regulations, “Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations,” 49 CFR Part 19, which apply to Federal grants and cooperative agreements with non-governmental recipients of Federal assistance.
- f. Constructive Change means an act or omission by the recipient that, although not identified by a “change order” does in fact cause a change in the contract work.
- g. Cooperative Agreement means an instrument by which FTA awards Federal assistance to a specific recipient to support a particular project in which FTA takes an active role or retains substantial control, as described in 31 U.S.C. Section 6305.
- h. Design-Bid-Build Project means a construction project under which a recipient commissions an architect or engineer to prepare drawings and specifications under a design services contract, and separately contracts for construction, by engaging the services of a contractor through sealed bidding or competitive negotiations to complete delivery of the project.
- i. Design-Build Project, as defined in 49 U.S.C. Section 5325(d)(1), means (1) a project under which a recipient enters into a contract with a seller, firm, or consortium of firms to design and build a public transportation system, or an operable segment of such system, that conforms to specific performance criteria; and (2) may include an option to finance, or operate for a period of time, the system or segment or any combination of designing, building, operating, or maintaining such system or segment. Apart from the definition at 49 U.S.C. Section 5325(d)(1), a “design-build project” also means a construction project under which a recipient enters into a contract with a seller, firm, or consortium of firms both to design and construct a public transportation facility that is the subject of the project.

- j. Electronic Commerce (E-Commerce) consists of electronic techniques for accomplishing business transactions including electronic mail or messaging, world wide web internet technology, electronic bulletin boards, purchase cards, electronic funds transfer, electronic signatures, and electronic data interchange.
- k. Force Account means the recipient's own labor forces and equipment, as discussed in this circular in the context of performing project work.
- l. FTA means the Federal Transit Administration.
- m. Full and Open Competition means that all responsible sources are permitted to compete.
- n. Governmental Recipient means a recipient that must comply with the Common Grant Rule at 49 CFR Part 18. This includes a State or local government or a federally recognized Indian tribal government, as defined in this section of this Chapter.
- o. Grant means the instrument by which FTA awards Federal assistance to a specific recipient to support a particular project in which FTA does not take an active role or retain substantial control, as described in 31 U.S.C. Section 6304.
- p. Indian Tribal Government means the governing body or a governmental agency of any Indian tribe, band, nation, or other organized group or community, including any Native village as defined in Section 3 of the Alaska Native Claims Settlement Act, 43 U.S.C. Section 1602, certified by the Secretary of the Interior as eligible for the special programs and services provided by him or her through the Bureau of Indian Affairs.
- q. Joint Procurement (sometimes informally referred to as "cooperative procurement") means a method of contracting in which two or more purchasers agree from the outset to use a single solicitation document and enter into a single contract with a vendor for delivery of property or services in a fixed quantity, even if expressed as a total minimum and total maximum. Unlike a State or local government purchasing schedule or contract, a joint procurement is not drafted for the purpose of accommodating the needs of other parties that may later choose to participate in the benefits of that contract.

We recognize that some will use the term "cooperative procurement" informally to refer to arrangements we designate "joint procurement." We also recognize that this may cause confusion with the very different arrangements for the General Services Administration's (GSA) "Cooperative Purchasing Program" and with similar State or local government purchasing programs that the State or local government might refer to as "cooperative."

- r. Local Government means a county, municipality, city, town, township, local public authority (including any public and Indian housing agency under the United States Housing Act of 1937) school district, special district, intrastate district, council of

governments (whether or not incorporated as a nonprofit corporation under state law), any other regional or interstate government entity, or any agency or instrumentality of a local government. This term does not include a local public institution of higher education.

- s. Master Agreement means the FTA document incorporated by reference and made part of FTA's standard grant agreements and cooperative agreements that contains the standard terms and conditions governing the administration of a project supported with Federal assistance awarded by the FTA.
- t. Non-Governmental Recipient means a recipient that must comply with the Common Grant Rule at 49 CFR Part 19. This includes a public and private institution of higher education, a public or private hospital, and any other quasi-public and private nonprofit organization such as, but not limited to, a community action agency, research institute, educational association, and health center. FTA reserves the right to apply the requirements of 49 CFR Part 19 to a commercial organization, a for-profit organization, a foreign or international organization (such as an agency of the United Nations), and an individual. The term does not include a government-owned contractor-operated facility or research center providing continued support for mission-oriented, large-scale programs that is government-owned or controlled, or is designated as federally funded research and development center.
- u. Project Labor Agreement (PLA) means an agreement between the contractor, subcontractors, and the union(s) representing workers. Under a PLA, the contractor and subcontractors on a project and the union(s) agree on terms and conditions of employment for the project, establishing a framework for labor-management cooperation to advance the buyer's procurement interest in cost, efficiency, and quality.
- v. Property, as used in this circular, includes real property consisting of land and buildings, structures, or appurtenances on land, equipment, supplies, other expendable property, intellectual property, and intangible property.
- w. Public Transportation means transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include schoolbus, charter, sightseeing, or intercity bus transportation, or intercity passenger rail transportation provided by the entity described in 49 U.S.C. Chapter 243, AMTRAK, (or a successor to such entity).
- x. Recipient means the public or private entity to which FTA awards Federal assistance through a grant, cooperative agreement, or other agreement. The recipient is the entire legal entity even if only a particular component of the entity is designated in the document through which FTA has awarded Federal assistance. The term "recipient" includes "grantee," which is a "recipient" of Federal grant assistance. The term "recipient" also includes each member of a consortium, joint venture, team, or partnership awarded FTA assistance through a grant, cooperative agreement, or other agreement.

For the purposes of this circular, “recipient” also includes any subrecipient or subgrantee of the recipient. Furthermore, a recipient is responsible for assuring that each of its subrecipients complies with the applicable requirements and standards of this circular, and that each of its subrecipients is aware of the Federal statutory and regulatory requirements that apply to its actions as a subrecipient.

Neither a third party contractor nor a third party subcontractor is a “recipient” for purposes of this circular.

- y. Revenue Contract means a contract in which the recipient or subrecipient provides access to public transportation assets for the primary purpose of either producing revenues in connection with a public transportation related activity, or creating business opportunities involving the use of FTA assisted property.
- z. State means a State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands or any agency or instrumentality of a State exclusive of local governments. “State” does not include any public and Indian housing agency under the United States Housing Act of 1937.
- aa. State or Local Government Purchasing Schedule or Purchasing Contract means an arrangement that a State or local government has established with multiple vendors in which those vendors agree to provide essentially an option to the State or local government, and its subordinate government entities and others it might include in its programs, to acquire specific property or services in the future at established prices. These arrangements are somewhat similar to the GSA’s Cooperative Purchasing Program available for Federal Government use. If, at a later date, the State or local government permits others to use its schedules, the State or local government might seek the agreement of the vendor to provide the listed property or services to others with access to the schedules. In the alternative the State or local government establishing the schedules might permit the vendor to determine whether or not it wishes to provide others the same contractual arrangement it affords the State or local government that has established the schedules.

We recognize that some will use the term “cooperative” in reference to these State and local programs, possibly because they are somewhat similar to GSA’s “Cooperative Purchasing Program.” These programs are distinct from “Joint Procurement” as defined this Chapter.

- bb. Third Party Contract refers to a recipient’s contract with a vendor or contractor, including procurement by purchase order or purchase by credit card, which is financed with Federal assistance awarded by FTA.
- cc. Unsolicited Proposal means a proposal that is:
  - (1) Innovative and unique,

- (2) Independently originated and developed by the offeror,
- (3) Prepared without the recipient's supervision, endorsement, direction, or direct involvement,
- (4) Sufficiently detailed that its benefits in support of the recipient's mission and responsibilities are apparent,
- (5) Not an advance proposal for property or services that a recipient could acquire through competitive methods, and
- (6) Not an offer responding to a recipient's previously published expression of need or request for proposals.

dd. Value Engineering means the systematic application of recognized techniques that identify the function of a product or service, establish a value for that function, and provide the necessary function reliably at the lowest overall cost. In all instances, the required function should be achieved at the lowest possible life-cycle cost consistent with requirements for performance, maintainability, safety, security, and aesthetics.

6. FTA'S ROLE. Consistent with the Common Grant Rules' directions to Federal agencies not to substitute their judgment for that of their recipients, FTA does not substitute its judgment for that of its recipients by making third party contract decisions for its recipients. FTA's role in third party procurements complies with the principles of Executive Order No. 13132, "Federalism," August 4, 1999, 5 U.S.C. Section 601 note. The Executive Order directs Federal agencies to refrain from substituting their judgment for that of their State recipients unless the matter is primarily a Federal concern and, to the maximum extent feasible, to permit the States to establish their own standards rather than impose national standards.

To ensure compliance with Federal procurement requirements applicable to FTA projects, FTA will continue to provide guidance and technical assistance to its recipients consistent with its Federal oversight responsibilities.

- a. Reliance on the Recipient's Self-Certification. FTA recognizes that most FTA recipients have experience with the third party contracting requirements of the Common Grant Rules. Therefore, FTA will rely primarily on the recipient's annual "self-certification" (usually submitted in the first quarter of each Federal fiscal year) that its procurement system complies with FTA requirements and that the recipient has the technical capacity to comply with Federal procurement requirements. FTA requests each recipient to "self-certify" its procurement system as part of its Annual Certifications and Assurances.

To preclude unnecessary delay of recipient procurements, FTA generally does not conduct preaward reviews of third party contracts or contract specifications as envisioned in the Common Grant Rules, 49 CFR Section 18.36(g)(2) and

49 CFR Section 19.44(e). Instead, FTA relies heavily on the recipient's self-certification of its procurement system.

FTA, however, will review compliance with this circular as part of its routine oversight responsibilities. If FTA becomes aware of circumstances that might invalidate a recipient's self-certification, FTA will investigate and recommend appropriate measures to correct the recipient's deficiencies.

- b. Third Party Contract Reviews. Although authorized by the Common Grant Rules to conduct preaward reviews, FTA relies on the validity of each recipient's self-certification rather than on a preaward review of third party contracts. FTA will rely on periodic, post-award reviews to ensure that the recipient complies with Federal requirements and standards. Should a recipient fail to self-certify its procurement system, however, FTA reserves the right to conduct preaward reviews as provided by the Common Grant Rules. Even if a recipient self-certifies its procurement system, the recipient still may request FTA's preaward review of specific procurements as part of FTA's technical assistance program. Conversely, if FTA seeks to review the record of a particular procurement, the recipient must make its procurement documents available for FTA's preaward or post-award review.
- c. Procurement System Reviews. Under 49 U.S.C. Section 5307(i), a recipient may request that the Secretary approve its procurement system, and FTA may approve that procurement system if it complies with Federal requirements. As required by 49 U.S.C. Section 5307(h), FTA must perform reviews and evaluations of the Urbanized Area Formula Program and perform a full review and evaluation of the performance of each recipient in carrying out Federal assistance through FTA's Urbanized Area Formula Programs with specific reference to their compliance with statutory and administrative requirements.

Accordingly, FTA will perform procurement system reviews as part of its on-going project oversight responsibilities and will perform procurement system reviews for Urbanized Area Formula Program recipients that self-certify their procurement systems. To assist the recipient in improving its procurement practices, FTA may recommend certain "best practices." In those situations, FTA will identify its recommendations as "advisory." For more information, see FTA's "Procurement Reviews," guidance at the FTA Web site:

**[http://www.fta.dot.gov/funding/oversight/grants\\_financing\\_100.html](http://www.fta.dot.gov/funding/oversight/grants_financing_100.html)**.

- d. Audits. FTA may perform, contract for, or instruct the recipient to obtain specific audits of particular third party contracts to determine whether payments were made in conformance with the terms of the contract, or for other purposes.
- e. Training and Technical Assistance. FTA provides procurement training and technical assistance at both regional and national levels by offering various instructional courses, by conducting regional technical assistance conferences, and by providing assistance by a contractor as needed.

- f. Master Agreement. From the inception of its electronic award system in Fiscal Year 1994, FTA has incorporated by reference and made part of each FTA grant and FTA cooperative agreement a Master Agreement that FTA issues annually. Along with the standard terms and conditions governing an FTA assisted project, the most recent FTA Master Agreement, typically issued at the beginning of each Federal fiscal year, contains references to substantially all FTA and other cross-cutting Federal laws and regulations that may apply to a federally assisted project. Many of these Federal requirements will need to be included in third party contracts to the lowest tier necessary, and others will have a direct or indirect effect on the recipient's third party contracts.
- g. "Best Practices Procurement Manual.(BPPM)" FTA's "Best Practices Procurement Manual" (BPPM) provides suggested procedures, methods, and examples to advise a recipient how it might conduct its third party procurements in compliance with Federal laws and regulations and FTA Circular 4220.1F guidance. These procedures, methods, and examples are based on the Federal acquisition process, Comptroller General Decisions, and "Best Practices" of recipients of FTA assistance and others in the industry, and FTA encourages recipients to adopt them as needed. Although the BPPM can be a good resource for the recipient to use in conducting FTA assisted procurements, it is not the source of any FTA or Federal requirements and, as such, is not binding on FTA recipients although the underlying Federal laws and regulations from which the BPPM's advice and recommendations are derived will apply. As such, the text of the BPPM is not and should not be treated as an official description of any FTA or Federal requirement. Moreover, while FTA does revise and update the BPPM periodically, FTA cautions each recipient that relying solely on the BPPM may not ensure compliance with all applicable FTA and Federal requirements. You can obtain access to the BPPM at the FTA Web site:  
**[http://www.fta.dot.gov/funding/thirdpartyprocurement/grants\\_financing\\_6037.html](http://www.fta.dot.gov/funding/thirdpartyprocurement/grants_financing_6037.html)**.
- h. Third Party Procurement Helpline. This Helpline at the FTA Web site provides another resource through which you may submit your third party contracting questions to FTA. To do so, access the FTA Web site:  
**[http://www.fta.dot.gov/funding/thirdpartyprocurement/grants\\_financing\\_6040.html](http://www.fta.dot.gov/funding/thirdpartyprocurement/grants_financing_6040.html)**.
- i. "Frequently Asked Questions." To review the Frequently Asked Questions pertaining to third party contracting, access the FTA Web site:  
**[http://www.fta.dot.gov/funding/thirdpartyprocurement/grants\\_financing\\_6039.html](http://www.fta.dot.gov/funding/thirdpartyprocurement/grants_financing_6039.html)**.
- j. FTA Offices. You may also contact your FTA regional or metropolitan office or FTA's Office of Administration for assistance. You can find a list of FTA's regional and metropolitan offices in Appendix B of this document.

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## CHAPTER II

### APPLICABILITY

1. LEGAL EFFECT OF THE CIRCULAR. The Federal Transit Administration (FTA) has developed this circular to assist its recipients and their subrecipients in complying with the various Federal laws and regulations that affect their FTA assisted procurements. FTA considers this circular, in its entirety, to be a guidance document. While this guidance itself does not have the force and effect of Federal law or regulation, it does contain information about Federal laws and regulations for which compliance is mandatory when applicable.

As guidance, this circular attempts to describe how a recipient or subrecipient of FTA assistance can comply with those Federal requirements. In some cases, this guidance describes the single method by which an FTA recipient or subrecipient can comply with a specific Federal legal or regulatory requirement. In other cases, Federal laws, regulations, and this guidance provide more flexibility. As guidance, this circular also expresses FTA's preferences about how the procurements it supports should be undertaken. FTA's Master Agreement reflects FTA and the recipient's agreement that FTA's third party contracting circular will apply to its third party contracts. As a guidance document, it does not waive any requirements of Federal statutes or regulations restated herein except as permitted by their terms.

Because the circular is guidance, FTA is willing to consider methods of compliance with Federal laws and regulations other than those described in this circular. If a recipient identifies an alternative method for complying with an applicable Federal statute and regulation, it may contact FTA before employing that method to ensure that FTA agrees with the alternative proposed. While FTA's prior concurrence is not required, FTA reserves the right to decline to participate in the costs of third party procurements that fail to comply with Federal laws, regulations, or the terms of the recipient's underlying grant or cooperative agreement.

2. APPLICABILITY OF THE CIRCULAR. Unless FTA determines otherwise in writing, this guidance applies when the recipient uses FTA assistance to support its procurements.
  - a. Participants in FTA Assisted Procurements. Whether and how the circular applies to a specific participant in an FTA assisted project depends on its relationship to the particular FTA assisted procurement:
    - (1) Recipients of FTA Grants or Cooperative Agreements. The circular applies to each FTA recipient of Federal assistance, including each grantee and each recipient of Federal assistance under a cooperative agreement or an "other agreement" (whether an individual entity or member of a consortium, joint venture, team, or partnership) when it uses FTA assistance for third party contracts. The extent to

which the provisions of this circular apply to a recipient depends on whether the recipient is a State or other than a State.

- (a) States. When procuring property and services under a grant or cooperative agreement, a State may use the same procurement policies and procedures that it uses for acquisitions not financed with Federal assistance. At a minimum, the State must comply with the federally mandated requirements on contract term limitations for revenue vehicle purchases, competition, prohibitions against geographic preferences, procurement of architectural engineering (A&E) services, and awards to responsible contractors. The State must also ensure that each purchase order and contract financed with FTA assistance includes all provisions required by Federal statutes and their implementing regulations.
  - 1 Governmental Subrecipients of the State. Each State and its governmental subrecipients may use State procurement procedures for their third party contracts. Only those provisions of this circular and Department of Transportation (DOT) regulations, "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments," 49 CFR Part 18, applicable to the State will apply to procurements by the State's governmental subrecipients.
  - 2 Private Non-Profit Subrecipients of the State. In contrast, the provisions of this circular and DOT regulations, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations," 49 CFR Part 19, will apply to a private non-profit subrecipient of a State.
- (b) Recipients and Subrecipients that are not States. This circular applies to third party contracts and subcontracts of all other FTA recipients and their subrecipients, including regional public transportation authorities, that are not a State. Even though a recipient or subrecipient is not a State, it may use its own procurement procedures, if those procedures conform to applicable Federal law and regulations, including the applicable Common Grant Rule.
  - (2) Subrecipients of FTA Assistance. This circular also applies to each subrecipient, including each subgrantee (a type of subrecipient), under an FTA grant or cooperative agreement) that enters into contracts with other parties financed with FTA assistance.
  - (3) Recipients of Both Federal Assistance Awarded by FTA and Funds Provided by Another Federal Agency. An FTA recipient that also uses funding provided by another Federal agency or agencies for a third party procurement also supported with FTA assistance must comply with the third party contracting requirements of both FTA and each additional Federal agency providing Federal assistance. If compliance with all Federal requirements is impossible, the recipient should notify

the FTA Chief Counsel for resolution. If an FTA recipient finances an acquisition with funding provided by another Federal agency but not with FTA assistance, this circular would not apply to that procurement.

- (4) Recipients of “Other Agreement” Assistance. For “other agreements” authorized by 49 U.S.C. Section 5312(a) for research, development, demonstration, and deployment projects and 49 U.S.C. Section 5312(b) for joint partnership projects for the deployment of public transportation innovation, this circular may be used as an initial starting point from which to consider Federal requirements and other provisions that should be adopted, and other Federal requirements that should be modified or waived to achieve FTA’s and the recipient’s objectives.
- (5) Third Party Contractors and Subcontractors.
  - (a) Status. Neither third party contractors nor third party subcontractors are “recipients” or “subrecipients” for purposes of this circular. Consequently, third party contractors are not directly covered by this circular, the Common Grant Rule at 49 CFR Parts 18 and 19, or FTA’s “Best Practices Procurement Manual” (BPPM) in awarding their subcontracts.
  - (b) Effect of Federal Requirements. However, each third party contractor and subcontractor is required to comply with the terms of its third party contract or subcontract, including requirements to extend those federally required clauses and provisions to its subcontractors at the lowest tier required. For that reason, this circular, the Common Grant Rules at 49 CFR Parts 18 and 19, and the BPPM do provide useful information to a third party contractor and third party subcontractor about the constraints under which a recipient may enter into a third party contract financed with FTA assistance.
- b. Project Types and Third Party Contracts. With limited exceptions, FTA’s Master Agreement reflects FTA and the recipient’s agreement that FTA’s third party contracting circular will apply to its third party contracts. The extent to which this circular applies to a recipient’s contract depends on the character of that contract and the project which it supports.
  - (1) Capital Contracts. The provisions of this circular apply to most third party capital contracts except as listed below:
    - (a) Capital Contracts Financed Entirely Without Federal Assistance. The provisions of this circular do not apply to a recipient’s capital contracts that can be demonstrated to be entirely financed without FTA assistance or other Federal funds even if those contracts supplement an FTA assisted capital project.
    - (b) Art. Procurements of art are beyond the scope of this circular. FTA Circular 9400.1A, “Federal Transit Administration Design and Art in Transit Projects,”

dated 06-09-95, provides guidance on the acquisition of art. In addition, FTA's "Best Practices Procurement Manual" includes extensive non-binding suggestions and advice on implementing FTA Circular 9400.1A and related provisions.

- (c) Over-the-Road Bus Accessibility Program. Section 3038 of TEA-21, as amended by Section 3039 of SAFETEA-LU, 49 U.S.C. Section 5310 note, authorizes the Over-the-Road Bus Accessibility Program to provide Federal assistance to private for-profit companies for the incremental costs of wheelchair lift equipment and the necessary training to implement DOT's accessibility requirements for over-the-road buses. FTA has determined that the provisions of this circular and the Common Grant Rules do not apply to the acquisition of FTA assisted property or services under that program. As a result, FTA's annual notice of availability of funds for that program does not refer to Common Grant Rule procurement requirements or this circular. The provisions of this circular and the Common Grant Rule at 49 CFR Part 19, however, apply to any over-the-road buses and related equipment for them acquired under another FTA program.
- (d) Real Property. Procurements of real property consisting of land and any existing buildings and structures on that land are generally beyond the scope of this circular. Real property acquisition is addressed in DOT regulations, "Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs," 49 CFR Part 24, which provide protections for owners and lessees of real property to be acquired as part of an FTA assisted project. For further guidance, see the most recent edition of FTA Circular 5010.1, "Grant Management Guidelines."

The third party contracting provisions of this circular, however, do apply to FTA assisted construction of buildings, structures, or appurtenances that were not on land to be used for the project when that land was acquired. The third party contracting provisions of this circular also apply to any alterations or repairs to buildings or structures existing on that land when that land was acquired or made available for the FTA assisted project.

- (2) Operations Contracts. FTA has reviewed its policies with respect to operations procurements undertaken by FTA recipients and their subrecipients and has adopted the following policies:
  - (a) Operations Contracts Financed With FTA Assistance. The provisions of this circular continue to apply to contracts in support of a recipient's or subrecipient's operations financed with FTA assistance.
  - (b) Operations Contracts Financed Entirely Without FTA Assistance. FTA has determined that its third party contracting requirements will not apply to operations contracts that recipients and their subrecipients finance entirely

without FTA assistance. Notwithstanding any other provision of this circular, however, a recipient that enters into third party contracts for operations or planning must comply with the requirements of DOT regulations, “Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs,” 49 CFR Part 26, applicable to those contracts, regardless of how or whether it intends to use its FTA assistance for contracts or other purposes. Specifically, a recipient required to have a Disadvantaged Business Enterprise (DBE) program may not structure its operations expenditures so that an unreasonable proportion of contracts that could be performed by DBEs are removed from its DBE program. Other Federal regulations issued by FTA, DOT, or other Federal agencies may also apply a third party contractor, either directly as a covered entity or when the third party contractor is expected to perform activities on behalf of another entity or the Federal Government.

- (3) Preventive Maintenance Contracts. Third party contracts for preventive maintenance are eligible for FTA capital assistance. This circular applies to a recipient’s preventive maintenance contracts financed with FTA assistance. If a recipient uses its FTA assistance to support specific preventive maintenance contracts that are separate and distinct from its other maintenance or operations contracts, and if, through its accounting procedures, a recipient can allocate and trace all its Federal assistance for capital preventive maintenance to those separate and distinct preventive maintenance contracts, this circular applies only those specific FTA assisted contracts. If, however, the recipient applies its Federal capital assistance for preventive maintenance as a percentage of its total maintenance costs, and the recipient cannot allocate all of its Federal assistance for capital maintenance to specific preventive maintenance contracts that are separate and distinct from its other maintenance or operations contracts, this circular applies to all the recipient’s preventive maintenance contracts, even if specific maintenance or operations contracts were financed wholly without FTA assistance.
- (4) Revenue Contracts. A revenue contract is a contract in which the recipient or subrecipient provides access to public transportation assets for the primary purpose of either producing revenues in connection with an activity related to public transportation, or creating business opportunities with the use of FTA assisted property. The recipient has broad latitude in determining the extent and type of competition appropriate for a particular revenue contract. Nevertheless, to ensure fair and equal access to FTA assisted property and to maximize revenue derived from such property, the recipient should conduct its revenue contracting as follows:
  - (a) Limited Contract Opportunities. If there are several potential competitors for a limited opportunity (such as advertising space on the side of a bus), then the recipient should use a competitive process to permit interested parties an equal chance to obtain that limited opportunity.

- (b) Open Contract Opportunities. If, however, one party seeks access to a public transportation asset (such as a utility that might seek cable access in a subway system), and the recipient is willing and able to provide contracts or licenses to other parties similarly situated (since there is room for a substantial number of such cables without interfering with transit operations), then competition would not be necessary because the opportunity to obtain contracts or licenses is open to all similar parties.

In the case of joint development, as explained below, FTA will work with the recipient to determine appropriate procedures, as necessary.

- (5) Joint Development. Many public transportation agencies form partnerships with the private sector in order to promote real estate development in and around transit facilities, which is often referred to as “joint development.” Although FTA joint development projects are primarily a means to provide private capital to transit projects, joint development projects combine aspects of federally assisted construction and revenue contracting. FTA has published joint development guidance, including third party contracting guidance in a “Notice of Final Agency Guidance on the Eligibility of Joint Development Improvements under Federal Transit Law,” 72 FR 5788, February 7, 2007. Section VI of the Joint Development guidance addresses FTA’s third party contracting requirements.
  - (a) Construction Contracts. This circular applies to FTA assisted construction aspects of a joint development project.
  - (b) Revenue Contracts. FTA will work with the recipient on a case-by-case basis to craft approaches suitable for revenue contracts as defined in this circular. FTA’s concern is that procedures used satisfy Federal statutory and regulatory requirements for competition while preserving the benefits of joint development to the maximum possible extent.
  - (c) Other Contracts. If a contract between a recipient and a third party involving a joint development project is not a construction contract or a revenue contract as defined in this circular, then that contract is not covered by FTA’s third party contracting provisions. For example, third party contracts to manage, operate, or maintain intercity bus or intercity rail terminals, or tenancy agreements with third party intercity bus or intercity rail operators are the types of operations contracts not covered by FTA’s third party contracting provisions. Nevertheless, even in situations not covered by the third party contracting provisions, FTA generally favors full and open competition.
- (6) Public-Private Partnerships. A Public-Private Partnership (PPP) is a formal contractual arrangement between a public recipient and one or more private partners establishing a mechanism for procuring property and services under which the private sector assumes some of the public sector’s customary role in the planning, financing, design, construction, operation, and maintenance of a

transportation facility compared to traditional procurement methods, many of which activities are generally controlled by the public sector partner. As part of FTA's interest in fostering PPPs, FTA is considering which procurement and other requirements may be modified to simplify project implementation, including procurement requirements that are redundant with private sector safeguards, incentives, and obligations. While a recipient that has not formed a PPP may use some of the contract delivery arrangements or project delivery systems listed below, FTA is considering the implications for PPPs that use the following types of contracting delivery arrangements or project delivery systems, including, but not limited to:

- (a) Design-Build,
- (b) Design-Build with a Warranty,
- (c) Construction Manager at Risk,
- (d) Design-Build-Operate-Maintain,
- (e) Design-Build-Finance-Operate,
- (f) Build-Operate-Transfer,
- (g) Build-Own-Operate, and
- (h) Full Delivery or Program Management.

For a description of these types of PPPs, see FTA "Notice of establishment of Public-Private Partnership Pilot Program; solicitation of applications," 72 FR 2583, esp. 2584, 2585-2591, January 19, 2007.

As a starting point, FTA expects the parties to the PPP to apply the requirements of this circular to FTA assisted projects they undertake. A PPP recipient seeking an exception from specific provisions of this circular should contact the FTA Project Manager. FTA will work with the recipient to craft processes as necessary to satisfy the statutory and regulatory requirements for competition when FTA assistance is used while preserving the benefits of the innovative contracting strategy proposed to the maximum possible extent.

- (7) Transactions Involving Complex Financial Arrangements. If a public transportation project involves the services of an "arranger" or similar facilitator, and those services will be financed with Federal assistance or the proceeds from the use of property supported with FTA assistance, FTA expects the recipient to use competitive procedures to select the "arranger." If, however, a public transportation project involves the services of an "arranger" or similar facilitator whose services will not be financed with Federal assistance or the proceeds from

the use of property acquired with FTA assistance, FTA encourages, but does not require, competition in the selection of that arranger.

FTA also encourages the recipient to impose whatever conflict of interest provisions in its contract with the arranger the recipient may believe desirable. After the arranger is selected and then develops a transaction involving FTA assisted assets, FTA requires competition to the extent permissible in view of the limitations of securities regulations.

(8) Force Account. FTA third party contracting guidance does not apply to a recipient's use of its own forces to perform project work.

3. FEDERAL LAWS AND REGULATIONS. Each recipient and subrecipient must comply with applicable Federal laws and regulations including, but not limited to, Federal transit laws at 49 U.S.C. Chapter 53, FTA regulations, and other Federal laws and regulations that contain requirements applicable to FTA recipients and their FTA assisted procurements.

a. Common Grant Rules. The following government-wide regulations (frequently referred to as the "Common Grant Rules") contain the most comprehensive Federal requirements applicable to FTA's assistance programs:

- (1) Governmental Recipients. DOT regulations, "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments," 49 CFR Part 18, apply to governmental recipients (apart from institutions of higher education) and Indian tribes, and
- (2) Non-Governmental Recipients. DOT regulations, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations," 49 CFR Part 19, apply to private non-profit entities, institutions of higher education and, if FTA so determines, to private for-profit organizations.

b. Federal Acquisition Regulation. The Federal Acquisition Regulation (FAR), 48 CFR Chapter 1, does not apply to federally assisted procurements, absent Federal laws or regulations to the contrary. In the case of FTA programs, FAR cost principles Part 31 apply to grants and cooperative agreements with private for-profit entities. Audits of A&E services listed in 49 U.S.C. Section 5325 must be carried out under FAR Part 31 cost principles. Nevertheless, in the absence of other guidance, FAR standards may prove useful if the recipient's circumstances are suitable for application of the specific FAR provision under consideration.

c. Other Federal Requirements. In addition to the Common Grant Rules, each FTA recipient must comply with applicable Federal transit laws and implementing regulations not addressed in the Common Grant Rules, and with other Federal cross cutting statutes and regulations that affect what a recipient may acquire.

- (1) Compilation in the Master Agreement. Citations to most Federal requirements are included in the latest edition of FTA's Master Agreement, typically issued at the beginning of each Federal fiscal year, which includes comprehensive information about Federal laws and regulations that may apply to an FTA assisted project. FTA strongly encourages participants in FTA assisted projects to review the Master Agreement when making its procurement decisions. *See*, Chapter I, subsection 6.f of this circular for additional information about the Master Agreement.
  - (2) Conflicting Federal Requirements. Requirements of the various Federal agencies that may be involved in the project will sometimes differ, with the result that FTA expects the recipient to comply with all those differences. If compliance with all applicable Federal requirements is impossible, the recipient should notify the FTA Chief Counsel for resolution.
- d. Waivers. Requests for waivers of Federal requirements should be addressed to the Federal Transit Administrator.
4. STATE AND LOCAL LAWS AND REGULATIONS. The Common Grant Rules provide that recipients and subrecipients will use their own procurement procedures that comply with applicable State and local laws and regulations, and also comply with applicable Federal laws and regulations.
- a. Inadequate State and Local Requirements. If State or local laws or regulations do not address a particular aspect of procurement adequately, Federal direct procurement principles may often (but not always) provide useful guidance.
  - b. Conflicts Between Federal Requirements and State or Local Requirements. If Federal requirements conflict with State or local requirements, the recipient should provide written notification promptly to either the FTA Regional Counsel for the region in which the project takes place or the FTA Assistant Chief Counsel for General Law in the case of projects administered by FTA headquarters staff. FTA will then work with the recipient to make appropriate arrangements to proceed with the project. If unsuccessful, then FTA reserves the right to amend or terminate Federal assistance for the underlying Project.

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## CHAPTER III

### THE RECIPIENT'S RESPONSIBILITIES

1. WRITTEN STANDARDS OF CONDUCT. The Common Grant Rules require each recipient to maintain written standards of conduct governing the performance of its employees engaged in the award and administration of contracts.
  - a. Personal Conflicts of Interest. As provided in the Common Grant Rules and the Federal Transit Administration (FTA) Master Agreement, no employee, officer, agent, or board member, or his or her immediate family member, partner, or organization that employs or is about to employ any of the foregoing may participate in the selection, award, or administration of a contract supported with FTA assistance if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when any of those previously listed has a financial or other interest in the firm selected for award.
  - b. Gifts. The recipient's officers, employees, agents or board members may neither solicit nor accept gifts, gratuities, favors, or anything of monetary value from contractors, potential contractors, or parties to subagreements. The recipient may set minimum rules when the financial interest is not substantial or the gift is an unsolicited item of nominal intrinsic value.
  - c. Violations. To the extent permitted by State or local law or regulations, such standards of conduct will provide for penalties, sanctions, or other disciplinary action for violation of such standards by the recipient's officers, employees, agents, board members, or by contractors or subrecipients or their agents.
2. SELF-CERTIFICATION. FTA expects each recipient to self-certify that its procurement system complies with Federal requirements for any FTA assisted third party contract the recipient undertakes and administers.
3. THIRD PARTY CONTRACTING CAPACITY. As part of an FTA recipient's obligation to maintain adequate technical capacity to carry out its project and comply with the Common Grant Rules, the recipient's third party contracting capability must be adequate to undertake its procurements effectively and efficiently in compliance with applicable Federal, State, and local requirements. The Common Grant Rules require the recipient to maintain a contract administration system to ensure that it and its third party contractors comply with the terms, conditions, and specifications of their contracts or purchase orders and applicable Federal, State and local requirements. Many FTA recipients assign contracting duties to technical, financial or management personnel. If the recipient lacks qualified personnel within its organization to undertake the various procurement tasks, such as drafting specifications, evaluating contracts, or performing internal audits for the recipient, FTA expects the recipient to acquire the necessary services from sources outside the recipient's organization. When using outside sources, the recipient should take appropriate steps to prevent or mitigate organizational conflicts of interest that would result

in conflicting roles that might bias a contractor's judgment or would result in unfair competitive advantage.

- a. Written Procurement Procedures. The Common Grant Rule for non-governmental recipients requires the recipient to have written procurement procedures, and by implication, the Common Grant Rule for governmental recipients requires written procurement procedures as a condition of self-certification. The recipient's procurement procedures are expected to address:
  - (1) Solicitations. The following standards apply to solicitations:
    - (a) Clear Descriptions. A clear and accurate description of the technical requirements for the material, product, or service to be procured is required (discussed further in Chapter VI of this circular).
    - (b) Nonrestrictive Specifications. In competitive procurements, the description may not contain features that unduly restrict competition. Notably, FTA may not finance procurements that use exclusionary or discriminatory specifications (discussed further in Chapter VI of this circular).
    - (c) Quality Requirements. A description may include a statement of the qualitative nature of the material, product, or service to be procured and when necessary, describe minimum essential characteristics and standards to which the property or services must conform if it is to satisfy its intended use (discussed further in Chapter VI of this circular).
    - (d) Preference for Performance Specifications. The Common Grant Rule for governmental recipients advises the recipient that "[d]etailed product specifications should be avoided if at all possible." The Common Grant Rule for non-governmental recipients advises the recipient to describe technical requirements in terms of "functions to be performed or performance required, including the range of acceptable characteristics or minimum acceptable standards" (discussed further in Chapter VI of this circular).
    - (e) Brand Name or Equal. When it is impractical or uneconomical to write a clear and accurate description of the technical requirements of the property or services to be acquired, a "brand name or equal" description may be used to define the performance or other salient characteristics of the property or services sought. The specific features or salient characteristics of the named brand which must be met by offerors of "an equal" proposal must be clearly stated (discussed further in Chapter VI of this circular).

The Common Grant Rule for non-governmental recipients further requires (and governmental recipients should have) written procurement procedures that address:

- (2) Necessity. The recipient's need for the property or services (discussed further in Chapter VI of this circular).
- (3) Lease Versus Purchase. The use of lease or purchase alternatives to achieve an economical and practical procurement (discussed further in Chapter VI of this circular).
- (4) Metric Usage. The acceptance, to the extent practicable and economically feasible, of products and services dimensioned in the metric system of measurement (discussed further in Chapter IV of this circular).
- (5) Environmental and Energy Efficiency Preferences. A preference, to the extent practicable and economically feasible, for products and services that conserve natural resources, protect the environment, and are energy efficient (discussed further in Chapter IV of this circular).

The recipient's procurement procedures should also address the following matters:

- (6) Procurement Methods. What procurement methods may be used (discussed further in Chapter VI of this circular).
  - (7) Legal Restrictions. Any Federal, State, or local restrictions on the recipient's acquisitions (discussed further in Chapter IV of this circular).
  - (8) Third Party Contract Provisions. The specific third party contract provisions required for each third party contract including requirements that each third party contractor extend those provisions to its subcontractors to the extent required (discussed further in Chapter IV of this circular).
  - (9) Sources. The availability and use of various sources of property and services (discussed further in Chapter V of this circular).
  - (10) Resolution of Third Party Contracting Issues. Procedures to resolve third party contracting issues (discussed further in Chapter VII of this circular).
- b. Adequate Third Party Contract Provisions. The Common Grant Rules require that all third party contracts include provisions adequate to form a sound and complete agreement. Compliance with Federal laws and regulations will necessarily result in the addition of many other provisions to ensure compliance with those laws and regulations. *See*, Chapter IV of this circular for requirements applicable to third party contractors and the property and services third party contractors agree to provide.
  - c. Industry Contracts. The recipient should take special care when using an industry developed contract or contract that may be provided by a bidder or offeror. Not only may that contract lack the required Federal provisions, but its terms may also be unfavorable to the recipient. FTA does not intend to prohibit the use of industry forms,

specifications, or contract terms when their use would benefit the recipient and would accommodate Federal requirements. Instead, FTA intends to remind the recipient to use industry developed forms, specifications, or contract terms cautiously.

- d. Record Keeping. The Common Grant Rules require the recipient to prepare and maintain adequate and readily accessible project performance and financial records, covering procurement transactions as well as other aspects of project implementation. The Common Grant Rules require the recipient to maintain these records for three years after the recipient and subrecipients, if any, have made final payment and all other pending matters are closed. The recipient must also prepare, maintain, and distribute the following documents as necessary:
- (1) Procurement History. The Common Grant Rules require the recipient to maintain and make available to FTA written records detailing the history of each procurement, as follows:
    - (a) Procurement Method. A governmental recipient must (and a non-governmental recipient should) provide its rationale for the method of procurement it used for each contract, including a sole source justification for any acquisition that does not qualify as competitive, while a non-governmental recipient need only provide a justification for lack of competition when it does not obtain competitive bids or proposals for contracts exceeding the simplified acquisition threshold;
    - (b) Contract Type. A governmental recipient must (and a non-governmental recipient should) state the reasons for selecting the contract type it used (fixed price, cost reimbursement, and so forth);
    - (c) Contractor Selection. A governmental recipient must state its reasons for contractor selection or rejection. For procurements exceeding the small purchase threshold, a non-governmental recipient must state its reasons for contractor selection, but need not state its reasons for contractor rejection. Each recipient should include a written responsibility determination for the successful contractor; and
    - (d) Cost or Price. Each recipient must evaluate and state its justification for the contract cost or price.
    - (e) Reasonable Documentation. The extent of documentation should be reasonable. Documents included in a procurement history should be commensurate with the size and complexity of the procurement itself. FTA recognizes that these written records will vary greatly for different procurements. For example, a receipt or bill accompanying a \$100 credit card purchase might contain all of the required information to support that procurement. Procurements that are more substantial may require extensive documentation.

- (2) Access to Records. Apart from the more limited record access provisions of the Common Grant Rules, 49 U.S.C. Section 5325(g) provides FTA and DOT officials, the Comptroller General, or any of their representatives, access to and the right to examine and inspect all records, documents, and papers, including contracts, related to any FTA project financed with Federal assistance authorized by 49 U.S.C. Chapter 53.
- e. Special Notification Requirements for States. For many years, various Federal appropriations laws imposed notification requirements on all recipients of Federal assistance awards exceeding \$500,000. Currently, notification requirements have been limited to States, but the \$500,000 threshold has been removed. Therefore, each State must include provisions in all its requests for proposals, solicitations, Federal assistance applications, forms, notifications, press releases, or other publications involving FTA assistance, stating that FTA is or will be providing Federal assistance for the project, the amount of Federal assistance FTA has provided or expects to provide, and the Catalog of Federal Domestic Assistance (CFDA) Number of the program that authorizes the Federal assistance. FTA interprets the statute to require that subrecipients, lessees, or third party contractors of the State at any tier also comply with those notification requirements. Because appropriations laws expire annually and these provisions have not been enacted as permanent legislation or even appear consistently in the same appropriations acts, it is necessary to review the various Federal appropriations acts for the applicable fiscal year to determine the required level of notification. FTA's Master Agreement incorporates the notification requirements in effect when that Master Agreement is issued.
  - f. Use of Technology/Electronic Commerce. Along with other technology the recipient may choose to employ, the recipient may use a well-structured Electronic Commerce system to conduct third party procurements.
    - (1) Sufficient System Capacity. The recipient's system must have sufficient system capacity necessary to accommodate all Federal requirements for full and open competition.
    - (2) Written Procedures. The recipient must establish adequate written procedures before any solicitation takes place. Those procedures must be sufficient to ensure that all information FTA requires for project administration is entered into the recipient's electronic system and can be made readily available to FTA as needed.
    - (3) Uses. The recipient may undertake third party procurements through:
      - (a) Standard Bidding and Proposal Procedures. Standard procurement procedures may be implemented through an electronic medium or resource to the extent of the system's capacity.
      - (b) Electronic Bidding and Reverse Auctions. FTA recipients may use electronic bidding and reverse auctions.



engage a qualified independent accountant or accounting firm to perform its audit responsibilities.

- b. Independent Auditors. The recipient's personnel will not be able to perform certain audits required by the Federal Government, such as audits required by the Single Audit Act of 1984, as amended, 31 U.S.C. Sections 7501 *et seq.* and OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations," as revised. If the Federal Government requires additional audits, it may also be necessary for the recipient to engage independent auditors not performing other work for the recipient. See also Chapter IV, subparagraph 2.b(19)(a) of this circular.
- c. Federal Audit Agencies. The Federal Government maintains a continuing Federal audit capability at certain contractor locations. On occasion, these auditors may be used to audit an FTA recipient's third party contracts. In other circumstances, an audit by a Federal agency may best serve the interests of the Federal Government and the recipient. This can be true of audits to determine a contractor's provisional overhead (burden) and General & Administrative (G&A) rates that need to be verified by audit for specific contract periods. Federal audit services, however, might not be available when needed; then the recipient will need to obtain the services of an independent private auditing firm that can perform the audit soon after an audit is requested.

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## CHAPTER IV

### **THE RECIPIENT'S PROPERTY AND SERVICES NEEDS AND FEDERAL REQUIREMENTS AFFECTING THOSE NEEDS**

1. **DETERMINING THE RECIPIENT'S NEEDS.** To support a third party contract with Federal assistance awarded by the Federal Transit Administration (FTA), the Common Grant Rules require the recipient to adopt adequate procedures for determining the type and amount of property and services it needs to acquire:
  - a. **Eligibility.** The property and services to be acquired must be eligible under the Federal law authorizing the FTA assistance award and any regulations thereunder. For example, FTA prohibits the use of capital assistance for the recipient's operations expenses. If FTA assistance will be used to finance the cost of property or services, the property or services must be within the scope of the specific project from which that FTA assistance will be derived.
  - b. **Necessity.** The Common Grant Rules require the recipient to establish procedures to avoid the purchase of unnecessary property and services it does not need (including duplicative items and quantities or options it does not intend to use or whose use is unlikely). In monitoring whether a recipient has complied with its procedures to determine what property or services are unnecessary, FTA bases its determinations on what would have been a recipient's reasonable expectations at the time it entered into the contract.
    - (1) **Unnecessary Reserves.** FTA expects the recipient to limit the acquisition of federally assisted property and services to the amount it needs to support its public transportation system. In particular, FTA seeks information about the recipient's fleets to ensure that the recipient does not acquire more vehicles than it needs for public transportation service in its service area. Further guidance on spare ratios is contained in the most recent versions of FTA Circulars 5010.1, 9030.1, and 9300.1.
    - (2) **Acquisition for Assignment Purposes.** The recipient may contract only for its current and reasonably expected public transportation needs and may not add quantities or options to third party contracts solely to permit assignment to another party at a later date. These limits on assignments, however, do not preclude joint procurements that are entered into simultaneously by two or more parties to obtain advantages unavailable for smaller procurements.
      - (a) **General Prohibition.** The recipient may contract only for its current and reasonably expected public transportation needs, and may not add quantities or options to third party contracts solely to permit assignment to another party at a later date.

- (b) Changes in the Recipient's Needs. FTA recognizes that the quantity of property or services a recipient reasonably believes it may need at the time of contract award may change. A recipient's later needs might decrease due to changed circumstances or honest mistakes. In those situations, the recipient may assign its unneeded contract authority to another entity that would like to acquire the property or services.
- (c) Exceptions. These limits on assignments, however, do not preclude:
  - 1 Joint Procurements. Two or more recipients may enter into a single procurement at the same time to obtain advantages unavailable for smaller procurements as discussed more fully in Chapter V, section 3 of this circular.
  - 2 State or Local Government Purchasing Schedules or Purchasing Contracts. A State or local government may enter into contracts that support its purchasing schedules or purchasing contracts established as discussed more fully in Chapter V, section 4 of this circular.
- c. Procurement Size. The recipient should consider whether to consolidate or break out the procurement to obtain a more economical purchase.
  - (1) Joint Procurements. It may be economically advantageous for a recipient to enter into a joint procurement with others that have similar needs. The recipient responsible for undertaking the joint procurement may, upon contract award, assign to the other participants responsibilities for administering those parts of the contract affecting their property or services. Participation in a joint procurement, however, does not relieve any participating recipient from the requirements and responsibilities it would have if it were procuring the property or services itself, and does not relinquish responsibility for the actions of other participants merely because the primary administrative responsibility for a particular action resides in an entity other than in itself.
  - (2) Smaller Procurements. In other circumstances, breaking out procurements may provide greater opportunities for Disadvantaged Business Enterprises (DBEs), small and minority firms, and women's business enterprises to participate. As stated in paragraph 1.b(2) of this Chapter, the FTA expects the recipient to ensure that it contracts only for its current and reasonably expected needs. Absent efforts to foster greater opportunities for DBE, small and minority firms, and women's business enterprises, the recipient should not split a larger procurement merely to gain the advantages of small purchase procedures available for federally assisted procurements of less than \$100,000 (currently, the Federal "simplified acquisition" threshold).
- d. Options. The recipient's contracts may include options to ensure the future availability of property or services, so long as the recipient is able to justify them as needed for its

public transportation or project purposes. An option is a unilateral right in a contract by which, for a specified time, a recipient may acquire additional equipment, supplies, or services than originally procured. An option may also extend the term of the contract. Chapter VI of this circular contains procedures for evaluating options.

- e. Lease Versus Purchase. To obtain the best value, the recipient should review lease versus purchase alternatives for acquiring property and, if necessary, should obtain an analysis to determine the more economical alternative. The recipient may use FTA capital assistance to finance the costs of leasing eligible property if leasing is more cost effective than full ownership. Before the recipient may lease an asset, FTA regulations, "Capital Leases," 49 CFR Part 639, Subpart C, require the recipient to make a written comparison of the cost of leasing the asset compared with the cost of purchasing or constructing the asset. Costs used in the comparison must be reasonable, based on realistic current market conditions, and based on the expected useful service life of the asset.
- f. Specifications. Typically, the recipient is responsible for preparing specifications that describe its needs while assuring that those specifications are not exclusionary, discriminatory, unreasonably restrictive, or otherwise in violation of Federal laws or regulations. In general, the specifications should clearly describe the property or services to be procured and state how the proposals will be evaluated. For additional guidance, see section 2 of this Chapter, and Chapter VI, section 3 of this circular.

2. FEDERAL REQUIREMENTS THAT MAY AFFECT A RECIPIENT'S ACQUISITIONS.

Before a recipient may use FTA assistance to support the acquisition of property or services, it must comply with all applicable Federal laws and regulations, whether or not addressed in the Common Grant Rules. Some of those laws and regulations will affect the third party contractor providing the property or services or even determine which entities may qualify as a third party contractor. Other laws and regulations will affect the nature of the property or services to be acquired or the terms under which the property or services must be acquired. A recipient may not use FTA assistance to support acquisitions that do not comply with all applicable Federal requirements.

FTA's Master Agreement contains a current, but not all-inclusive, description of statutory and regulatory requirements that may affect a recipient's procurement (such as Disadvantaged Business Enterprise (DBE) and Clean Air requirements). The Master Agreement states that applicable Federal requirements will apply to project participants to the lowest tier necessary to ensure compliance with those requirements. A recipient will also need to include applicable Federal requirements in each subagreement, lease, third party contract, or other document as necessary. For specific guidance on cross-cutting requirements administered by other Federal agencies, FTA recommends that the recipient contact those agencies.

The recipient may also use the checklists in Appendix C of this circular as a reminder of Federal requirements, and the matrices in Appendix D of this circular for a list of clauses

and provisions required by Federal laws and regulations. The recipient may also refer to the Model Clauses in FTA's "Best Practices Procurement Manual" but cautions the recipient also to check the latest edition of FTA's Master Agreement to determine which provisions have been added, changed, or rescinded.

Some of the more typical requirements and restrictions that will affect the use of FTA assistance to finance a recipient's third party contracts include:

- a. Contractor Qualifications. The following Federal laws and regulations may affect contractor selection:
  - (1) "Responsibility" Requirements. In addition to the Common Grant Rules that require contract awards be made only to responsible contractors, Federal transit law at 49 U.S.C. Section 5325(j) limits third party contractor awards to those contractors capable of successfully performing under the terms and conditions of the proposed contract. Before selecting a contractor for award, the recipient must consider such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources. Moreover, SAFETEA-LU now requires a recipient entering into a fixed guideway project contract to consider the contractor's past performance, including information reported in FTA's required Contractor Performance Assessment Reports, 49 U.S.C. Section 5325(j)(2)(C).
  - (2) Debarment and Suspension. Debarment and suspension regulations and guidance include the following:
    - (a) DOT Debarment and Suspension Regulations. Department of Transportation (DOT) regulations, "Nonprocurement Suspension and Debarment," 2 CFR Part 1200 apply to each third party contract at any tier of \$25,000 or more, to each third party contract at any tier for a federally required audit (irrespective of the contract amount), and to each third party contract at any tier that must be approved by an FTA official irrespective of the contract amount. *See*, 2 CFR Part 1200. Thus, the recipient must apply DOT's debarment and suspension requirements to itself and each third party contractor at every tier to the extent required by DOT's regulations that incorporate the requirements of Office of Management and Budget (OMB), "Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," 2 CFR Part 180.
    - (b) General Services Administration (GSA) Excluded Parties List System. Even though the recipient may collect a debarment and suspension certification from the prospective third party contractor, or include a clause in the third party contract requiring disclosure, FTA strongly recommends that the recipient check the Excluded Parties List System (EPLS) maintained by the GSA and available at the Web site it maintains: <http://www.epls.gov/> before awarding a third party contract.

- (c) State Debarment and Suspension Lists. A recipient may also treat any prospective contractor or subcontractor listed on a centralized State government debarment and suspension list as nonresponsible and ineligible for contract award.
- (3) Conflict of Interest. The Common Grant Rules require the recipient to be aware of conflict of interest issues a prospective contractor might have, including lack of impartiality, impaired objectivity, or unfair competitive advantage, as discussed more fully in Chapter VI, paragraph 2.a(4)(h).
- (4) Lobbying Certification and Disclosure. If the third party contract will exceed \$100,000, before awarding the contract, the recipient must obtain a lobbying certification, and if applicable, a lobbying disclosure from a prospective third party contractor. *See*, DOT regulations, “New Restrictions on Lobbying,” 49 CFR Part 20, modified as necessary by 31 U.S.C. Section 1352.
- (5) Federal Civil Rights Laws and Regulations. Each FTA recipient has agreed that it and its third party contractors at each tier will comply with:
  - (a) Federal Equal Employment Opportunity (EEO) Requirements. These include, but are not limited to:
    - 1 Nondiscrimination in Federal Public Transportation Programs. 49 U.S.C. Section 5332, covering projects, programs, and activities financed under 49 U.S.C. Chapter 53 prohibits discrimination on the basis of race, color, creed, national origin, sex, or age, and prohibits discrimination in employment or business opportunity.
    - 2 Prohibition Against Employment Discrimination. Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. Section 2000e, and implementing Federal regulations that prohibit discrimination in employment on the basis of race, color, religion, sex, or national origin.
  - (b) Nondiscrimination on the Basis of Sex. Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. Sections 1681 *et seq.* and implementing Federal regulations, “Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance,” 49 CFR Part 25 prohibit discrimination on the basis of sex.
  - (c) Nondiscrimination on the Basis of Age. The Age Discrimination in Employment Act (ADEA), 29 U.S.C. Sections 621 through 634, and Equal Employment Opportunity Commission (EEOC) implementing regulations, “Age Discrimination in Employment Act,” 29 CFR Part 1625, prohibit employment discrimination against individuals on the basis of age. The “Age Discrimination Act of 1974, as amended, 42 U.S.C. Sections 6101 *et seq.*, and Department of Health and Human Services implementing regulations,

“Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance, 45 CFR Part 90, also prohibit discrimination against individuals on the basis of age.

- (d) Federal Protections for Individuals with Disabilities. The Americans with Disabilities Act of 1990, as amended (ADA), 42 U.S.C. Sections 12101 *et seq.*, prohibits discrimination against qualified individuals with disabilities in programs, activities, and services, and imposes specific requirements on public and private public and private entities. Third party contractors must comply with their responsibilities under Titles I, II, III, IV, and V of the ADA in employment, public services, public accommodations, telecommunications, and other provisions, many of which are subject to regulations issued by other Federal agencies.
- (6) Socio-Economic Development. Each FTA recipient must comply with applicable Federal laws and regulations that provide competitive opportunities for a contractor that qualifies as a disadvantaged business enterprise (DBE), minority owned firm, women’s business enterprise, or small business.
  - (a) Disadvantaged Business Enterprises (DBE). Section 1101(b) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, as amended (SAFETEA-LU), requires FTA to make available at least 10 percent of its funding under that Act for contracts with small business concerns owned and controlled by socially and economically disadvantaged people. Each FTA recipient assists FTA in meeting this national goal. To receive FTA assistance, each FTA recipient must comply with applicable requirements of DOT regulations, “Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs,” 49 CFR Part 26. If the recipient is required to have a DBE program, the third party contracts that the recipient has included in its DBE program determine whether the recipient meets the DBE threshold for goal setting, and the goal if the threshold is met.
  - (b) Small and Minority Firms and Women’s Business Enterprises. The Common Grant Rules require each recipient and subrecipient to take steps to ensure that it uses small and minority firms and women’s business enterprises (irrespective of whether they qualify as DBEs) to the fullest extent practicable. Although the Common Grant Rule for governmental recipients includes labor surplus area firms in the category of firms authorized for special treatment, this circular does not include them because Section 7101(a) of the Federal Acquisition Streamlining Act of 1994, 15 U.S.C. Section 644 note, enacted after publication of the Common Grant Rule for governmental recipients removed nearly all labor surplus area preferences.

- 1 Notice. The Common Grant Rules require each recipient to make information available to potentially qualified firms about procurement opportunities. Each governmental recipient is directed to include these contractors on solicitation lists and request their participation when they are potential sources.
  - 2 Contract Size. To foster greater participation of small and minority firms and women's business enterprises, the Common Grant Rule for governmental recipients directs the governmental recipient to divide total requirements into smaller tasks or quantities, when economically feasible. The Common Grant Rule for non-governmental recipients encourages the non-governmental recipient to contract with consortia when a contract is too large for one of these firms to handle individually.
  - 3 Delivery Schedule. The Common Grant Rules require the recipient to specify delivery schedules that encourage their participation.
  - 4 Small Business Administration and the Department of Commerce Minority Business Development Agency. The Common Grant Rules instruct the recipient to use the services and assistance of the Small Business Administration and the Department of Commerce's Minority Business Development Agency.
  - 5 Subcontracting Opportunities. The Common Grant Rule for governmental recipients directs each governmental recipient to require its prime third party contractors to include the preceding provisions in FTA assisted subcontracts. The Common Grant Rule for non-governmental recipients directs each non-governmental recipient to consider whether firms competing for larger contracts intend to subcontract with small businesses, minority-owned firms, and women's business enterprises.
- (7) Sensitive Security Information. Each third party contractor must protect, and take measures to ensure that its subcontractors at each tier protect, "sensitive security information" made available during the administration of a third party contract or subcontract to ensure compliance with 49 U.S.C. Section 40119(b) and implementing DOT regulations, "Protection of Sensitive Security Information," 49 CFR Part 15, and with 49 U.S.C. Section 114(s) and implementing Department of Homeland Security regulations, "Protection of Sensitive Security Information," 49 CFR Part 1520.
- (8) Seat Belt Use. In compliance with Federal Executive Order No. 13043, "Increasing Seat Belt Use in the United States," April 16, 1997, 23 U.S.C. Section 402 note, FTA encourages each third party contractor to adopt and promote on-the-job seat belt use policies and programs for its employees and other personnel that operate company owned, rented, or personally operated

vehicles, and to include this provision in any third party subcontracts, involving the project.

- b. Administrative Restrictions on the Acquisition of Property and Services. The following Federal laws and regulations impose administrative requirements, many of which will affect specific third party procurements.
- (1) Legal Eligibility. The property or services acquired must be eligible for support under the restrictions accompanying the Federal statute authorizing the Federal assistance to be used.
  - (2) Scope of the Project. The property or services acquired must be eligible for support within the scope of the underlying grant or cooperative agreement from which the Federal assistance to be used is derived.
  - (3) Period of Performance. FTA expects the recipient to use sound business judgment and be judicious in establishing and extending a contract's period of performance.
    - (a) General Standards. The period of performance generally should not exceed the time necessary to accomplish the purpose of the contract. The recipient should also consider competition, pricing, fairness, and public perception. The recipient's procurement files should document its rationale for determining the performance period designated for each contract.
    - (b) Federal Restrictions. Except for procurements of rolling stock and replacement part contracts, which are limited by law to five (5) years as discussed in subsection 2.e of this Chapter, the recipient's other third party contracts (such as property, services, leases, construction, revenue, and so forth) are not encumbered by Federal requirements restricting the maximum periods of performance. Nevertheless, the duration of the recipient's other contracts must be reasonable.
    - (c) Time Extensions. Consistent with the general tone of the circular, contract time extensions will be considered in light of whether they are permissible changes or impermissible cardinal changes. Once the recipient awards the third party contract, an extension of the contract term length that amounts to a cardinal change will require a sole source justification.
  - (4) Federal Cost Principles. The Common Grant Rules require project costs to conform to applicable Federal cost principles for allowable costs. In general, costs must be necessary and reasonable, allocable to the project, authorized or not prohibited by Federal law or regulation, and must comply with Federal cost principles applicable to the recipient. Separate cost principles apply to the following four categories of recipients:

- (a) Governmental Entities. OMB Guidance for Grants and Agreements, “Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87),” 2 CFR Part 225, applies to project costs incurred by a recipient that is a State, local, or Indian tribal government.
  - (b) Educational Institutions. OMB Guidance for Grants and Agreements, “Cost Principles for Educational Institutions (OMB Circular A-21),” 2 CFR Part 220, applies to project costs incurred by a recipient that is a public or private institution of higher education.
  - (c) Non-Profit Entities. OMB Guidance for Grants and Agreements “Cost Principles for Non-profit Organizations (OMB Circular A-122),” 2 CFR Part 230, applies to project costs incurred by a recipient that is a private non-profit entity.
  - (d) For-Profit Entities. FAR Subpart 31.2, “Contracts with Commercial Organizations,” applies to project costs incurred by a recipient that is a for-profit entity.
- (5) Payment Provisions. The recipient may use its own funds to finance its contracts. However, if the recipient intends to use FTA assistance, expects to be reimbursed with FTA assistance, or dedicates its local share funds to support contract costs it has financed, then it must structure its payment provisions carefully.
- (a) FTA Support for the Project. FTA must indicate its general interest in the project before a recipient may use FTA assistance to finance or reimburse project costs, or use local share funds for project costs. FTA expresses its general interest in the project when it has taken one of the following actions:
    - 1 Award Made. FTA has awarded Federal assistance to the recipient through a grant or cooperative agreement for the underlying project,
    - 2 Preaward Authority. FTA has provided preaward authority for the underlying project through a *Federal Register* notice, or
    - 3 Letter of No Prejudice. FTA has issued a letter of no prejudice for the underlying project.
  - (b) Advance Payments. Advance payments are payments made to a contractor before the contractor incurs contract costs. The recipient may use its local share funds for advance payments. However, if there is no automatic preaward authority for its project, then advance payments made with local share funds before FTA assistance has been awarded, or before a letter of no prejudice has been issued or other preaward authority has been provided, or before FTA approval for the specific advance payment has been obtained, are ineligible for reimbursement. The following principles and restrictions apply:

- 1 Use of FTA Assistance Prohibited. The recipient may not use FTA assistance to make payments to a third party contractor before the contractor has incurred the costs for which the payments would be attributable.
- 2 Exceptions for Sound Business Reasons. Apart from advance payments that are customary, as discussed further, FTA does occasionally make exceptions to its advance payment prohibitions, if the recipient can provide sound business reasons for doing so and has obtained FTA's advance written concurrence. A recipient that seeks to use FTA assistance to support advance payments should contact the regional office administering its project to obtain FTA concurrence.

  - a Adequate Security for Advance Payments. FTA recognizes that advance payments may be needed for certain costs supported by sound business judgment. Adequate security for the advance payment is an essential pre-condition to FTA's concurrence in the use of FTA or local share funds.
  - b Customary Advance Payments. FTA recognizes that advance payments are typically required for, but are not limited to, public utility connections and services, rent, tuition, insurance premiums, subscriptions to publications, software licenses, construction mobilization costs, transportation, hotel reservations, and conference and convention registrations. Accordingly, the recipient may use FTA assistance to support or reimburse the costs of such acquisitions. FTA concurrence is required only when such advance payment or payments customarily required in the marketplace exceed \$100,000.

In summary, if there are sound business reasons justifying the advance payment and adequate security for the payment, FTA will generally concur in a written request for an exception.
- (c) Progress Payments. Progress payments are payments for contract work that has not been completed. The recipient may use FTA assistance to support progress payments provided the recipient obtains adequate security for those payments and has sufficient written documentation to substantiate the work for which payment is requested.

  - 1 Adequate Security for Progress Payments. Adequate security for progress payments may include taking title or obtaining a letter of credit or taking equivalent measures to protect the recipient's financial interest in the progress payment. Adequate security should reflect the practical realities of different procurement scenarios and factual circumstances. FTA acknowledges the practical reality that taking title to work in progress may not be desirable in some circumstances. The recipient should always

consider the costs associated with providing security (for example, the recipient may need to acquire bonds or letters of credit in the commercial marketplace) and the impact of those costs on the contract price, as well as the consequences of incomplete performance.

- 2 Adequate Documentation. Sufficient documentation is required to demonstrate completion of the amount of work for which progress payments are made.
  - 3 Percentage of Completion Method. The Common Grant Rules require that any progress payments for construction contracts be made on a percentage of completion method described therein. The recipient, however, may not make progress payments for other than construction contracts based on this percentage method.
- (6) Protections Against Performance Difficulties. The Common Grant Rule for governmental recipients authorizes FTA to require each governmental recipient to include contract provisions that would reduce potential problems that might occur during contract performance. In addition to other clauses that may be approved by the Office of Federal Procurement Policy, FTA expects the governmental recipient to include provisions as described below:
- (a) Changes. FTA expects a governmental recipient to include changes and changed conditions provisions or clauses in most contracts, except for routine supply contracts.
  - (b) Remedies. The Common Grant Rule for governmental recipients authorizes FTA to require remedies. Accordingly, FTA expectations are as follows:

    - 1 Liquidated Damages. FTA has determined that a recipient may use liquidated damages if the recipient reasonably expects to suffer damages through delayed contract completion, or if weight requirements are exceeded, and the extent or amount of such damages are uncertain and would be difficult or impossible to determine. The rate and measurement standards must be calculated to reasonably reflect the recipient's costs should the standards not be met, and must be specified in the solicitation and contract. The assessment for damages is often established at a specific rate per day for each day beyond the contract's delivery date or performance period. A measurement other than a day or another period of time, however, may be established if that measurement is appropriate, such as weight requirements in a rolling stock purchase. The procurement file should include a record of the calculation and rationale for the amount of damages established. Any liquidated damages recovered must be credited to the project account involved unless FTA permits otherwise. We also refer you to Chapter V, paragraph 5(a)(1) for a discussion of how liquidated damages can be used to encourage settlements.

- 2 Violation or Breach. Third party contracts exceeding \$100,000 must include administrative, contractual, or legal remedies for violations or breach of the contract by the third party contractor.
- 3 Suspension of Work. FTA may require provisions pertaining to suspension of work.
- 4 Termination. Termination for cause and termination for convenience provisions must be included in contracts exceeding \$10,000.

Although the Common Grant Rule for non-governmental recipients does not expressly require contract remedies or termination clauses, FTA strongly encourages the inclusion of appropriate performance remedies in all third party contracts.

- c. Socio-Economic Requirements for the Acquisition of Property and Services. The following Federal laws and regulations imposing socio-economic requirements may affect a specific procurement:
  - (1) Labor. The following Federal labor protection laws and regulations may affect the types of property and services that may be acquired with FTA assistance:
    - (a) Wage and Hour Requirements. The Common Grant Rules direct the recipient to include provisions in its third party contracts requiring the contractor to compute the wages of every mechanic and laborer based on a standard workweek of 40 hours. Work in excess of the standard workweek is permitted if the worker is compensated at a rate of not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in the workweek. The Common Grant Rules require these provisions for compliance with Sections 102 of the Contract Work Hours and Safety Standards Act, 40 U.S.C. Section 3702, and Department of Labor (DOL) regulations, "Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction (also Labor Standards Provisions Applicable to Nonconstruction Contracts Subject to the Contract Work Hours and Safety Standards Act)," 29 CFR Part 5. Section 4104(c) of the Federal Acquisition Streamlining Act of 1994, 40 U.S.C. Section 3701(b)(3)(A)(iii), increased the wage and hour thresholds of \$2,000 for construction work and \$2,500 for nonconstruction work set forth in the Common Grant Rules to \$100,000. A federally assisted contract must exceed \$100,000 before these wage and hour requirements apply to that contract.
    - (b) Fair Labor Standards. The Fair Labor Standards Act, 29 U.S.C. Sections 201 *et seq.*, applies to employees performing work involving commerce.
  - (2) Civil Rights. The following Federal civil rights laws and regulations may affect the types of property and services that may be acquired with FTA assistance:

- (a) Nondiscrimination in Federal Public Transportation Programs. Federal transit law at 49 U.S.C. Section 5332, covering projects, programs, and activities financed under 49 U.S.C. Chapter 53 prohibits discrimination on the basis of race, color, creed, national origin, sex, or age, and prohibits discrimination in employment or business opportunity.
- (b) Title VI of the Civil Rights Act. In determining the types of property or services to acquire, no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity receiving Federal financial assistance in violation of Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. Sections 2000d *et seq.* and DOT regulations, “Nondiscrimination in Federally Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964,” 49 CFR Part 21. In addition, FTA Circular 4702.1, “Title VI and Title VI-Dependent Guidelines for FTA Recipients,” 05-13-07, provides FTA guidance and instructions for implementing DOT’s Title VI regulations.
- (c) Environmental Justice. Executive Order No. 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” February 11, 1994, 42 U.S.C. Section 4321 note, and DOT Order 5610.2, “Department of Transportation (DOT) Order To Address Environmental Justice in Minority Populations and Low-Income Populations,” 62 FR 18377, April 15, 1997, protect minority populations and low-income populations against disproportionately high and adverse effects of federally assisted programs. FTA Circular 4702.1, “Title VI and Title VI-Dependent Guidelines for FTA Recipients,” 05-13-07, also provides FTA guidance and instructions for implementing the DOT Order on Environmental Justice.
- (d) Limited English Proficiency (LEP). Executive Order No. 13166, “Improving Access to Services for Persons with Limited English Proficiency,” August 11, 2000, 42 U.S.C. Section 2000d-1 note, and DOT , “Policy Guidance Concerning Recipients’ Responsibilities to Limited English Proficient (LEP) Persons,” December 14, 2005. This guidance clarifies the responsibilities of recipients of Federal financial assistance from DOT and assists them in fulfilling their responsibilities to LEP persons, pursuant to Title VI of the Civil Rights Act of 1964 and implementing regulations. FTA Circular 4702.1, “Title VI and Title VI-Dependent Guidelines for FTA Recipients,” 05-13-07, also provides FTA guidance and instructions for implementing the DOT Policy Guidance.
- (e) Nondiscrimination on the Basis of Disability. The recipient agrees to comply, and assures the compliance of each third party contractor and each subrecipient at any tier of the project, with the applicable laws and regulations, discussed below, for nondiscrimination on the basis of disability.

- 1 Section 504 of the Rehabilitation Act of 1973, as amended (Section 504), 29 U.S.C. Section 794, prohibits discrimination on the basis of disability by recipients of Federal financial assistance.
- 2 The Americans with Disabilities Act of 1990, as amended (ADA), 42 U.S.C. Sections 12101 *et seq.*, prohibits discrimination against qualified individuals with disabilities in all programs, activities, and services of public entities, as well as imposes specific requirements on public and private providers of transportation.
- 3 DOT Public Transportation Regulations implementing Section 504 and the ADA. These regulations include DOT regulations, “Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance,” 49 CFR Part 27, DOT regulations, “Transportation Services for Individuals with Disabilities (ADA),” 49 CFR Part 37, and Architectural and Transportation Barriers Compliance Board (ATBCB)/DOT regulations, “Americans With Disabilities (ADA) Accessibility Specifications for Transportation Vehicles,” 36 CFR Part 1192 and 49 CFR Part 38. Examples of requirements include, but are not limited to, the following:

  - a Design and Construction. Accessibility requirements for the design and construction of new transportation facilities;
  - b Accessibility and Usability. Requirements that vehicles acquired (with limited exceptions) be accessible to and usable by individuals with disabilities, including individuals using wheelchairs;
  - c Complementary Paratransit Service. Requirements that public entities providing fixed-route service, (including a private non-profit entity providing public transportation service on behalf of the State or designated recipient as a subrecipient providing fixed-route service), provide complementary paratransit service to individuals with disabilities who cannot use the fixed-route service;
  - d Equal Opportunity. Requirements for compliance with service requirements intended to ensure that individuals with disabilities are afforded equal opportunity to use transportation systems and services.
- (f) Electronic Reports and Information. Reports and other information prepared in electronic format developed in connection with a third party contract that the recipient intends to provide to FTA, among others, whether as a contract end item or in compliance with contract administration provisions, must comply with the accessibility standards of Section 508 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. Section 794d, and ATBCB regulations,

“Electronic and Information Technology Accessibility Standards,”  
36 CFR Part 1194.

- (3) Environmental Protections. Federal laws and regulations require the recipient to comply with applicable environmental requirements and implement them as necessary through third party contracts.
- (a) Environmental Mitigation. FTA expects the recipient to include adequate third party contract provisions to facilitate compliance with environmental mitigation measures it has agreed to implement.
- (b) National Environmental Policy Act. Certain acquisitions and the timing of certain acquisitions can adversely affect the environmental review process required by the National Environmental Policy Act (NEPA), 42 U.S.C. Sections 4321 through 4335, for a project constituting a major Federal action.
- 1 Property. The recipient may not enter into binding arrangements for the acquisition of property that may or would affect environmental impact determinations with respect to the underlying project or otherwise interfere with any required environmental impact reviews until applicable environmental impact determinations have been made.
- 2 Services. Council on Environmental Quality regulations, “Other Requirements of NEPA,” 40 CFR Part 1506, at Section 1506.5(c), require the recipient to obtain a disclosure statement from the contractor selected to prepare an environmental impact statement specifying that the contractor has no financial or other interest in the outcome of the project.
- (c) Protections for Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites. DOT’s enabling legislation has special requirements designed to protect parks, recreation areas, wildlife and waterfowl refuges, and historic sites, at 49 U.S.C. Sections 303(b) and 303(c) (often referred to as “Section 4(f)”), that may affect the types and methods of procurement that the recipient may use. The Federal Highway Administration (FHWA) and FTA have published implementing regulations, “Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites,” 23 CFR Parts 771 and 774, and 49 CFR Part 622.
- (d) Clean Air. The Common Grant Rules specifically prohibit the use of facilities included in the Environmental Protection Agency (EPA) “List of Violating Facilities,” in the performance of any third party contract at any tier exceeding \$100,000. The contractor must also comply with all applicable standards, orders, or regulations issued under Section 306 of the Clean Air Act, as amended, 42 U.S.C. Section 7414, and other applicable provisions of the Clean Air Act, as amended, 42 U.S.C. Sections 7401 through 7671q.

- (e) Clean Water. The Common Grant Rules specifically prohibit the use of facilities included in the EPA “List of Violating Facilities,” in the performance of any third party contract at any tier exceeding \$100,000. The contractor must also comply with all applicable standards, orders, or regulations issued under Section 508 of the Clean Water Act, as amended, 33 U.S.C. Section 1368, and other applicable requirements of the Clean Water Act, as amended, 33 U.S.C. Sections 1251 through 1377.
  - (f) Recycled Products. The Resource Conservation and Recovery Act of 1976, 42 U.S.C. Section 6962, requires governmental recipients to provide a competitive preference to products and services that conserve natural resources, protect the environment, and are energy efficient. EPA guidelines, “Comprehensive Procurement Guideline for Products Containing Recovered Materials,” 40 CFR Part 247, direct that third party contracts of \$10,000 or more with governmental recipients specify a competitive preference for products containing recycled materials identified in those EPA guidelines. For information about EPA’s recovered materials advisory notices, see EPA’s Web site: <http://www.epa.gov/cpg/backgrnd.htm>.
  - (g) Other Federal Environmental Protection Requirements. Additional third party contract provisions may be needed for compliance with other Federal laws and regulations. FTA’s Master Agreement includes environmental laws and regulations that may affect the acquisition of property or services with FTA assistance. These laws and regulations include various provisions to protect wild and scenic rivers, manage coastal zones, protect wetlands, conserve endangered species, and protect fisheries, and protect historic sites, archeological sites, and Indian sacred sites.
- (4) Energy Conservation. The Common Grant Rules require third party contract provisions as necessary for compliance with applicable energy efficiency standards and policies of State energy conservation plans issued under the Energy Policy and Conservation Act, as amended, 42 U.S.C. Sections 6321 *et seq.*
- (5) Preference for U.S. Property—Buy America. FTA’s “Buy America” regulations apply to procurements in excess of \$100,000 that involve the purchase of iron, steel, manufactured goods, or rolling stock to be delivered to the recipient under the third party contract for incorporation into the FTA project. Property that the contractor acquires to fabricate a deliverable for the recipient, such as tools, machinery, and other equipment or facilities, are not subject to FTA’s Buy America requirements unless the recipient intends to take possession of those assets upon completion of the project. Thus, if a third party contractor is acquiring property for its general inventory of equipment or facilities to conduct its overall business affairs, the recipient may enter the cost of that acquisition into its calculations of overhead amounts applicable to the FTA assisted project

irrespective of whether the property acquired would comply with FTA's Buy America regulations.

FTA cautions that its Buy America regulations that apply to FTA assisted third party procurements, published at 49 CFR Part 661, differ from Federal "Buy American Act" regulations that apply to direct Federal procurements, published in the FAR at 48 CFR Chapter 1, Subparts 25.1 and 25.2. FTA strongly recommends that the recipient review FTA's Buy America regulations before undertaking any FTA assisted procurement.

(6) Shipments of Property—U.S. Flag Requirements.

(a) Shipments by Ocean Vessel. The Common Grant Rules require third party contract provisions to ensure compliance with 46 U.S.C. Section 55303 and Maritime Administration regulations, "Cargo Preference-U.S. Flag Vessels," 46 CFR Part 381. With few exceptions, the regulations require that U.S. Flag vessels be used to transport at least 50 percent of any federally assisted property.

(b) Shipments by Air Carrier. Third party contracts involving shipments of federally assisted property by air carrier will require provisions to ensure compliance with Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974, as amended, ("Fly America" Act), 49 U.S.C. Section 40118, and GSA regulations, "Use of United States Flag Air Carriers," 41 CFR Sections 301-10.131 through 301-10.143. The regulations require shipment by U.S. flag air carriers unless such carriers are not reasonably available within the standards of GSA's implementing regulations.

(7) Project Travel—Use of U.S. Flag Air Carriers. Third party contracts to acquire transportation by air carrier needed by people participating in a federally assisted project require provisions to ensure compliance with Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974, as amended, ("Fly America" Act), 49 U.S.C. Section 40118, and GSA regulations, "Use of United States Flag Air Carriers," 41 CFR Sections 301-10.131 through 301-10.143. The regulations require transportation by U.S. flag air carriers unless U.S. flag air carriers are not reasonably available within the standards of the GSA's implementing regulations.

d. Technical Restrictions on the Acquisition of Property and Services. The following Federal laws and regulations imposing technical requirements may affect a specific procurement.

(1) Intelligent Transportation Systems. Intelligent transportation system (ITS) property and services must comply with the National ITS Architecture and Standards to the extent required by Section 5307(c) of SAFETEA-LU, FTA

Notice, “FTA National ITS Architecture Policy on Transit Projects,” 66 FR 1455 *et seq.*, January 8, 2001, and later published policies or implementing directives FTA may issue. Consequently, third party contracts involving ITS are likely to require provisions to ensure compliance with Federal requirements.

- (2) Metric Measurements. The Common Grant Rules require the recipient to accept property and services with dimensions expressed in metric measurements, to the extent practicable and feasible, in compliance with the Metric Conversion Act, as amended by the Omnibus Trade and Competitiveness Act, 15 U.S.C. Sections 205a *et seq.*; Executive Order No. 12770, “Metric Usage in Federal Government Programs,” July 25, 1991, 15 U.S.C. Section 205a note; and applicable Federal regulations.
  - (3) Use of \$1 Coins. To comply with Section 104 of the Presidential \$1 Coin Act of 2006, 31 U.S.C. Section 5312(p), FTA assisted property that requires the use of coins or currency in public transportation service or supporting service must be fully capable of accepting and dispensing \$1 coins.
- e. Rolling Stock—Special Requirements. The following Federal laws and regulations impose requirements that may affect rolling stock procurements.
- (1) Accessibility. Rolling stock must comply with the accessibility requirements of DOT regulations, “Transportation Services for Individuals with Disabilities (ADA),” 49 CFR Part 37, and Joint ATBCB/DOT regulations, “Americans with Disabilities (ADA) Accessibility Specifications for Transportation Vehicles,” 36 CFR Part 1192 and 49 CFR Part 38.
  - (2) Transit Vehicle Manufacturer Compliance with DBE Requirements. Before a transit vehicle manufacturer (TVM) may submit a bid or proposal to provide vehicles to be financed with FTA assistance, 49 CFR Section 26.49 requires the TVM to submit a certification that it has complied with FTA’s DBE requirements.
  - (3) Minimum Service Life. FTA requires each recipient to maintain satisfactory continuing control of FTA assisted property. For buses and certain other vehicles, FTA has established minimum service life policies that may affect the quantity of vehicles that the recipient may acquire. *See*, the most recent versions of FTA Circular 5010.1, “Grants Management Guidelines,” FTA Circular 9030.1, “Urbanized Area Formula Program: Grant Application Instructions,” and FTA Circular 9300.1, “Capital Program: Grant Application Instructions,” that addresses minimum service life for vehicles.
  - (4) Spare Ratios. While all FTA assistance for third party procurements must be limited to property and services the recipient will use in the near future, FTA is concerned that the recipient does not acquire an excessive number of spare vehicles not regularly used in public transportation service.

- (5) Air Pollution and Fuel Economy. Each third party contract to acquire rolling stock must include provisions to ensure compliance with applicable Federal air pollution control and fuel economy regulations, such as EPA regulations, “Control of Air Pollution from Mobile Sources,” 40 CFR Part 85; EPA regulations, “Control of Air Pollution from New and In-Use Motor Vehicles and New and In-Use Motor Vehicle Engines,” 40 CFR Part 86; and EPA regulations, “Fuel Economy of Motor Vehicles,” 40 CFR Part 600.
- (6) Preaward and Post Delivery Review. Each third party contract to acquire rolling stock must include provisions to ensure compliance with applicable requirements of 49 U.S.C. Section 5323(m) and FTA regulations, “Pre-Award and Post-Delivery Audits of Rolling Stock Purchases,” 49 CFR Part 663, that do not conflict with 49 U.S.C. Section 5323(m).
- (7) Bus Testing. Each third party contract to acquire a new bus model or a bus with significant alterations to an existing model must include provisions to assure compliance with applicable requirements of FTA regulations, “Bus Testing,” 49 CFR Part 665.
- (8) In-State Dealers. The recipient may not limit third party bus procurements to in-State dealers, 49 U.S.C. Section 5325(i). Although FTA respects State licensing requirements, it is prohibited by law from providing FTA assistance to support bus procurements that have the result of limiting competition to entities that have been able to obtain a State license.
- (9) Basis for Contract Award. As permitted by 49 U.S.C. Section 5325(f), the recipient may award a third party contract for rolling stock based on initial capital costs, or based on performance, standardization, life cycle costs, and other factors, or by selection through a competitive procurement process.
- (10) Five-Year Limitation. A recipient may enter into a multi-year contract to buy rolling stock with an option not exceeding five (5) years to buy additional rolling stock or replacement parts, 49 U.S.C. Section 5325(e)(1). The recipient may not exercise that option later than five (5) years after the date of its original contract.

FTA interprets this five-year period as covering the recipient’s “material requirements” for rolling stock and replacement needs from the first day when the contract becomes effective to its “material requirements” at the end of the fifth year. In the case of rolling stock, which frequently cannot be delivered expeditiously, FTA recognizes that a recipient’s “material requirements” for rolling stock will necessarily precede its actual need to put that rolling stock to use in public transportation service. This means that the contract may not have options for more rolling stock and replacement parts than a recipient’s material requirements for a five-year period. The five-year rule does not mean the recipient must obtain delivery, acceptance, or even fabrication in five years. Instead it means only that FTA limits a contract to purchasing no more than the recipient’s

material requirements for rolling stock or replacement parts for five years based on the effective date of the contract.

f. Public Transportation Services—Special Requirements. Although the Common Grant Rules refer to the following Federal requirements in the context of federally assisted procurements, these requirements will affect how a third party contractor implements its contract to provide public transportation services financed with Federal assistance. Consequently, the recipient must include provisions in its third party contract ensuring compliance with the following requirements, or the recipient must obtain the third party contractor's agreement in another form, as a matter of contractor responsibility, to ensure compliance with the following:

(1) Protections for Public Transportation Employees. When the recipient acquires public transportation services from a third party contractor, the terms of the recipient's DOL certification of public transportation employee protective arrangements will apply to work under the contract provided by those employees covered by the certification. That certification is required by 49 U.S.C. Section 5333(b) (often referred to as "13(c)") and implementing DOL guidelines, "Section 5333(b), Federal Transit Law," 29 CFR Part 215. Consequently, the third party contractor must comply with the terms of that DOL certification.

The Fair Labor Standards Act, 29 U.S.C. Sections 201 *et seq.*, also applies to public transportation employees performing work involving commerce.

(2) Drug and Alcohol Testing. A third party contractor providing services involving the performance of safety sensitive activities must comply with 49 U.S.C. Section 5331 and FTA regulations, "Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations," 49 CFR Part 655.

(3) Accessibility. A third party contractor providing public transportation services must operate its services in compliance with 42 U.S.C. Sections 12101 *et seq.* and DOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," using facilities and equipment that comply with 49 CFR Part 37; and Joint ATBCB/DOT regulations, "Americans with Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 36 CFR Part 1192 and 49 CFR Part 38. Private entities must comply with the requirements of 49 CFR Part 37 applicable to public entities with which they contract to provide public transportation services. The recipient should advise its third party contractors operating public transportation services to review the requirements for public entities in this context.

(4) Protection of Animals. A third party contractor providing services involving the use of animals must comply with the Animal Welfare Act, 7 U.S.C. Sections 2131 *et seq.* and Department of Agriculture regulations, "Animal Welfare," 9 CFR Subchapter A, Parts 1, 2, 3, and 4.

- (5) Charter Service Restrictions. A third party contractor performing services using FTA assisted facilities or equipment may not use those facilities or that equipment to support any charter service operations except as permitted by 49 U.S.C. Section 5323(d) and FTA regulations, “Charter Service,” 49 CFR Part 604.
  - (6) School Bus Restrictions. A third party contractor performing services using FTA assisted facilities or equipment may not use those facilities or that equipment to support exclusive school bus operations except as permitted by 49 U.S.C. Sections 5323(f) or (g) and FTA regulations, “School Bus Operations,” 49 CFR Part 605, to the extent consistent with 49 U.S.C. Sections 5323(f) or (g).
- g. Architectural Engineering (A&E) and Related Services—Special Requirements. Federal laws and regulations impose the following requirements on A&E and related procurements:
- (1) Qualifications-Based Requirements. For projects related to or leading to construction, an FTA recipient must use the qualifications-based procurement procedures of 40 U.S.C. Chapter 11 (Brooks Act procedures) when contracting for A&E services and other services described in 49 U.S.C. Section 5325(b), which include program management, construction management, feasibility studies, preliminary engineering, design, architectural, engineering, surveying, mapping, or related services.
  - (2) Relation to Construction. The nature of the services to be performed and its relationship to construction, not the nature of the prospective contractor, determines whether qualifications-based procurement procedures may be used.
    - (a) Purpose of Services. FTA has long administered the requirement for using qualifications-based procurement procedures for selection of contractors that perform A&E services, generally associated with the construction, alteration, or repair of real property. FTA interprets 49 U.S.C. Section 5325(b) to authorize the use of qualifications-based procurement procedures only for those services that directly support or are directly connected or related to construction, alteration, or repair of real property. FTA’s interpretation of 49 U.S.C. Section 5325(b) is consistent with typical Federal policies implementing the Brooks Act, 40 U.S.C. Section 1102, which limits qualifications-based procurement procedures to research, planning, development, design, construction, alteration, or repair of real property. Thus if services, such as program management, feasibility studies, or mapping, are not directly in support of, directly connected to, or directly related to, or lead to construction, alteration, or repair of real property, then the recipient may not use qualifications-based procurement procedures to select the contractor that will perform those services.
    - (b) Requirements in the Context of a Construction Project. A project involving construction (including an ITS project) does not always require the use of

qualifications-based procurement procedures. Whether qualifications-based procurement procedures may be used depends on the actual services to be performed in connection with the construction project. For example:

- 1 End Products Used in Construction. The design or fabrication of message signs, signals, and movable barriers that will become off-the-shelf items or will be fabricated and delivered as final end products for installation in an FTA assisted construction project, including an Intelligent Transportation System (ITS) construction project, are not services for which qualifications-based procurement procedures may be used.
  - 2 Services Related to Design of Construction Projects. In contrast, program manager, project designer, construction manager, or engineering services in which the contractor would select the finished products to be acquired for an FTA assisted construction project are services for which qualifications-based procurement procedures must be used.
  - 3 Actual Construction. The actual construction or improvement to the real property to be used in an FTA assisted construction project, however, are not services for which qualifications-based procurement procedures may be used.
- (c) Type of Contractor Not Determinative. The nature of the firm performing the services does not determine whether it will be selected through the use of qualifications-based procurement procedures. For example, if a well-known A&E firm offers to provide mapping services not related to construction, alteration, or repair of real property, the recipient may not use qualifications-based procurement procedures to evaluate that contractor's offer. In contrast, if a firm that does not generally provide A&E services offers to provide mapping services that are directly in support of, directly connected to, or directly related to or lead to construction, alteration, or repair of real property, the recipient must evaluate that offer using qualifications-based procurement procedures.
- (3) Equivalent State Law. SAFETEA-LU also divided the former 49 U.S.C. Section 5325(b) by separating procurement requirements for FTA assisted A&E services from audit requirements for FTA assisted A&E services. As amended by the SAFETEA-LU Technical Corrections Act, 49 U.S.C. Section 5325(b)(1) requires A&E services to be procured using either Brooks Act procedures or an equivalent qualifications-based requirement adopted by a State before August 10, 2005.
  - (4) Special Requirements for Indirect Cost Rates. In addition, SAFETEA-LU amended 49 U.S.C. Section 5325 to require the acceptance of FAR indirect cost rates for applicable one-year accounting periods if those rates are not currently in dispute. After the indirect cost rates are accepted as required, the recipient must

use those indirect cost rates for contract estimates, negotiation, administration, reporting, and payments, with administrative or de facto ceiling limitations. *See*, 49 U.S.C. Section 5325(b)(3) and subparagraph 2.j(2)(c) of this Chapter.

- h. Construction—Special Requirements. The following Federal laws and regulations impose requirements that may affect FTA assisted construction projects:
- (1) Bonding. The Common Grant Rules require bonds for all construction contracts exceeding the simplified acquisition threshold unless FTA determines that other arrangements adequately protect the Federal interest. FTA's bonding policies are as follows:
    - (a) Bid Guarantee. Both FTA and the Common Grant Rules generally require each bidder to provide a bid guarantee equivalent to 5 percent of its bid price. The "bid guarantee" must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid to ensure that the bidder will honor its bid upon acceptance.
    - (b) Performance Bond. Both FTA and the Common Grant Rules generally require the third party contractor to obtain a performance bond for 100 percent of the contract price. A "performance bond" is obtained to ensure completion of the obligations under the third party contract.
    - (c) Payment Bond. The Common Grant Rules generally require the third party contractor to obtain a standard payment bond for 100 percent of the contract price. A "payment bond" is obtained to ensure that the contractor will pay all people supplying labor and material for the third party contract as required by law. FTA, however, has determined that payment bonds in the following amounts are adequate to protect FTA's interest and will accept a local bonding policy that meets the following minimums:
      - 1 Less Than \$1 Million. Fifty percent of the contract price if the contract price is not more than \$1 million,
      - 2 More Than \$1 Million but Less Than \$5 Million. Forty percent of the contract price if the contract price is more than \$1 million but not more than \$5 million, or
      - 3 More Than \$5 Million. Two and one half million dollars if the contract price is more than \$5 million.
    - (d) Acceptable Sureties. The Common Grant Rule for non-governmental recipients requires the non-governmental recipient to obtain construction bonds from companies holding certificates of authority as acceptable sureties under Department of the Treasury regulations, "Surety Companies Doing Business with the United States," 31 CFR Part 223. For a current list of

approved sureties, see Department of the Treasury's Listing of Approved Sureties (Department Circular 570), <http://fms.treas.gov/c570/c570.html>. FTA encourages each governmental recipient to require similarly acceptable sureties.

- (e) Reduced Bonding. FTA recognizes that bonding costs can be expensive. FTA will accept a local bonding policy that conforms to the minimums described in this subparagraph 2.h(1) of this Chapter. FTA reserves the right to approve bonding amounts that do not conform to these minimums if the local bonding policy adequately protects the Federal interest. A recipient that wishes to adopt less stringent bonding requirements, for a specific class of projects, or for a particular project should submit its policy and rationale to the Regional Administrator for the region administering the project.
  - (f) Excessive Bonding. Compliance with State and local bonding policies that are greater than FTA's bonding requirements do not require FTA approval. FTA recognizes that in some situations bond requirements can be useful if the recipient has a material risk of loss because of a failure of the prospective contractor. This is particularly so if the risk results from the likelihood of the contractor's bankruptcy or financial failure at the time of partially completed work. Nevertheless, if the recipient's "excessive bonding" requirements would violate the Common Grant Rules as restrictive of competition, FTA will not provide Federal assistance for procurements encumbered by those requirements. Consequently, if the recipient's bonding policies far exceed those described in this subsection, FTA reminds the recipient that it may find it useful to submit its policy and rationale to the Regional Administrator for the region administering the project.
- (2) Seismic Safety. The recipient must include seismic safety provisions in its third party contracts for the construction of new buildings or additions to existing buildings as required by 42 U.S.C. Sections 7701 *et seq.*, and DOT regulations, "Seismic Safety," 49 CFR Part 41 at Sections 41.117 and 41.120.
  - (3) Value Engineering. The Common Grant Rule for governmental recipients encourages them to use value engineering provisions in contracts for construction projects, and cautions that value engineering can be a pre-requisite for some Federal assistance awards. FTA generally will not approve a New Starts grant application for final design funding or a full funding grant agreement until value engineering is complete. It is important to note that some contractual arrangements (for example, design-build contracts) may inherently include value engineering. When this is the case, FTA does not require separate value engineering proposals, contract changes, or other processes. From a procurement view, the concept of value engineering is more important than the form it takes.

- (4) Equal Employment Opportunity. The Common Grant Rules require that third party construction contracts include provisions ensuring compliance with DOL regulations, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor,” 41 CFR Parts 60 *et seq.*, which implement Executive Order No. 11246, “Equal Employment Opportunity,” September 24, 1965, as amended by Executive Order No. 11375, “Amending Executive Order No. 11246 Relating to Equal Employment Opportunity,” October 13, 1967.
- (5) Prevailing Wages. Under 49 U.S.C. Section 5333(a), Davis-Bacon Act prevailing wage protections apply to laborers and mechanics employed on FTA assisted construction projects. Thus, the Common Grant Rules specify that third party contracts at any tier exceeding \$2,000 must include provisions requiring compliance with the Davis-Bacon Act, 40 U.S.C. Sections 3141 *et seq.*, and implementing DOL regulations, “Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction,” 29 CFR Part 5. The Davis-Bacon Act requires contractors to pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor. The Davis-Bacon Act also requires contractors to pay wages not less than once a week. The recipient must include a copy of the current prevailing wage determination issued by DOL in each contract solicitation and must condition contract award upon the acceptance of that wage determination. These requirements are in addition to the separate Wage and Hour Requirements addressed in paragraph 2.c(1) of this Chapter.
- (6) Anti-Kickback. For all third party construction and repair contracts exceeding \$100,000, the Common Grant Rules require provisions for compliance with the Copeland “Anti-Kickback” Act, as amended, 18 U.S.C. Section 874, and implementing DOL regulations, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in part by Loans or Grants from the United States,” 29 CFR Part 3. The Act prohibits a contractor from inducing, by any means, any employee, to give up any part of his or her compensation to which he or she is otherwise entitled. Section 4104(c) of the Federal Acquisition Streamlining Act of 1994, 40 U.S.C. Section 3701(b)(3)(A)(iii), increased the threshold for construction and repair to \$100,000 from \$2,000 as set forth in the Common Grant Rules, so that a federally assisted construction contract must exceed \$100,000 before these “Anti-Kickback” prohibitions apply to that contract.
- (7) Construction Safety. The Common Grant Rules require provisions to ensure safety at construction sites so that no laborer or mechanic shall be required to work in surroundings or under working conditions that are unsanitary, hazardous, or dangerous as prohibited by the safety requirements of Section 107 of the Contract Work Hours and Safety Standards Act, 40 U.S.C. Section 3704, and its implementing DOL regulations, “Safety and Health Regulations for Construction,” 29 CFR Part 1926. Notably, Section 4104(c) of the Federal Acquisition

Streamlining Act of 1994, 40 U.S.C. Section 3701(b)(3)(A)(iii), increased the threshold for construction safety protections to \$100,000 from \$2,000 as set forth in the Common Grant Rules, so that a federally assisted construction contract must exceed \$100,000 before these construction safety requirements apply to that contract.

- (8) Labor Neutrality. A recipient's third party contract may not require or prohibit the use of a project labor agreement (PLA), except if special circumstances require a PLA to be used to avert an imminent threat to public health or safety. A third party contractor or subcontractor, however, may voluntarily enter into a PLA. These provisions are needed to ensure compliance with Executive Order No. 13202, "Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects," February 17, 2001, as amended by Executive Order No. 13208, April 6, 2001, 41 U.S.C. Section 251 note.
- (9) Preference for U.S. Property—Buy America. For any FTA assisted third party construction contract exceeding \$100,000, FTA's Buy America requirements require the third party contractor to provide property produced or manufactured in the United States for use in the construction project that the recipient acquires, unless FTA has granted a waiver authorized by those regulations. FTA cautions that its Buy America regulations are complex and different from the Federal "Buy American Act" regulations in FAR Subparts 25.1 and 25.2.

Property that the contractor acquires to perform its construction activities for the recipient, such as tools, machinery, and other equipment or facilities, is not covered by FTA's Buy America requirements unless the recipient intends to take possession of that property upon completion of the project. Thus, if a third party contractor is acquiring property for its general inventory of equipment or facilities to conduct its overall business affairs, the recipient may enter the cost of that acquisition into its calculations of overhead amounts applicable to the FTA assisted project irrespective of whether that property would comply with FTA's Buy America regulations.

- (10) Accessibility. Facilities to be used in public transportation service must comply with 42 U.S.C. Sections 12101 *et seq.* and DOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 CFR Part 37; and Joint ATBCB/DOT regulations, "Americans with Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 36 CFR Part 1192 and 49 CFR Part 38. Notably, DOT incorporated by reference the ATBCB's "Americans with Disabilities Act Accessibility Guidelines" (ADAAG), revised July 2004, which include accessibility guidelines for buildings and facilities, and are incorporated into Appendix A to 49 CFR Part 37. DOT also added specific provisions to Appendix A modifying the ADAAG, with the result that buildings

and facilities must comply with both the ADAAG and amendments thereto in Appendix A to 49 CFR Part 37.

- i. Research, Development, Demonstration, Deployment, and Special Studies—Special Requirements. Procurements of research-type services can involve circumstances that bring special Federal requirements into effect. Among these are:
  - (1) Patent Rights. Irrespective of the status of the recipient, subrecipient, or third party contractor (for example, a large business, small business, State government, State instrumentality, local government, Indian tribe, non-profit organization, institution of higher education, individual, and so forth) the Common Grant Rules require provisions consistent with Department of Commerce regulations, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms,” 37 CFR Part 401 (implementing 35 U.S.C. Sections 200 *et seq.*), unless the Federal Government requires otherwise. Except in the case of an “other agreement” in which the Federal Government has agreed to take more limited rights, the Federal Government is entitled to a non-exclusive royalty free license to use the resulting invention or patent to the invention for Federal Government purposes.
  - (2) Rights in Data. In general, FTA does not seek greater rights in data or copyright than described in the Common Grant Rules when it provides FTA capital assistance to support acquisitions. But when FTA provides Federal assistance to support the costs of a research, development, demonstration, or a special studies project, FTA generally seeks sufficient rights in the data developed so that the resulting data can be made available to any FTA recipient, subrecipient, third party contractor, or third party subcontractor. FTA’s purpose in providing Federal assistance for a research, development, demonstration, or special studies project is to increase transportation knowledge, rather than limit the benefits of the project to project participants. Therefore, unless FTA determines otherwise in writing, FTA expects the following conditions to apply to rights in data requirements for FTA assisted research, development, demonstration, or special studies projects.
    - (a) Publication Restrictions. Except for its own internal use, neither the recipient nor the third party contractor may publish or reproduce subject data in whole or in part, or in any manner or form, without the advance written consent of the Federal Government, unless the Federal Government has released or approved the release of that data to the public. These restrictions do not apply to an institution of higher education.
    - (b) Distribution of Data. Except for contracts for adaptation of automatic data processing equipment or data provided in support of an FTA capital project, each recipient and third party contractor must agree that, in addition to the rights in data and copyrights that it must provide to FTA under the Common Grant Rules, FTA may make available to any FTA recipient, subrecipient,

third party contractor, or third party subcontractor, either FTA's license in the copyright to the subject data or a copy of the subject data. If, for any reason, the project is not completed, all data developed under the project is expected to be delivered as FTA may direct.

In certain circumstances, however, FTA may determine that it is in the public interest to take only those rights in data identified in the Common Grant Rules.

- (3) Export Control. If data developed in the course of a third party contract is subject directly or indirectly to U.S. Export Control regulations, that data may not be exported to any countries or any foreign persons, without first obtaining the necessary Federal license or licenses and complying with any applicable Department of Commerce, Export Administration Regulations, 15 CFR Part 730.
  - (4) Protection of Human Subjects. A third party contractor providing services involving the use of human subjects must comply with 42 U.S.C. Sections 289 *et seq.*, and DOT regulations, "Protection of Human Subjects," 49 CFR Part 11.
  - (5) Protection of Animals. A third party contractor providing services involving the use of animals must comply with the Animal Welfare Act, 7 U.S.C. Sections 2131 *et seq.*, and Department of Agriculture regulations, "Animal Welfare," 9 CFR Subchapter A, Parts 1, 2, 3, and 4.
- j. Audit Services. In general, the procedures of this circular apply to the acquisition of audit services financed with FTA assistance. The following considerations, however, are especially important in procurements of audit services:
- (1) Single Audit Act. Each recipient that spends \$500,000 or more in Federal awards in a single year must obtain an audit as required by the Single Audit Act of 1984, as amended, 31 U.S.C. Sections 7501 *et seq.*, and must ensure compliance with OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations," as revised.
    - (a) Organizational Conflicts of Interest. The auditor selected must be independent of the recipient.
    - (b) Eligibility of Costs. The recipient may charge the costs for audits required by the Single Audit Act to its project as direct or indirect costs as permitted by applicable Federal Cost Principles. A recipient that spends less than \$500,000 in Federal awards in a single year is not required to obtain this audit. Nor may a recipient spending less than \$500,000 in Federal awards in a single year finance the costs of such an audit with Federal assistance.
  - (2) Other Project Audits. Before procuring audit services for a specific contract or project, the recipient should be aware of the following:

- (a) Organizational Conflicts of Interest. In general, the recipient must select an auditor that is independent of the third party contractor to be audited.
- (b) Verification of Indirect Costs. Federal verification of a contractor's indirect cost rates, such as provisional overhead (burden) and General & Administrative (G&A) rates, may be required. To the extent possible, relevant information available through undisputed audits of the contractor by other recipients should be used.
- (c) Duplication of Services. To prevent duplication and ensure the eligibility of particular audit services for Federal participation, a recipient seeking a third party contract audit should contact FTA before undertaking the audit. This is particularly important in connection with the procurement of A&E services, because 49 U.S.C. Section 5325(b)(3) requires that FAR Part 31 cost principles be used to audit A&E contracts. In addition, 49 U.S.C. Section 5325(b)(3) requires the recipient and its A&E contractors and subcontractors to accept indirect cost rates established under FAR cost principles if those rates are not under dispute. Thus, the recipient should not obtain duplicative audits because they are likely to produce disparate indirect cost rates and may be ineligible for Federal assistance. Accordingly, FTA recommends that the recipient seek guidance from the cognizant Federal auditor or agency that approved the third party contractor's indirect cost rates before entering into audit contracts.
- (d) Obtaining Indirect Cost Rates. Recipients and third party contractors may obtain indirect cost rates based on FAR cost principles from the following sources:
  - 1 Governmental Entities. Government entities may obtain indirect cost rates through negotiations with OMB. *See*, OMB Guidance for Grants and Agreements, "Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87)," 2 CFR Part 225, App. E, "State and Local Indirect Cost Rate Proposals."
  - 2 Indian Tribes. Indian tribes may obtain indirect cost rates with the Department of the Interior. *See*, OMB Guidance for Grants and Agreements, "Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87)," 2 CFR Part 225, App. E, "State and Local Indirect Cost Rate Proposals."
  - 3 Educational Institutions. Educational institutions may obtain facilities and administrative rates (indirect cost rates) from the Department of Health and Human Services (HHS) or the Department of Defense's Office of Naval Research (DOD), usually depending on which of the two agencies (HHS or DOD) has provided more funds to the educational institution for the most recent three years. *See*, OMB Guidance for Grants and

Agreements, “Cost Principles for Educational Institutions (OMB Circular A-21),” 2 CFR Part 220, App. A, “Principles for Determining Costs Applicable to Grants, Contracts, and Other Agreements With Educational Institutions.”

- 4 Non-Profit Entities. Non-profit entities may obtain indirect cost rates from the Federal agency with the largest dollar value of awards with an organization, unless different arrangements are agreed to by the agencies concerned. *See*, OMB Guidance for Grants and Agreements, “Cost Principles for Non-Profit Organizations (OMB Circular A-122)” 2 CFR Part 230, App. A, “General Principles.”
  - 5 Private For-Profit Entities. Private for-profit entities may obtain indirect cost rates from the Defense Contract Audit Agency. *See*, the DCAA Web site: <http://www.dcaa.mil/>.
- (e) Eligibility of Costs. Costs of third party contract audits and proposal evaluations are eligible for reimbursement by FTA as a direct or indirect charge as permitted by applicable Federal cost principles. FTA reserves the right to disallow payments for duplicative audit charges.

## CHAPTER V

### SOURCES

A recipient will often have several sources from which to acquire the property and services it needs as described below:

1. FORCE ACCOUNT. As used in this circular, “force account” means the recipient’s own labor forces and equipment. The use of force account labor is a project management function, rather than a procurement and contract administration function, except in the general sense of the recipient’s ability to perform work with its own forces rather than contracting with another entity to acquire the property or services it needs, and the cost implications of the recipient’s decision. Although rarely exercised, FTA’s grant or cooperative agreement secures FTA the right to determine the extent to which Federal assistance may be used to participate in force account costs. FTA’s concern is to assure that the recipient will have adequate technical capacity to perform the work it undertakes reasonably economically and prudently. The third party contracting guidance of this circular does not apply to a recipient’s use of its own forces to perform project work.
2. SHARED USE. The Common Grant Rule for governmental recipients encourages recipients and subrecipients to enter into agreements for shared use of property and services. FTA encourages non-governmental recipients to consider shared use if economical and feasible.
3. JOINT PROCUREMENTS. FTA uses the term “joint procurement” to mean a method of contracting in which two or more purchasers agree from the outset to use a single solicitation document and enter into a single contract with a vendor for delivery of property or services in a fixed quantity, even if expressed as a total minimum and total maximum. Unlike a State or local government purchasing schedule, a joint procurement is not drafted for the purpose of accommodating the needs of other parties that may later want to participate in the benefits of that contract.
  - a. Use Encouraged. The Common Grant Rules and FTA encourage recipients to procure goods and services jointly with other recipients to obtain better pricing through larger purchases. Joint procurements offer the advantage of being able to obtain goods and services that may match each participating recipient’s requirements better than those likely to be available through an assignment of another recipient’s contract rights. If economical and feasible, FTA also participates in the costs of joint procurements by non-governmental recipients.
  - b. All FTA and Federal Requirements Apply. When obtaining goods or services in this manner, recipients participating in the joint procurement must ensure compliance with all applicable FTA and Federal requirements and include all required clauses and certifications in the joint solicitation and contract documents.

4. STATE OR LOCAL GOVERNMENT PURCHASING SCHEDULES OR PURCHASING CONTRACTS. FTA uses the term “state or local government purchasing schedule” to mean an arrangement that a State or local government has established with several or many vendors in which those vendors agree to provide essentially an option to the State or local government, and its subordinate government entities, to acquire specific property or services in the future at established prices. These arrangements are somewhat similar to the General Services Administration’s (GSA) Cooperative Purchasing Program available for Federal Government use. If the State or local government wishes to permit others to use its schedules, the State or local government might seek the agreement of the vendor to provide the listed property or services to others with access to the schedules, or it may permit the vendor to determine whether or not it wishes to do so.
  - a. Use Encouraged. The Common Grant Rule for governmental recipients encourages recipients and subrecipients to enter into State and local intergovernmental agreements for procurements of property or services. If so permitted by State or local authorities, a non-governmental recipient may also use State and local sources of property and services.
  - b. All FTA and Federal Requirements Apply. When obtaining property or services in this manner, the recipient must ensure all Federal requirements, required clauses, and certifications (including Buy America) are properly followed and included, whether in the master intergovernmental contract or in the recipient's purchase document. One way of achieving compliance with FTA requirements is for all parties to agree to append the required Federal clauses in the purchase order or other document that effects the recipient’s procurement. When buying from these schedules, the recipient should obtain Buy America certification before entering into the purchase order. If the product to be purchased is Buy America compliant, there is no problem. If the product is not Buy America compliant, the recipient will need to obtain a waiver from FTA before proceeding.
5. FEDERAL EXCESS AND SURPLUS PROPERTY. The Common Grant Rule for governmental recipients encourages recipients to use Federal excess and surplus property managed by the GSA when feasible and economical rather than procuring new property. The GSA Federal Property Management Regulations, 41 CFR Parts 101-42 through 101-46, 101-48, and 101-49 govern the eligibility of recipients and subrecipients, as well as others, to acquire supplies and services through GSA’s personal property utilization and disposal programs.
6. FEDERAL SUPPLY SCHEDULES. A recipient must be specifically authorized by Federal law before it may use a GSA Federal Supply Schedule.
  - a. Full Use of Federal Supply Schedules. Appendix B of GSA Order ADM 4800.2E, “Eligibility to Use GSA Sources of Supply and Services,” FTA recipients eligible for full use of GSA Schedules are limited by 40 U.S.C. Section 502(a)(3) to the Washington Metropolitan Area Transit Authority and the District of Columbia

Department of Mass Transportation. The Government of American Samoa, the Government of Guam, Virgin Islands Department of Public Works, and the Commonwealth of the Northern Marianas are similarly authorized access to GSA schedules by 48 U.S.C. Section 1469e.

- b. Limited Use of Federal Supply Schedules. Federal laws authorize State and Local Governments (including institutions of higher education) to use Federal Supply Schedules to acquire information technology (IT) and to purchase products and services to facilitate recovery from a major disaster. In both circumstances, GSA defines the term “State and Local Government” broadly to include many FTA governmental recipients and others as follows:

The States of the United States, counties, municipalities, cities, towns, townships, tribal governments, public authorities (including public or Indian housing agencies under the United States Housing Act of 1937), school districts, colleges, and other institutions of higher education, council of governments (incorporated or not), regional or interstate government entities, or any agency or instrumentality of the preceding entities (including any local educational agency or institution of higher education), and including legislative and judicial departments.

GSA has determined that the term “State and Local Government” does not include “contractors, or grantees, of State or local governments.” Nevertheless, under the GSA Cooperative Purchasing Program, State and local governmental entities (including institutions of higher education) receiving Federal assistance, either as an FTA recipient or subrecipient, are eligible users by virtue of conforming to the definition of State or local government entities; the source of funding for these entities is irrelevant.

- (1) Information Technology. Section 211 of the E-Government Act of 2002, 40 U.S.C. Section 502(c), authorizes “State and local governments,” within limits established by law, to acquire IT of various types through GSA’s Cooperative Purchasing Program, Federal Supply Schedule 70. More information about cooperative purchasing is available at GSA’s Web site:  
**<http://www.gsa.gov/Portal/gsa/ep/channelView.do?pageTypeId=8199&channelPage=%252Fep%252Fchannel%252FgsaOverview.jsp&channelId=-13528>**.
- (2) Major Disaster or Emergency Recovery. Since February 1, 2007, Section 833 of the John Warner National Defense Authorization Act for Fiscal Year 2007, Public Law 109-364, amended 40 U.S.C. Section 502(d), to authorize State and local government entities to use any GSA Federal Supply Schedule to acquire property and services in advance of a major disaster declared by the President of the United States, as well as in the aftermath of an emergency event. The State or local government is then responsible for ensuring that the property or services acquired will be used for recovery. More information about major disaster and emergency recovery acquisition is available at GSA’s Web site:

[http://www.gsa.gov/Portal/gsa/ep/contentView.do?faq=yes&pageTypeId=8199&contentId=22410&contentType=GSA\\_OVERVIEW](http://www.gsa.gov/Portal/gsa/ep/contentView.do?faq=yes&pageTypeId=8199&contentId=22410&contentType=GSA_OVERVIEW).

- c. All FTA and Federal Requirements Apply. When using GSA schedules to acquire property or services in this manner, the recipient must ensure all Federal requirements, required clauses, and certifications (including FTA's Buy America requirements) are properly followed and included, whether in the master intergovernmental contract or in the recipient's purchase document. One way of achieving compliance with FTA requirements is for all parties to agree to append the required Federal clauses in the purchase order or other document that effects the recipient's procurement. When buying from these schedules, the recipient should obtain an FTA Buy America certification before entering into the purchase order. If the property to be purchased is Buy America compliant under FTA regulations, the recipient may proceed with its acquisition. If the property is not Buy America compliant under FTA standards, the recipient will need to obtain a waiver from FTA before proceeding.
  - d. Competition and Price Reasonableness. When using GSA schedules to acquire property or services, a recipient will have fulfilled the Common Grant Rules' competition requirements if it seeks offers from at least three sources. FTA expects a recipient using a price published on a GSA schedule to consider whether the GSA price is reasonable. The recipient may also seek a lower price than that published on the GSA schedules.
7. EXISTING CONTRACTS. Occasionally, a recipient may find it advantageous to use existing contract rights. As used in this circular, "existing contract" means a contract that, when formed, was intended to be limited to the original parties thereto, and does not include State or local government purchasing schedules or purchasing contracts as discussed in sections 4, 5, and 6 of this Chapter.
- a. Permissible Actions. Within the conditions set forth below, FTA permits a recipient to use existing contract rights held by another recipient:
    - (1) Exercise of Options. A recipient may use contract options held by another recipient with the following limitations:
      - (a) Consistency with the Underlying Contract. FTA expects the recipient to ensure that the terms and conditions of the option it seeks to exercise are substantially similar to the terms and conditions of the option as stated in the original contract at the time it was awarded.
      - (b) Price. The recipient may not exercise an option unless it has determined that the option price is better than prices available in the market, or that when it intends to exercise the option, the option is more advantageous.
      - (c) Awards Treated as Sole Source Procurements. The following actions constitute sole source awards:

- 1 Failure to Evaluate Options Before Awarding the Underlying Contract. If a contract has one or more options and those options were not evaluated as part of the original contract award, exercising those options after contract award will result in a sole source award.
- 2 Negotiating a Lower Option Price. Exercising an option after the recipient has negotiated a lower or higher price will also result in a sole source award unless that price can be reasonably determined from the terms of the original contract, or that price results from Federal actions that can be reliably measured, such as changes in Federal prevailing labor rates, for example.

In the circumstances described in this paragraph, FTA assistance may be used to support a sole source award only if that award can be justified under FTA's third party contract standards for sole source awards.

- (2) Assignment of Contract Rights. FTA expects the recipient to limit its procurements to the amount of property and services required to meet its reasonably expected needs without adding excess capacity simply for the purpose of assigning contract rights to others at a later date. FTA expects the recipient to be able to justify the quantities it procures. Having written statements of its anticipated material requirements in the recipient's contract files may prove helpful.

For example, if the supplies or services were solicited, competed, and awarded through the use of an indefinite-delivery-indefinite-quantity (IDIQ) contract, the solicitation and also the contract award are expected to contain both a minimum and maximum quantity that represent the recipient's reasonably foreseeable needs. The establishment of State or local government purchasing schedules intended to be available for future use as discussed in section 4 of this Chapter, however, are not usually financed with FTA assistance. FTA assistance would be used to acquire property or services listed on such a contract only to the extent needed for public transportation purposes.

Nevertheless, a recipient may find that it has inadvertently acquired contract rights in excess of its needs. The recipient may assign those contract rights to other recipients if the original contract contains an assignability provision that permits the assignment of all or a portion of the specified deliverables under the terms originally advertised, competed, evaluated, and awarded, or contains other appropriate assignment provisions. Some refer to this process as "piggybacking."

- (a) Acquisition Through Assigned Contract Rights. Although FTA does not encourage the practice, a recipient may find it useful to acquire contract rights through assignment by another recipient. A recipient that obtains contractual rights through assignment may use them after first determining the contract price remains fair and reasonable, and the contract provisions are adequate for

compliance with all Federal requirements. The recipient need not perform a second price analysis if a price analysis was performed for the original contract. However, FTA expects the recipient to determine whether the contract price or prices originally established are still fair and reasonable before using those rights. *See*, FTA's "Best Practices Procurement Manual" for further information about procurements through assignment of another's contract rights. The recipient using assigned contract rights is responsible for ensuring the contractor's compliance with FTA's Buy America requirements and execution of all the required preaward and post delivery Buy America review certifications. For further details, please refer to FTA's Pre-Award and Post-Delivery Handbooks for buses and rail cars, which contain copies of those certifications. The recipient seeking to use assigned contract rights will not usually be able to determine whether the assigning recipient originally procured unreasonably large quantities. Before proceeding with the assignment, however, FTA does expect the recipient seeking the assignment to review the original contract to be sure that the quantities the assigning recipient acquired, coupled with the quantities the acquiring recipient seeks, do not exceed the amounts available under the assigning recipient's contract.

- (b) Alternatives to Assigned Contract Rights. Assignments limit a recipient's choices to specific property and services acquired to meet another recipient's particular needs, and may be less suited to the recipient's needs. More desirable approaches may include:
- 1 Joint Procurements. Recipients should consider combining or "pooling" their procurements to obtain better pricing. In general, joint procurements are often more desirable than procurements through assignment because an assignment does not represent the combined buying power of more than one purchaser at the time when prices are established. A joint procurement may also offer the advantage of permitting the parties to acquire property and services more closely responsive to each purchaser's material requirements than would be available through assignment of existing contract rights. FTA cautions, however, that if two or more parties jointly solicit and award an IDIQ contract, total minimum and maximum quantities are expected to be stated in the solicitation and contract.
  - 2 Intergovernmental Procurements. As discussed in sections 4, 5, and 6 of this Chapter, Federal, State, and local governmental resources may provide attractive procurement opportunities.
- b. Impermissible Actions. A recipient may not use Federal assistance to finance:
- (1) Improper Contract Expansion. A contract has been improperly expanded when it includes a larger scope, greater quantities, or options beyond the recipient's

reasonably anticipated needs. A contract has also been improperly expanded when excess capacity has been added primarily to permit assignment of those contract rights to another entity. The Common Grant Rules require the recipient to have procurement procedures that preclude the recipient from acquiring property or services it does not need.

- (2) Cardinal Changes. A significant change in contract work (property or services) that causes a major deviation from the original purpose of the work or the intended method of achievement, or causes a revision of contract work so extensive, significant, or cumulative that, in effect, the contractor is required to perform very different work from that described in the original contract, is a cardinal change. Such practices are sometimes informally referred to as “tag-ons.” A change within the scope of the contract (sometimes referred to as an “in-scope” change) is not a “tag-on” or cardinal change.
  - (a) Identifying Cardinal Changes. Although FTA has provided additional guidance in its Best Practices Procurement Manual, FTA has not developed a finite list of acceptable contract changes. Recognizing a cardinal change to a third party contract can be difficult. A cardinal change cannot be identified easily by assigning a specific percentage, dollar value, number of changes, or other objective measure that would apply to all cases.
  - (b) Changes in Quantity. To categorize virtually any change in quantity as a prohibited cardinal change (sometimes referred to as an “out-of-scope” change) fails to account for the realities of the marketplace and unnecessarily restricts a recipient from exercising reasonable freedom to make minor adjustments contemplated fairly and reasonably by the parties when they entered into the contract. The U.S. Supreme Court decision in *Freund v. United States*, 260 U.S. 60 (1922) supports FTA’s policy.
  - (c) Tests. Among other things, customary marketing practices can influence the determination of which changes will be “cardinal.” Other tests involve the nature and extent of the work to be performed, the amount of effort involved, whether the change was originally contemplated at the time the original contract was entered into, or the cumulative impact on the contract’s quantity, quality, costs, and delivery terms.
  - (d) Rolling Stock. In the case of rolling stock, a major change in quantity or a substitution of major end items not contemplated when competition for the original award took place would generally be a cardinal change. Another cardinal change would, at this time, include a change from a high-floor to a low-floor vehicle. Changing an engine might result in a cardinal change depending on the circumstances surrounding the project and whether a compatible replacement could be obtained through competition. FTA, however, considers changes to seating, fabrics, and colors, exterior paint

schemes, signage, and floor covering, and other similar changes to be permissible changes.

- (e) Federal Procurement Standards. The broader standards applied in Federal contracting practice reflected in Federal court decisions, Federal Boards of Contract Appeals decisions, and Comptroller General decisions provide guidance in determining whether a change would be treated as a cardinal change. FTA does not imply that these Federal procurement decisions are controlling. FTA intends to consider the collective wisdom within these decisions in determining the nature of third party contract changes along the broad spectrum between permissible changes and impermissible cardinal changes. Other guidance can be found in FTA's Best Practices Procurement Manual and "Frequently Asked Questions" at the FTA Web site: [http://www.fta.dot.gov/funding/thirdpartyprocurement/grants\\_financing\\_6039.html](http://www.fta.dot.gov/funding/thirdpartyprocurement/grants_financing_6039.html).

FTA intends to monitor its recipients and oversight contractors to ensure that this concept is well understood and uniformly applied. This approach permits greater latitude but, because it requires analysis, it can sometimes require a greater knowledge of Federal contracting practices. In any event, before attempting to change the terms of its contract, the recipient should review the contract's provisions to ensure that the contract permits the change sought.

8. THE OPEN MARKET. The recipient will probably acquire most of the property and services it needs through procurements in the open market. The next two chapters of this circular will address proper procedures for conducting and administering such procurements.

## CHAPTER VI

### **PROCEDURAL GUIDANCE FOR OPEN MARKET PROCUREMENTS**

1. **COMPETITION REQUIRED.** Except as permitted by Federal law or regulations, the Common Grant Rules require a recipient of Federal assistance to use third party procurement procedures that provide full and open competition. The Federal Transit Administration's (FTA) enabling legislation at 49 U.S.C. Section 5325(a), also requires an FTA recipient to conduct all third party procurements financed under 49 U.S.C. Chapter 53 in a manner that provides full and open competition as determined by FTA. The recipient may make third party contract awards on the basis of:
  - a. **Solicitation by the Recipient.** Compliance with the solicitation procedures described in this Chapter will fulfill FTA requirements for "full and open competition."
  - b. **Unsolicited Proposals.** A recipient may also enter into contracts based on an unsolicited proposal, as defined in Chapter I of this circular, when authorized by applicable State or local law or regulation. Receipt of an unsolicited proposal does not, by itself, justify contract award without providing for full and open competition. Unless the unsolicited proposal offers a proprietary concept that is essential to contract performance, FTA expects the recipient to seek competition. To satisfy the requirement for full and open competition, FTA expects the recipient to take the following actions before entering into a contract resulting from an unsolicited proposal:
    - (1) **Receipt.** Publicize its receipt of the unsolicited proposal,
    - (2) **Adequate Description.** Publicize an adequate description of the property or services offered without improperly disclosing proprietary information or disclosing the originality of thought or innovativeness of the property or services sought,
    - (3) **Interest in the Property or Services.** Publicize its interest in acquiring the property or services described in the proposal,
    - (4) **Adequate Opportunity to Compete.** Provide an adequate opportunity for interested parties to comment or submit competing proposals, and
    - (5) **Contract Award Based on Proposals Received.** Publicize its intention to award a contract based on the unsolicited proposal or another proposal submitted in response to the publication.

If it is impossible to describe the property or services offered without revealing proprietary information or disclosing the originality of thought or innovativeness of the property or services sought, the recipient may make a sole source award to the offeror. A sole source award may not be based solely on the unique capability of the offeror to provide the specific property or services proposed.

- c. Prequalification. Prequalification lists are most commonly used in procurements of property involving lengthy evaluations needed to determine whether it satisfies the recipient's standards. The Common Grant Rule for governmental recipients permits a recipient to prequalify people, firms, and property for procurement purposes if:
- (1) Lists. The recipient ensures that all prequalification lists it uses are current.
  - (2) Sources. The recipient ensures that all prequalification lists it uses include enough qualified sources to provide maximum full and open competition.
  - (3) Qualification Periods. The recipient permits potential bidders or offerors to qualify during the solicitation period (from the issuance of the solicitation to its closing date). FTA, however, does not require a recipient to hold a particular solicitation open to accommodate a potential supplier that submits property for approval before or during that solicitation. Nor must a recipient expedite or shorten prequalification evaluations of bidders, offerors, or property presented for review during the solicitation period.

Prequalification should not be confused with reviews of technical qualifications—that are an essential process in two-step procurements and qualifications-based procurements, as discussed further in subsections 3.e and 3.f of this Chapter, respectively.

2. SOLICITATION REQUIREMENTS AND RESTRICTIONS. The Common Grant Rules require that each solicitation provide the following information:
- a. Description of the Property or Services. The solicitation and the contract awarded thereunder must include a clear and accurate description of the recipient's technical requirements for the property or services to be acquired in a manner that provides for full and open competition.
    - (1) What to Include. The description may include a statement of the qualitative nature of the property or services to be acquired. When practicable, the recipient should describe its requirements in terms of functions to be performed or level of performance required, including the range of acceptable characteristics or minimum acceptable standards. The Common Grant Rules for governmental recipients states that "Detailed product specifications should be avoided if at all possible." Both Common Grant Rules express a preference for performance or functional specifications, but do not prohibit the use of detailed technical specifications when appropriate.
    - (2) Quantities Limited to the Recipient's Actual Needs. FTA limits Federal assistance to the amount necessary to support the quantity of property or extent of services the recipient actually needs at the time of acquisition. The recipient may not add quantities or options to contracts solely to allow them to assign these quantities or options at a later date. FTA will not knowingly support the additional cost of

contract rights to property or services excess to the recipient's immediate needs, even though the recipient may assign its excess contract rights to others.

- (3) Brand Name or Equal. When it is impractical or uneconomical to provide a clear and accurate description of the technical requirements of the property to be acquired, a "brand name or equal" description may be used to define the performance or other salient characteristics of a specific type of property. The recipient must identify the salient characteristics of the named brand that offerors must provide. When using a "brand name" specification, the recipient does not need to reverse-engineer a complicated part to identify precise measurements or specifications in order to describe its salient characteristics. FTA's "Best Practices Procurement Manual," (BPPM) contains additional information on preparation of specifications including examples with specific language.
- (4) Prohibitions. The Common Grant Rules prohibit solicitation requirements that contain features that unduly restrict competition. FTA recipients are also prohibited by 49 U.S.C. Section 5325(h) from using FTA assistance to support an exclusionary or discriminatory specification. Some situations considered to be restrictive of competition include, but are not limited to, the following, all of which are identified in one or both Common Grant Rules:
  - (a) Excessive Qualifications. Imposing unreasonable business requirements for bidders or offerors.
  - (b) Unnecessary Experience. Imposing unnecessary experience requirements for bidders and offerors.
  - (c) Improper Prequalification. Using prequalification procedures that conflict with the prequalification standards described in subsection 1.c of this Chapter.
  - (d) Retainer Contracts. Making a noncompetitive award to any person or firm on a retainer contract with the recipient if that award is not for the property or services specified for delivery under the retainer contract.
  - (e) Excessive Bonding. To encourage greater contractor participation in FTA assisted projects, FTA does not require the recipient to impose bonding requirements on its third party contractors other than construction bonding specified by the Common Grant Rules and this circular for construction. FTA discourages unnecessary bonding because it increases the cost of the contract and restricts competition, particularly by disadvantaged business enterprises. Bond companies exercise their discretion and assure their profits primarily by declining to undertake excessive risks. Consequently many bidders have limited "bonding capacity." Unnecessary performance bonding requirements reduce a prospective bidder's or offeror's capability to bid or offer a proposal on bonded work. Small businesses with short histories may have particular difficulty obtaining bonds as may be specified.

Nevertheless, even though bonding can be expensive, FTA recognizes that a recipient might find bid, performance, or payment bonds to be desirable. Because bonding requirements can limit contractor participation, FTA expects the recipient's bonding requirements to be reasonable and not unduly restrictive. FTA, however, will not challenge State or local bonding requirements as unreasonably restrictive of competition, even though they might exceed Federal requirements. Nevertheless, if the recipient's bonding policies result in such "excessive bonding" that it would violate the Common Grant Rules as restrictive of competition, FTA will not provide Federal assistance for those procurements. Thus if the recipient's bonding policies far exceed those described in this subparagraph or are permissible under State or local law, the recipient should obtain FTA's written concurrence to ensure the availability of Federal assistance for the project.

- (f) Brand Name Only. Specifying only a "brand name" product without allowing offers of "an equal" product, or allowing "an equal" product without listing the salient characteristics that the "equal" product must meet to be acceptable for award.
- (g) In-State or Local Geographic Restrictions. Specifying in-State or local geographical preferences, or evaluating bids or proposals in light of in-State or local geographic preferences, even if those preferences are imposed by State or local laws or regulations. In particular, 49 U.S.C. Section 5325(i) prohibits an FTA recipient from limiting its bus purchases to in-State dealers. Exceptions expressly mandated or encouraged by Federal law include the following:
  - 1 Architectural Engineering (A&E) Services. Geographic location may be a selection criterion if an appropriate number of qualified firms are eligible to compete for the contract in view of the nature and size of the project.
  - 2 Licensing. A State may enforce its licensing requirements, provided that those State requirements do not conflict with Federal law.
  - 3 Major Disaster or Emergency Relief. Federal assistance awarded under the Stafford Act, 42 U.S.C. Section 5150, to support contracts and agreements for debris clearance, distribution of supplies, reconstruction, and other major disaster or emergency assistance activities permits a preference, to the extent feasible and practicable, for organizations, firms, and individuals residing or doing business primarily in the area affected by a major disaster or emergency.
- (h) Organizational Conflicts of Interest. Engaging in practices that result in organizational conflicts of interest as prohibited by the Common Grant Rules:

- 1 Occurrence. An organizational conflict of interest occurs when any of the following circumstances arise:
  - a Lack of Impartiality or Impaired Objectivity. When the contractor is unable, or potentially unable, to provide impartial and objective assistance or advice to the recipient due to other activities, relationships, contracts, or circumstances.
  - b Unequal Access to Information. The contractor has an unfair competitive advantage through obtaining access to nonpublic information during the performance of an earlier contract.
  - c Biased Ground Rules. During the conduct of an earlier procurement, the contractor has established the ground rules for a future procurement by developing specifications, evaluation factors, or similar documents.
- 2 Remedies. FTA expects the recipient to analyze each planned acquisition in order to identify and evaluate potential organizational conflicts of interest as early in the acquisition process as possible, and avoid, neutralize, or mitigate potential conflicts before contract award.
  - (i) Restraint of Trade. Supporting or acquiescing in noncompetitive pricing practices between firms or between affiliated companies. Questionable practices would include, but not be limited to submissions of identical bid prices for the same products by the same group of firms, or an unnatural pattern of awards that had the cumulative effect of apportioning work among a fixed group of bidders or offerors.
  - (j) Arbitrary Action. Taking any arbitrary action in the procurement process.
- b. Evaluation Factors. The solicitation must identify all factors to be used in evaluating bids or proposals.
- c. Contract Type Specified. The recipient's specifications should state the type of contract that will be awarded.
  - (1) Typical Contract Types. Contract types may include, but are not limited to, the following:
    - (a) Firm Fixed Price. A firm fixed price contract includes a price that remains fixed irrespective of the contractor's cost experience in performing the contract. A firm fixed price contract may include an economic price adjustment provision, incentives, or both.

- (b) Cost Reimbursement. A cost-reimbursement contract provides for payment of the contractor's allowable incurred costs, to the extent prescribed in the contract. Allowable costs may include incentives if the recipient believes they can prove helpful. Cost-reimbursement contracts are suitable for use only when uncertainties involved in contract performance do not permit costs to be estimated with sufficient accuracy to use any type of fixed price contract.
- (2) Prohibited or Restricted Contract Types. The Common Grant Rule for governmental recipients provides more guidance on contract type than does the Common Grant Rule for non-governmental recipients, which merely authorizes the recipient to select the type of contract it will use (for example, fixed price, cost reimbursement, purchase order, or incentive contract) if it is appropriate for the particular procurement and promotes the best interests of the program or project involved.

The following contract types are restricted or prohibited:

- (a) Cost Plus a Percentage of Cost—Prohibited. The Common Grant Rules expressly prohibit the use of the cost plus a percentage of cost and cost plus a percentage of construction cost methods of contracting.
- (b) Time and Materials—Restricted. The Common Grant Rule for governmental recipients permits the use of time and material contracts only:
  - 1 When to Use. After determining that no other contract type is suitable; and
  - 2 Firm Ceiling Price. If the contract specifies a ceiling price that the contractor may not exceed except at its own risk.

FTA strongly encourages non-governmental recipients to use similar procedures.

- d. Other Federal Requirements Affecting the Property or Services to be Acquired. The solicitation and resulting contract must identify those Federal requirements that will affect contract scope and performance. *See*, Chapter IV, subsection 2.b of this circular, and FTA's latest Master Agreement for references to Federal requirements established following publication of this circular.
- e. Other Federal Requirements Affecting the Bidder or Offeror and the Contractor. The solicitation and resulting contract must identify all Federal requirements that a bidder or offeror must fulfill before and during contract performance. *See*, Chapter IV, subsection 2.a of this circular and FTA's latest Master Agreement that may reference more Federal requirements.
- f. Award to Other Than the Low Bidder. If the recipient intends to reserve its right to award to other than the low bidder or offeror, that information should be stated in the solicitation document.

g. Rejection of All Bids or Offers. If the recipient intends to reserve its right to reject all bids or offers, that information should be stated in the solicitation document.

3. METHODS OF PROCUREMENT. The recipient should use competitive procedure(s) appropriate for the acquisition undertaken. The procedures used must comply with State and local law as well as with Federal requirements. Federal restrictions vary with the type of procurement method used. The following guidance is based on the requirements of the Common Grant Rule for governmental recipients, supplemented by FTA policies that address the needs of FTA recipients.

a. Micro-Purchases. Consistent with the Federal Acquisition Regulation (FAR), FTA considers micro-purchases to be those purchases of \$3,000 or less.

(1) When Appropriate. If permitted by State and local law, the recipient may acquire property and services valued at less than \$3,000 without obtaining competitive quotations. These purchases are exempt from FTA's Buy America requirements. Davis-Bacon prevailing wage requirements, however, will apply to construction contracts exceeding \$2,000, even though the recipient uses micro-purchase procurement procedures. FTA does not intend to imply that the recipient must treat any purchase under \$3,000 as a micro-purchase. The recipient may set lower thresholds for micro-purchases in compliance with State and local law, or otherwise as it considers appropriate.

(2) Procedures. The following procedures apply to micro-purchases:

(a) Competition. The recipient should distribute micro-purchases equitably among qualified suppliers.

(b) Prohibited Divisions. The recipient may not divide or reduce the size of its procurement merely to come within the micro-purchase limit.

(c) Documentation. FTA's only documentation requirement for micro-purchases is a determination that the price is fair and reasonable and a description of how the recipient made its determination. FTA does not require the recipient to provide its rationale for the procurement method used, selection of contract type, or reasons for contractor selection or rejection.

b. Small Purchases. The Common Grant Rule for governmental recipients authorizes governmental recipients to use relatively simple and informal small purchase procedures as follows:

(1) When Appropriate. Small purchase procedures may be used to acquire services, supplies, or other property valued at more than the micro-purchase threshold but less than the Federal simplified acquisition threshold at 41 U.S.C. Section 403(11) (currently \$100,000). These purchases are also exempt from FTA's Buy America requirements. FTA does not intend to imply that any purchase of less than

\$100,000 must be treated as a small purchase. The recipient may set lower thresholds for small purchases in compliance with State and local law, or otherwise as it considers appropriate.

- (2) Procedures. When using small purchase procedures:
  - (a) Competition. The recipient must obtain price or rate quotations from an adequate number of qualified sources.
  - (b) Prohibited Divisions. The recipient may not divide or reduce the size of its procurement to avoid the additional procurement requirements applicable to larger acquisitions.
- c. Sealed Bids (Formal Advertising). The Common Grant Rule for governmental recipients acknowledges sealed bidding to be a generally accepted procurement method in which bids are publicly solicited, and a firm fixed price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming to all the material terms and conditions of the invitation for bids, is lowest in price.
  - (1) When Appropriate. The Common Grant Rule for government recipients states a preference for the sealed bids procurement method for acquiring property, construction, and other services. Procurement using sealed bids is appropriate if:
    - (a) Precise Specifications. A complete, adequate, precise, and realistic specification or purchase description is available.
    - (b) Adequate Sources. Two or more responsible bidders are willing and able to compete effectively for the business.
    - (c) Fixed Price Contract. The procurement generally lends itself to a firm fixed price contract.
    - (d) Price Determinative. The successful bidder can be selected on the basis of price and those price-related factors listed in the solicitation including, but not limited to, transportation costs, life cycle costs, and discounts expected to be taken. Apart from responsibility determinations discussed in later sections of this Chapter, contractor selection may not be determined on the basis of other factors whose costs cannot be measured at the time of award.
    - (e) Discussions Unnecessary. Discussions with one or more bidders after bids have been submitted are expected to be unnecessary as award of the contract will be made based on price and price-related factors alone. This contrasts with Competitive Proposal procedures in which discussions with individual offerors are expected to be necessary and may take place at any time after receipt of proposals. However, a pre-bid conference with prospective bidders before bids have been received can be useful.

- (2) Procurement Procedures. The following procedures apply to sealed bid procurements:
  - (a) Publicity. The invitation for bids is publicly advertised.
  - (b) Adequate Sources. Bids are solicited from an adequate number of known suppliers.
  - (c) Adequate Specifications. The invitation for bids, including any specifications and pertinent attachments, describes the property or services sought in sufficient detail that a prospective bidder will be able to submit a proper bid.
  - (d) Sufficient Time. Bidders are allowed sufficient time to prepare bids before the date of bid opening.
  - (e) Public Opening. All bids are publicly opened at the time and place prescribed in the invitation for bids.
  - (f) Fixed Price Contract. A firm fixed price contract is usually awarded in writing to the lowest responsive and responsible bidder, but a fixed price incentive contract or inclusion of an economic price adjustment provision can sometimes be appropriate. When specified in the bidding documents, factors such as transportation costs and life cycle costs affect the determination of the lowest bid; payment discounts are used to determine the low bid only when prior experience indicates that such discounts are typically taken.
  - (g) Rejection of Bids. Any or all bids may be rejected if there is a sound, documented business reason.

FTA strongly encourages non-governmental recipients to use similar procedures.

- d. Competitive Proposals (Request for Proposals). The Common Grant Rule for governmental recipients acknowledges the use of competitive proposals to be a generally accepted procurement method when the nature of the procurement does not lend itself to sealed bidding and the recipient expects that more than one source will be willing and able to submit an offer or proposal.
  - (1) When Appropriate. Competitive proposals should be used when any of the following circumstances are present:
    - (a) Type of Specifications. The property or services to be acquired are described in a performance or functional specification; or if described in detailed technical specifications, other circumstances such as the need for discussions or the importance of basing contract award on factors other than price alone are present.

- (b) Uncertain Number of Sources. Uncertainty about whether more than one bid will be submitted in response to an invitation for bids and the recipient lacks the authority or flexibility under State or local law to negotiate the contract price if it receives only a single bid.
  - (c) Price Alone Not Determinative. Due to the nature of the procurement, contract award need not be based exclusively on price or price-related factors. In different types of negotiated acquisitions, the relative importance of cost or price may vary. When the recipient's material requirements are clearly definable and the risk of unsuccessful contract performance is minimal, cost or price may play a dominant role in source selection. The less definitive the requirements, the more development work required, or the greater the performance risk, the more technical or past performance considerations may play a dominant role in source selection and supersede low price.
  - (d) Discussions Expected. Separate discussions with individual offeror(s) are expected to be necessary after they have submitted their proposals. This contrasts with Formal Advertising procedures in which discussions with individual bidders are not likely to be necessary, as award of the contract will be made based on price and price-related factors alone.
- (2) Procurement Procedures. The following procedures apply to procurements by competitive proposals:
- (a) Publicity. The request for proposals is publicly advertised.
  - (b) Evaluation Factors. All evaluation factors and their relative importance are specified in the solicitation; but numerical or percentage ratings or weights need not be disclosed.
  - (c) Adequate Sources. Proposals are solicited from an adequate number of qualified sources.
  - (d) Evaluation Method. A specific method is established and used to conduct technical evaluations of the proposals received and to determine the most qualified offeror.
  - (e) Price and Other Factors. An award is made to the responsible offeror whose proposal is most advantageous to the recipient's program with price and other factors considered.
  - (f) Best Value. If permitted under its State or local law, the recipient may award the contract to the offeror whose proposal provides the greatest value to the recipient. To do so, the recipient's solicitation must inform potential offerors that the award will be made on a "best value" basis and identify what factors will form the basis for award. The evaluation factors for a specific

procurement should reflect the subject matter and the elements that are most important to the recipient. Those evaluation factors may include, but need not be limited to, technical design, technical approach, length of delivery schedules, quality of proposed personnel, past performance, and management plan. The recipient should base its determination of which proposal represents the “best value” on an analysis of the tradeoff of qualitative technical factors and price or cost factors. Apart from the statutory requirement that the contract must support the recipient’s public transportation project consistent with applicable Federal laws and regulations, FTA does not require any specific factors or analytic process.

FTA strongly encourages non-governmental recipients to use similar procedures.

- e. Two-Step Procurement Procedures. If permitted by State and local law, the recipient may use two-step procurement procedures in both sealed bid and competitively negotiated procurements, provided the opportunity for full and open competition is retained.
  - (1) Review of Technical Qualifications and Approach. The first step is a review of the prospective contractors’ technical approach to the recipient’s request and technical qualifications to carry out that approach. The recipient then may narrow the competitive range to prospective contractors that demonstrate a technically satisfactory approach and have satisfactory qualifications.
  - (2) Review of Bids and Proposals Submitted by Qualified Prospective Contractors. The second step consists of soliciting and reviewing complete bids (sometimes referred to as “two-step sealed bidding”) or proposals (as in “competitive negotiations”), including price, submitted by each prospective contractor determined to be qualified. Absent exceptional circumstances, the recipient should attempt to solicit bids or proposals from at least three qualified prospective contractors. Unlike qualifications-based procurement procedures required for A&E services, and other contracts covered by 49 U.S.C. Section 5325(b) discussed in subsection 3.f of this Chapter, FTA expects the recipient to consider all bid or proposal prices submitted as well as other technical factors, rather than limiting reviews to the most qualified bidder or offeror.
- f. Architectural Engineering (A&E) Services and Other Services. FTA’s enabling legislation at 49 U.S.C. Section 5325(b)(1) requires the use of the qualifications-based procurement procedures contained in the “Brooks Act,” 40 U.S.C. Sections 1101 through 1104, to acquire A&E services, but also for program management, construction management, feasibility studies, preliminary engineering, design, architectural, engineering, surveying, mapping and related services. The nature of the work to be performed and its relationship to construction, not the nature of the prospective contractor, determine whether qualifications-based procurement procedures may be used as described below.

- (1) Qualifications-Based Procurement Procedures Required. The recipient must use qualifications-based procurement procedures not only when contracting for A&E services, but also for other services listed in 49 U.S.C. Section 5325(b)(1) that are directly in support of, directly connected to, directly related to, or lead to construction, alteration, or repair of real property. For example, a contractor performing program management, project design, construction management, or engineering services in which that contractor would select the finished products to be acquired for an FTA assisted construction project must be selected through qualifications-based procurement procedures.
- (2) Qualifications-Based Procurement Procedures Prohibited. Unless FTA determines otherwise in writing, a recipient may not use qualifications-based procurement procedures to acquire other types of services if those services are not directly in support of, directly connected to, directly related to, or do not lead to construction, alteration, or repair of real property. Even if a contractor has performed services listed herein in support of a construction, alteration, or repair project involving real property, selection of that contractor to perform similar services not relating to construction may not be made through the use of qualifications-based procurement procedures.

A project involving construction does not always require that qualifications-based procurement procedures be used. Whether or not qualifications-based procurement procedures may be used depends on the actual services to be performed in connection with the construction project. For example, the design or fabrication of message signs, signals, movable barriers, and similar property that will become off-the-shelf items or will be fabricated and delivered as final end products for installation in an FTA assisted construction project are not services for which qualifications-based procurement procedures may be used. Nor are actual construction, alteration, or repair to real property the type of services for which qualifications-based procurement procedures may be used.

- (3) Qualifications-Based Procurement Procedures. The following procedures apply to qualifications-based procurements:
  - (a) Qualifications. Unlike other two-step procurement procedures in which price is an evaluation factor, an offeror's qualifications are evaluated to determine contract award.
  - (b) Price. Price is excluded as an evaluation factor.
  - (c) Most Qualified. Negotiations are first conducted with only the most qualified offeror.
  - (d) Next Most Qualified. Only after failing to agree on a fair and reasonable price may negotiations be conducted with the next most qualified offeror. Then, if necessary, negotiations with successive offerors in descending order may be

conducted until contract award can be made to the offeror whose price the recipient believes is fair and reasonable.

- (4) Effect of State Laws. To the extent that a State has, before August 10, 2005, adopted by law, an equivalent State qualifications-based procurement requirement for acquiring architectural, engineering, and design services, Federal “Brooks Act” procedures, 40 U.S.C. Sections 1101 through 1104, will not apply.
  - (5) Audits and Indirect Costs. As required by 49 U.S.C. Section 5325(b)(3), the following requirements apply to a third party contract for program management, architectural engineering, construction management, feasibility studies, preliminary engineering, design, architectural, engineering, surveying, mapping, or related services:
    - (a) Performance of Audits. The third party contract or subcontract must be performed and audited in compliance with FAR Part 31 cost principles.
    - (b) Indirect Cost Rates. The recipient and the third party contractor, its subcontractors and subrecipients, if any, must accept FAR indirect cost rates for one-year applicable accounting periods established by a cognizant Federal or State government agency, if those rates are not currently under dispute.
    - (c) Application of Rates. After a firm’s indirect cost rates established as described in subparagraph 3.f(5)(b) of this Chapter are accepted, those rates will apply for purposes of contract estimation, negotiation, administration, reporting, and payments, not limited by administrative or de facto ceilings.
    - (d) Prenotification; Confidentiality of Data. Before requesting or using cost or rate data described in subparagraph 3.f(5)(c), a recipient must notify the affected firm(s). That data must be kept confidential and may not be accessible by or provided by the group of agencies that share cost data under this subparagraph, except by written permission of the audited firm. If prohibited by law, that cost and rate data may not be disclosed under any circumstances. FTA recognizes that many States have “Open Records” laws that may make it difficult to maintain confidential cost or rate data. As a result, before requesting or using cost or rate data, not only should a recipient notify the affected firm, but it must also obtain permission to provide that data in response to a valid request under applicable State law. The confidentiality requirements of 49 U.S.C. 5325(b)(3)(D) cannot be waived, even if they conflict with State law or regulations.
- g. Design-Bid-Build. The design-bid-build procurement method requires separate contracts for design services and for construction.

- (1) Design Services. For design services, the recipient must use qualifications-based procurement procedures, in compliance with applicable Federal, State and local law and regulations.
  - (2) Construction. Because the recipient may not use qualifications-based procurement procedures for the actual construction, alteration or repair of real property, the recipient generally must use competitive procedures for the construction. These may include sealed bidding or competitive negotiation procurement methods, as appropriate.
- h. Design-Build. The design-build procurement method consists of contracting for design and construction simultaneously with contract award to a single contractor, consortium, joint venture, team, or partnership that will be responsible for both the project's design and construction. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) expressly authorizes the use of FTA capital assistance to support design-build projects "after the recipient complies with Government requirements," 49 U.S.C. Section 5325(d)(2).
- (1) Procurement Method Determined by Value. First, the recipient must separate the various contract activities to be undertaken and classify them as design or construction, and then calculate the estimated total value of each. Because both design and construction are included in a single procurement, the FTA expects the recipient to use the procurement method appropriate for the services having the greatest cost, even though other necessary services would not typically be procured by that method.
    - (a) Construction Predominant. The construction costs of a design-build project are usually predominant so that the recipient would be expected to use competitive negotiations or sealed bids for the entire procurement rather than the qualification-based Brooks Act procurement procedures. Specifically, when construction costs will be predominant, unless FTA determines otherwise in writing, an FTA recipient may not use qualifications-based procurement procedures to acquire architectural engineering, program management, construction management, feasibility studies, preliminary engineering, design, architectural and engineering, surveying, mapping, or related A&E services unless required by State law adopted before August 10, 2005.
    - (b) Design Services Predominant. In the less usual circumstance in which the cost of most work to be performed will consist of costs for architectural and engineering, program management, construction management, feasibility studies, preliminary engineering, design, architectural engineering, surveying, mapping, or related A&E services, FTA expects the recipient to use qualifications-based procurement procedures based on the Brooks Act as described in subsection 3.e of this Chapter.

- (2) Selection Processes. The recipient may structure its design-build procurement using one or more steps as described below:
- (a) One-Step Method. The recipient may undertake its design-build procurement in a single step.
  - (b) Two-Step Method. Another procurement method the recipient may use for large design-build projects is a two-step selection process as authorized for Federal Government use by 41 U.S.C. Section 253m. This method consists of:
    - 1 Review of Technical Qualifications and Approach. The first step is a review of the prospective contractors' technical qualifications and technical approach to the project. The recipient may then narrow the competitive range to those prospective contractors with satisfactory qualifications that demonstrate a technically satisfactory approach.
    - 2 Review of Complete Proposals. The second step consists of soliciting and reviewing complete proposals, including price, submitted by prospective contractors first determined to be qualified.

By using this two-step method, it will not be necessary for the recipient to undertake extensive proposal reviews, nor will prospective offerors need to engage in expensive proposal drafting. This two-step selection procedure is separate and distinct from prequalification and is but one procurement method available to the recipient.

- i. Other Than Full and Open Competition. Normally, the recipient must provide for full and open competition when soliciting bids or proposals. The Common Grant Rule for governmental recipients, however, acknowledges that under certain circumstances, a recipient may conduct procurements without providing for full and open competition.
  - (1) When Appropriate. A recipient may use noncompetitive proposals only when the procurement is inappropriate for small purchase procedures, sealed bids, or competitive proposals, and at least one of the following circumstances are present:
    - (a) Competition Adequacy. After soliciting several sources, FTA expects the recipient to review its specifications to determine if they are unduly restrictive or if changes can be made to encourage submission of more bids or proposals. After the recipient determines that the specifications are not unduly restrictive and changes cannot be made to encourage greater competition, the recipient may determine the competition adequate. A cost analysis must be performed in lieu of a price analysis when this situation occurs.
    - (b) Sole Source. When the recipient requires supplies or services available from only one responsible source, and no other supplies or services will satisfy its

requirements, the recipient may make a sole source award. When the recipient requires an existing contractor to make a change to its contract that is beyond the scope of that contract, the recipient has made a sole source award that must be justified.

- 1 Unique Capability or Availability. The property or services are available from one source if one of the conditions described below is present:
  - a Unique or Innovative Concept. The offeror demonstrates a unique or innovative concept or capability not available from another source. Unique or innovative concept means a new, novel, or changed concept, approach, or method that is the product of original thinking, the details of which are kept confidential or are patented or copyrighted, and is available to the recipient only from one source and has not in the past been available to the recipient from another source.
  - b Patents or Restricted Data Rights. Patent or data rights restrictions preclude competition.
  - c Substantial Duplication Costs. In the case of a follow-on contract for the continued development or production of highly specialized equipment and major components thereof, when it is likely that award to another contractor would result in substantial duplication of costs that are not expected to be recovered through competition.
  - d Unacceptable Delay. In the case of a follow-on contract for the continued development or production of a highly specialized equipment and major components thereof, when it is likely that award to another contractor would result in unacceptable delays in fulfilling the recipient's needs.
- 2 Single Bid or Proposal. Upon receiving a single bid or proposal in response to a solicitation, the recipient should determine if competition was adequate. This should include a review of the specifications for undue restrictiveness and might include a survey of potential sources that chose not to submit a bid or proposal.
  - a Adequate Competition. FTA acknowledges competition to be adequate when the reasons for few responses were caused by conditions beyond the recipient's control. Many unrelated factors beyond the recipient's control might cause potential sources not to submit a bid or proposal. If the competition can be determined adequate, FTA's competition requirements will be fulfilled, and the procurement will qualify as a valid sole source.



- b National Emergency. To maintain a facility, producer, manufacturer, or other supplier available to provide supplies or services in the event of a national emergency or to achieve industrial mobilization.
  - c Research. To establish or maintain an educational or other non-profit institution or a federally funded research and development center that has or will have an essential engineering, research, or development capability.
  - d Protests, Disputes, Claims, Litigation. To acquire the services of an expert or neutral person for any current or anticipated protest, dispute, claim, or litigation.
  - e International Arrangements. When precluded by the terms of an international agreement or a treaty between the United States and a foreign government or international organization, or when prohibited by the written directions of a foreign government reimbursing the recipient for the cost of the acquisition of the supplies or services for that government.
  - f National Security. When the disclosure of the recipient's needs would compromise the national security.
  - g Public Interest. When the recipient determines that full and open competition in connection with a particular acquisition is not in the public interest.
- (2) When Prohibited. Less than full and open competition is not justified based on:

  - (a) Failure to Plan. The recipient's lack of advance planning, or
  - (b) Limited Availability of Federal Assistance. Concerns about the amount of Federal assistance available to support the procurement (for example, expiration of Federal assistance previously available for award).
- (3) Procurement Procedures. When less than full and open competition is available to the recipient, the Common Grant Rule for governmental recipients directs the recipient to:

  - (a) Potential Sources. Solicit offers from as many potential sources as is practicable under the circumstances.
  - (b) Sole Source Justification. If the recipient decides to solicit an offer from only one source, the recipient must justify its decision adequately in light of the standards of subparagraph 3.i(1)(b) of this Chapter. FTA expects this sole source justification to be in writing.

- (c) Cost Analysis. Prepare or obtain a cost analysis verifying the proposed cost data, the projections of the data, and the evaluation of the costs and profits.
    - (d) Preaward Review. Submit the proposed procurement to FTA for preaward review if FTA so requests.
- 4. ELIGIBLE COSTS. Property and services must be eligible for Federal participation under the standards of the Federal cost principles (OMB Circular A-87, OMB Circular A-21, OMB Circular A-122, or FAR Part 31) applicable to the recipient before the recipient may use FTA assistance to support its costs. A recipient may use its own cost principles that comply with applicable Federal cost principles. FTA assistance may support contract costs or prices based on estimated costs only if the costs incurred or cost estimates included in negotiated prices comply with applicable Federal cost principles, and the property or services are eligible for Federal assistance under the terms of the underlying grant or cooperative agreement.
- 5. INCENTIVE COSTS AND PAYMENTS. SAFETEA-LU added a new amendment, 49 U.S.C. Section 5309(l), authorizing incentive payments to contractors that provide accurate cost and ridership estimates in connection with a new fixed guideway capital project, and to contractors that enable a new fixed guideway capital project to be completed for less than its original estimated cost. These incentive payments will be allowable costs in addition to other eligible project costs and must be “necessary and reasonable.” See, the Questions and Answers pertaining to incentive contracts at FTA’s Web site: [http://www.fta.dot.gov/funding/thirdpartyprocurement/faq/grants\\_financing\\_6148.html](http://www.fta.dot.gov/funding/thirdpartyprocurement/faq/grants_financing_6148.html).
- 6. COST AND PRICE ANALYSIS. The Common Grant Rules require the recipient to perform a cost or price analysis in connection with every procurement action, including contract modifications. The method and degree of analysis depends on the facts and circumstances surrounding each procurement, but as a starting point, the recipient must make independent estimates before receiving bids or proposals.
  - a. Cost Analysis. The recipient must obtain a cost analysis when a price analysis will not provide sufficient information to determine the reasonableness of the contract cost. The recipient must obtain a cost analysis when the offeror submits elements (that is, labor hours, overhead, materials, and so forth) of the estimated cost, (such as professional consulting and A&E contracts, and so forth). The recipient is also expected to obtain a cost analysis when price competition is inadequate, when only a sole source is available, even if the procurement is a contract modification, or in the event of a change order. The recipient, however, need not obtain a cost analysis if it can justify price reasonableness of the proposed contract based on a catalog or market price of a commercial product sold in substantial quantities to the general public or based on prices set by law or regulation.
    - (1) Federal Cost Principles. Federal cost principles contain many requirements about the allowability and allocability of costs.

- (2) Establishing Indirect Cost Rates. For contracts other than A&E contracts discussed in subsection 3.e of this Chapter, if the third party contractor or subcontractor does not have an approved Government indirect cost rate agreement, the contract's dollar value should determine how that rate is verified.
    - (a) Contracts of \$5 Million or Less. FTA will accept the audit recommendations of the contractor's certified public accountant, or indirect cost information in the contractor's annual statement to their stockholders, shareholders, or owners, or examples of acceptance of their rates by other governmental agencies within the last six months.
    - (b) Contracts Exceeding \$5 Million. If the contract exceeds \$5 million, then the Defense Contract Audit Agency, another Federal cognizant audit agency, or an accounting firm approved by the Federal Government to perform audits for the Federal Government, must verify the contractor's rates.
  - (3) Profit. FTA expects the recipient to negotiate profit as a separate element of the cost for each contract in which there has been no price competition, and in all acquisitions in which the recipient performs or acquires a cost analysis. To establish a fair and reasonable profit, the recipient needs to consider the complexity of the work to be performed, the risk undertaken by the contractor, the contractor's investment, the amount of subcontracting, the quality of the contractor's record of past performance, and industry profit rates in the surrounding geographical area for similar work.
- b. Price Analysis. If the recipient determines that competition was adequate, a price analysis, rather than a cost analysis, is required to determine the reasonableness of the proposed contract price. As discussed previously in subsection 3.a of this Chapter, the price analysis for micro-purchases may be limited. Similarly, the recipient may use an abbreviated price analysis for small purchases in most cases. One method to record this price analysis is through the use of a preprinted form on which a contracting officer (or other responsible person) can annotate a finding of fair and reasonable pricing and check off the most common reasons why this would be so, such as catalog or market prices offered in substantial quantities to the general public, regulated prices (for example, for many utilities purchases), or a comparison with recent prices for similar goods and services.
  - c. Guidance on Cost and Price Analysis. FTA recognizes that some recipients may have difficulty obtaining the information necessary to conduct a proper cost or price analysis. Although neither FTA nor DOT may change the Common Grant Rules' requirements for cost or price analysis, FTA continues to seek a fair, practical solution to this problem consistent with the flexibility provided to Federal contracting officers under the FAR. The recipient may use the following resources as guidance in preparing cost or price analyses:
    - (1) FTA's "Best Practices Procurement Manual," Chapter 5,

- (2) The National Transit Institute Course, "Cost or Price Analysis and Risk Assessment,"
- (3) Pricing Guide for FTA Grantees, FTA Web Site:  
[http://www.fta.dot.gov/documents/Helpline\\_Price\\_Guide.doc.](http://www.fta.dot.gov/documents/Helpline_Price_Guide.doc.),
- (4) FAR Part 31, Contract Cost Principles and Procedures, and
- (5) Defense Contract Audit Agency Audit Manual. *See*, the DCAA Web site:  
<http://www.dcaa.mil/>.

Note, however, that the requirements of FAR Part 31 and the Defense Contract Audit Agency Audit Manual may differ from restrictions applicable to an FTA recipient. Each FTA recipient must comply with those Federal laws and regulations directly applicable to it.

7. EVALUATIONS. The following standards apply:

- a. General. When evaluating bids or proposals submitted, FTA expects the recipient to consider all evaluation factors specified in its solicitation documents, and evaluate the bids or offers only on the evaluation factors included in those solicitation documents. The recipient may not modify its evaluation factors after bids or proposals have been submitted without re-opening the solicitation.
- b. Options. In awarding the contract that will include options, the following standards apply:
  - (1) Evaluation Required. In general, FTA expects the recipient to evaluate bids or offers for any option quantities or periods contained in a solicitation if it intends to exercise those options after the contract is awarded.
  - (2) Evaluation Not Required. The recipient need not evaluate bids or offers for any option quantities when the recipient determines that evaluation would not be in its best interests. An example of a circumstance that may support a determination not to evaluate bids or offers for option quantities is when the recipient is reasonably certain that funds will not be available to permit it to exercise the option.
- c. Evaluators. In addition to evaluators with experience in technical or public policy matters related to the procurement, other evaluators may also include auditors and financial experts to the extent that the recipient determines would be necessary or helpful. Although many FTA recipients assign evaluation duties to their own personnel, a recipient lacking qualified personnel within its organization may contract for evaluation services. If it does so, the procurement standards of this circular will apply to those contracts and to those contractors selected to perform evaluation functions on behalf of the recipient.

8. CONTRACT AWARD. The following provisions apply to third party contract awards:

- a. Award to Other Than the Lowest Bidder or Offeror. Federal transit law at 49 U.S.C. Section 5325(c) authorizes the recipient to award a contract to other than the lowest bidder if the award furthers an objective consistent with the purposes of 49 U.S.C. Chapter 53, including improved long-term operating efficiency and lower long-term costs. The recipient may also award a contract to other than the offeror whose proposal is lowest, when stated in the evaluation factors of the solicitation. In both cases, the recipient should include a statement in its solicitation document reserving the right to award the contract to other than the low bidder or offeror.
- b. Award Only to a Responsible Bidder or Offeror. SAFETEA-LU amended 49 U.S.C. Section 5325 to require FTA assisted contract awards be made only to “responsible” contractors possessing the ability, willingness, and integrity to perform successfully under the terms and conditions of the contract. Responsibility is a procurement issue that is determined by the recipient after receiving bids or proposals and before making contract award. FTA expects the prospective contractor to demonstrate affirmatively to the recipient that it qualifies as “responsible” under the standards of 49 U.S.C. Section 5325, and that its proposed subcontractors also qualify as “responsible.”

To designate a prospective contractor “responsible” as required by 49 U.S.C. Section 5325, FTA expects the recipient, at a minimum, to determine and ensure that the prospective contractor satisfies the following criteria described herein. In addition to being otherwise qualified and eligible to receive the contract award under applicable laws and regulations, a responsible contractor:

- (1) Integrity and Ethics. Has a satisfactory record of integrity and business ethics, in compliance with 49 U.S.C. Section 5325(j)(2)(A),
- (2) Debarment and Suspension. Is neither debarred nor suspended from Federal programs under DOT regulations, “Nonprocurement Suspension and Debarment,” 2 CFR Parts 180 and 1200, or under the FAR at 48 CFR Chapter 1, Part 9.4,
- (3) Affirmative Action and DBE. Is in compliance with the Common Grant Rules’ affirmative action and FTA’s Disadvantaged Business Enterprise requirements,
- (4) Public Policy. Is in compliance with the public policies of the Federal Government, as required by 49 U.S.C. Section 5325(j)(2)(B),
- (5) Administrative and Technical Capacity. Has the necessary organization, experience, accounting, and operational controls, and technical skills, or the ability to obtain them, in compliance with 49 U.S.C. Section 5325(j)(2)(D),
- (6) Licensing and Taxes. Is in compliance with applicable licensing and tax laws and regulations,

- (7) Financial Resources. Has, or can obtain, sufficient financial resources to perform the contract, as required by 49 U.S.C. Section 5325(j)(2)(D),
- (8) Production Capability. Has, or can obtain, the necessary production, construction, and technical equipment and facilities,
- (9) Timeliness. Is able to comply with the required delivery or performance schedule, taking into consideration all existing commercial and governmental business commitments, and
- (10) Performance Record. Is able to provide a:
  - (a) Current Performance. Satisfactory current performance record, and
  - (b) Past Performance. Satisfactory past performance record in view of its records of long-time performance or performance with a predecessor entity, including:
    - 1 Sufficient Resources. Key personnel with adequate experience, a parent firm with adequate resources and experience, and key subcontractors with adequate experience and past performance,
    - 2 Adequate Past Experience. Past experience in carrying out similar work with particular attention to management approach, staffing, timeliness, technical success, budgetary controls, and other specialized considerations as described in the recipient's solicitation, and
    - 3 Any Past Deficiencies Not the Fault of the Bidder or Offeror. A prospective bidder or offeror that is or recently has been seriously deficient in contract performance is presumed to be nonresponsible, unless the recipient determines that the circumstances were properly beyond the bidder or offeror's control, or unless the bidder or offeror has taken appropriate corrective action. Past failure to apply sufficient tenacity, perseverance, and effort to perform acceptably is strong evidence of nonresponsibility. Failure to meet the quality requirements of a contract is a significant factor to consider in determining satisfactory performance. FTA expects the recipient to consider the number of the bidder or offeror's contracts involved and the extent of deficient performance in each contract when making this determination.

Before entering into a full funding contract for a fixed guideway project, the recipient must now consider the prospective contractor's past performance in estimating costs and ridership as reported in the Contractor Performance Assessment Reports, as required by 49 U.S.C. Section 5325(j)(2)(C).

- c. Rejection of Bids and Proposals. Depending on the type of recipient, the following applies:

- (1) Governmental Recipients. The Common Grant Rule for governmental recipients asserts the recipient's right to reject all bids submitted in response to an invitation for bids or request for proposals.
  - (2) Non-Governmental Recipients. The Common Grant Rule for non-governmental recipients authorizes the recipient to reject any and all bids and proposals when it is in the recipient's interest to do so.
- d. Extent and Limits of Contract Award. A selection of a contractor to participate in one aspect of a project does not, by itself, constitute a sole source selection of the contractor's wholly owned affiliates to perform other work in connection with the project.

## CHAPTER VII

### **PROTESTS, CHANGES AND MODIFICATIONS, DISPUTES, CLAIMS, LITIGATION, AND SETTLEMENTS**

The Common Grant Rules assign responsibility to the recipient for resolving all contractual and administrative issues arising out of their third party procurements, including source evaluation and selection, including protests of awards, disputes, and claims using good administrative practices and sound business judgment. The Federal Transit Administration (FTA) also encourages the recipient to use appropriate alternative dispute resolution procedures. Neither FTA nor the Common Grant Rules relieve the recipient of any responsibility under its contracts to resolve disagreements that may arise in the course of contract formation or contract administration.

In general, FTA will not substitute its judgment for that of the recipient or subrecipient unless the matter is primarily a Federal concern. Examples of “Federal concerns” include, but are not limited to, situations “where a special Federal interest is declared because of program management concerns, possible mismanagement, impropriety, waste, or fraud.” Nevertheless, FTA can become involved in the recipient’s administrative decisions when a recipient’s protest decision is appealed to FTA, or when the recipient seeks to use FTA assistance to support the costs of settlements or other resolutions of protests, disputes, claims, or litigation.

#### 1. PROTESTS.

- a. The Recipient’s Role and Responsibilities. The Common Grant Rules charge the recipient with the initial responsibility to resolve protests of third party contract awards.
  - (1) Protest Procedures. Apart from other methods the recipient may have to resolve third party contract issues, such as mediation or arbitration, the Common Grant Rule for governmental recipients requires the recipient to have protest procedures. While the Common Grant Rule for non-governmental recipients does not impose a similar requirement on a non-governmental recipient, FTA expects each recipient to have appropriate written protest procedures, as part of its requirement to maintain or acquire adequate technical capacity to implement the project.
  - (2) Responsibilities to FTA. The recipient’s minimum responsibilities to FTA consist of the following:
    - (a) Timely Notification. The Common Grant Rule for governmental recipients requires a governmental recipient to notify FTA when it receives a third party contract protest to which this circular applies, and to keep FTA informed about the status of the protest. A non-governmental recipient involved in a protest is similarly expected to notify FTA when it receives a third party contract protest to which the circular applies, and to similarly keep FTA

informed about the status of the protest. The recipient is expected to provide the following information:

1 Subjects. A list of protests involving third party contracts and potential third party contracts that:

- a Have a value exceeding \$100,000, or
- b Involve a controversial matter, irrespective of amount, or
- c Involve a highly publicized matter, irrespective of amount.

2 Details. The following information about each protest:

- a A brief description of the protest,
- b The basis of disagreement, and
- c If open, how far the protest has proceeded, or
- d If resolved, the agreement or decision reached, and
- e Whether an appeal has been taken or is likely to be taken.

3 When and Where. The recipient should provide this information:

- a In its next quarterly Milestone Progress Report, and
- b At its next Project Management Oversight review, if any.

Small recipients may report less frequently if no protests are outstanding.

4 FTA Officials to Notify. When a recipient denies a bid protest, and especially if an appeal to FTA is likely to occur, FTA expects the recipient to inform the FTA Regional Administrator for the region administering a regional project, or the FTA Associate Administrator for the program office administering a headquarters project directly. FTA also encourages the recipient to keep its FTA project manager informed about protests with which it is involved. In particular, the recipient should contact its project manager about any unusual activity.

- (b) Access to Information. FTA expects the recipient to disclose information about any third party procurement protest to FTA upon request. FTA reserves the right to require the recipient to provide copies of a particular protest or all protests, and any or all related supporting documents as FTA may determine necessary.

- b. FTA's Role and Responsibilities. FTA has developed an appeals process for reviewing protests of a recipient's procurement decisions.
- (1) Requirements for the Protester. The protester must:
- (a) Qualify as an "Interested Party." Only an "interested party" qualifies for FTA review of its appeal. An "interested party" is a party that is an actual or prospective bidder or offeror whose direct economic interest would be affected by the award or failure to award the third party contract at issue.
    - 1 Subcontractors. A subcontractor does not qualify as an "interested party" because it does not have a direct economic interest in the results of the procurement.
    - 2 Consortia/Joint Ventures/Partnerships/Teams. An established consortium, joint venture, partnership, or team that is an actual bidder or offeror and is acting in its entirety, would qualify as an "interested party" because it has a direct economic interest in the results of the procurement. An individual member of a consortium, joint venture, partnership, or team, acting solely in its individual capacity, does not qualify as an "interested party" because it does not have a direct economic interest in the results of the procurement.
    - 3 Associations or Organizations. An association or organization that does not perform contracts does not qualify as an "interested party," because it does not have a direct economic interest in the results of the procurement.
  - (b) Exhaust Administrative Remedies. The protester must exhaust its administrative remedies by pursuing the recipient's protest procedures to completion before appealing the recipient's decision to FTA.
  - (c) Appeal Within Five Days. The protester must deliver its appeal to the FTA Regional Administrator for the region administering its project or the FTA Associate Administrator for the program office administering its project within five (5) working days of the date when the protester has received actual or constructive notice of the recipient's final decision. Likewise, the protester must provide its appeal to the FTA Regional Administrator for the region administering its project or the FTA Associate Administrator for the program office administering its project within five (5) working days of the date when the protester has identified other grounds for appeal to FTA. For example, other grounds for appeal include the recipient's failure to have or failure to comply with its protest procedures or failure to review the protest.
- (2) Extent of FTA Review. As provided in the Common Grant Rule for governmental recipients, FTA will limit its review of third party contract protests as follows:

- (a) The Recipient's Procedural Failures. FTA will consider a protest if the recipient:
    - 1 Does not have protest procedures, or
    - 2 Has not complied with its protest procedures, or
    - 3 Has not reviewed the protest when presented an opportunity to do so.
  - (b) Violations of Federal Law or Regulations. FTA will not consider every appeal filed by a protestor of an FTA recipient's protest decision merely because a Federal law or regulation may be involved. Instead, FTA will exercise discretionary jurisdiction over those appeals involving issues important to FTA's overall public transportation program. FTA will refer violations of Federal law for which it does not have primary jurisdiction to the Federal authority having proper jurisdiction.
  - (c) Violations of State or Local Law or Regulations. FTA will refer violations of State or local law to the State or local authority having proper jurisdiction.
- (3) FTA Determinations to Decline Protest Reviews. FTA's determination to decline jurisdiction over a protest does not mean that FTA approves of or agrees with the recipient's decision or that FTA has determined the contract is eligible for Federal participation. FTA's determination means only that FTA does not consider the issues presented to be sufficiently important to FTA's overall program that FTA considers a review to be required.

## 2. CHANGES AND MODIFICATIONS.

- a. The Recipient's Role and Responsibilities. The recipient is responsible for issuing, evaluating and making necessary decisions involving any change to its third party contracts, and any change orders, or modifications it may issue. The recipient is also responsible for evaluating and making the necessary decisions involving any claim of a constructive change. In general, FTA expects each recipient to comply with the following procedures:
  - (1) Approval Requirements. FTA expects the recipient to have cost justifications supporting each change order it may issue. FTA also expects the recipient's authorized official to approve any proposed change order before it is issued.
  - (2) Cost Restrictions. To be eligible for FTA assistance under the recipient's grant or cooperative agreement, the cost of the change, modification, change order, or constructive change must be allowable, allocable, within the scope of its grant or cooperative agreement, and reasonable for the completion of project scope.

A more extensive discussion on Changes and Modifications can be found in FTA's Best Practices Procurement Manual (BPPM).

- b. FTA's Role and Responsibilities. FTA does not participate in the recipient's decisions involving change orders, constructive changes, or modifications, but reserves the right to review the recipient's supporting documentation as necessary to determine the extent of FTA assistance that may be used to support those costs.

### 3. DISPUTES.

- a. The Recipient's Role and Responsibilities. The Common Grant Rules charge the recipient with responsibility for evaluating and resolving third party contract disputes. If the recipient intends to request FTA's permission to use Federal assistance to support payments to a third party contractor to settle a dispute, or even intends to request increased Federal assistance for that purpose, the recipient's responsibilities are as follows:

- (1) Notify FTA about Disputes. FTA expects the recipient to provide the following information in connection with third party contract disputes in which it is involved:

- (a) Subjects. A list of disputes involving third party contracts and potential third party contracts that:

- 1 Have a value exceeding \$100,000,
- 2 Involve a controversial matter, irrespective of amount, or
- 3 Involve a highly publicized matter, irrespective of amount.

- (b) Details. The following information about each dispute:

- 1 A brief description of the dispute,
- 2 The basis of disagreement, and
- 3 If open, how far the dispute has proceeded, or
- 4 If resolved, the agreement or decision reached, and
- 5 Whether an appeal has been taken or is likely to be taken.

- (c) When and Where. The recipient should provide this information:

- 1 In its next quarterly Milestone Progress Report, and
- 2 At its next Project Management Oversight review, if any.

Small recipients may report less frequently if no disputes are outstanding.

- (d) FTA Officials to Notify. FTA also encourages the recipient to keep its FTA project manager informed about disputes with which it is involved. In particular, the recipient should contact its project manager about any unusual activity.
- (2) Adequate Documentation. FTA expects the recipient to include adequate documentation in its project files of the facts, events, negotiations, applicable laws, and a legal evaluation of the likelihood of success in any potential litigation involving the dispute as may be needed to justify FTA's concurrence in any compromise or settlement of the dispute, should FTA concurrence become necessary.
- (3) Audit. An audit can help the recipient demonstrate that any settlement costs, if incurred, are necessary, reasonable, adequately documented, and appropriate for FTA support. The recipient should consider conducting or obtaining a formal audit to substantiate each part of a large contract dispute before entering into a settlement. The audit should be conducted in accordance with "Generally Accepted Auditing Standards" as defined by the American Institute of Certified Public Accountants. FTA also encourages the recipient to undertake an audit or similar analysis before settlement of a smaller dispute.
- b. FTA's Role and Responsibilities. FTA generally does not become involved in negotiating the resolution of a recipient's disputes. However, FTA does reserve the right to become involved as follows:
  - (1) Determine Reasonableness. FTA may review the reasonableness of a negotiated settlement to determine the extent of its participation in the costs of the settlement.
  - (2) Review Documents. When FTA considers necessary, FTA may review the recipient's files and history pertaining to the dispute or experience under a particular grant or cooperative agreement. If the recipient has already disbursed amounts determined to be ineligible through subsequent audit or FTA review, the recipient must return those amounts to FTA, unless FTA determines otherwise. FTA reserves the right to defer participation in settlement costs until it receives an adequate audit.

#### 4. CLAIMS AND LITIGATION.

- a. The Recipient's Role and Responsibilities. The Common Grant Rules charge the recipient with responsibility for evaluating and resolving third party contract claims and litigation resulting from a contractor's violation, default, or breach of its third party contracts with recipients of Federal assistance. The recipient is also responsible for resolving any claims and litigation the contractor may present against it. Due to FTA's financial interest in the settlement of third party contract claims and litigation, and

concerns about matters with significant policy consequences to the Federal Government, FTA expects the recipient to:

(1) Notify FTA about Claims and Litigation. FTA expects the recipient to provide the following information in connection with third party contract claims and litigation with which it is involved.

(a) Subjects. A list of claims and litigation involving third party contracts and potential third party contracts that:

- 1 Have a value exceeding \$100,000,
- 2 Involve a controversial matter, irrespective of amount, or
- 3 Involve a highly publicized matter, irrespective of amount.

(b) Details. The following information about each claim or lawsuit:

- 1 A brief description of the claim or litigation,
- 2 The basis of disagreement, and
- 3 If open, how far the claim or litigation has proceeded, or
- 4 If resolved, the decision or agreement reached, and
- 5 Whether an appeal has been or is likely to be taken.

(c) When and Where. The recipient should provide this information:

- 1 In its next quarterly Milestone Progress Report, and
- 2 At its next Project Management Oversight review, if any.

Small recipients may report less frequently if no claims or litigation are outstanding.

(d) FTA Officials to Notify. FTA also encourages the recipient to keep its FTA project manager informed about claims and litigation with which it is involved. In particular, the recipient should contact its project manager about any unusual activity.

(2) Legal Rights and Remedies. In resolving third party contract claims, FTA expects the recipient to take reasonable measures to pursue its rights and remedies available under law, including settlement, particularly if failure to do so would jeopardize the Federal interest in the project or cause the recipient to seek additional Federal assistance.

- b. FTA's Role and Responsibilities. In support of its financial interest in the settlement of claims and litigation involving any federally assisted third party contracts, FTA has retained its discretion to assert the following rights:
    - (1) Proceeds Recovered. FTA retains a right to a share of any net proceeds recovered through a third party contract claim or litigation, in proportion to the amount FTA has committed to the project, unless FTA permits other uses of the proceeds recovered.
    - (2) Liquidated Damages. If the third party contract includes a liquidated damages provision, FTA expects the recipient to credit any liquidated damages recovered to the project, unless FTA permits other uses of the liquidated damages. For example, in negotiating the terms of a claim or litigation settlement, it may be reasonable for the recipient to exchange some or all liquidated damages that may be due the recipient for additional property or services.
5. FTA PARTICIPATION IN SETTLEMENTS, ARBITRATION AWARDS, AND COURT AWARDS.
- a. The Recipient's Responsibilities.
    - (1) Settlement Arrangements Must Be Reasonable. FTA recognizes that a settlement may require the recipient to relinquish its rights to amounts it would otherwise be due, including amounts for liquidated damages and other matters, were it to prevail on all matters at issue. Still, FTA expects the recipient to enter into a settlement only if the recipient can justify its terms as reasonable. Reasonable settlement arrangements can take many forms. In certain situations, an agreement by the contractor to provide extra property or services in lieu of payments or reduced payments for damages, including liquidated damages, may be reasonable.
    - (2) Maintain Sufficient Records. To justify FTA's participation in settlements, arbitration awards, or court awards, the recipient's records must be sufficient to demonstrate that the recipient has taken reasonable and prudent measures to prevent or offset the actions or circumstances resulting in the underlying protest, dispute, claim, or litigation.
    - (3) Obtain FTA Concurrence. When the recipient incurs costs due to binding arbitration or court decision, FTA expects the recipient to secure FTA review and its written concurrence in a proposed or final settlement involving a dispute, claim, or litigation before using Federal assistance to support its costs if one of the following circumstances is present:
      - (a) More Than \$100,000. When the settlement exceeds \$100,000.
      - (b) Insufficient Funds. When the approved project lacks sufficient funds to cover the settlement costs.

- (c) Special Federal Interest or Federal Concern. When a special Federal interest or Federal concern is declared due to program management concerns, possible mismanagement, impropriety, waste, or fraud.

b. FTA's Prerogatives.

- (1) Review Supporting Documentation. FTA reserves the right to review the recipient's supporting documentation.
- (2) Provide Federal Assistance. If FTA assistance is available, FTA may provide a prorated share of any eligible costs resulting from protests, disputes, claims, litigation, or settlements that were not caused by the recipient's mismanagement or are attributable to the contractor, and were otherwise properly incurred.
- (3) Deny Federal Assistance. Protests, disputes, claims, litigation, or settlements that result from the recipient's negligence or error are usually ineligible for FTA participation. FTA reserves the right to determine the extent to which FTA assistance may be used for any dispute, claim, litigation, or settlement caused in whole or part by the recipient's negligence or error. Examples of situations that might be caused by a recipient's negligence or error include, but are not limited to, the following:
  - (a) Right-of-Way. Failure to ensure clear access to all needed right-of-way prior to award of the construction contract.
  - (b) Utility Agreements. Failure to execute all required utility agreements in time to assure uninterrupted construction progress.
  - (c) Planning and Scheduling. Failure to undertake comprehensive project planning and scheduling to achieve proper coordination among contractors.
  - (d) Subsurface Conditions. Failure to inform potential contractors of all available geo-technical information on subsurface conditions.
  - (e) Materials Compatibility. Failure to ensure that all materials provided by the recipient are compatible with contractor project facilities or equipment or both and available when needed.
  - (f) Pre-Construction Surveys and Engineering. Failure to complete all pre-construction surveys and engineering prior to issuing the contractor a Notice to Proceed.
  - (g) Public Authority Approvals. Failure to complete the necessary approvals and agreements from all other public authorities affected by the project before contract award.

- (h) Drawing Approvals. Failure by the recipient to approve and provide all design and shop drawings to the contractor promptly as needed.

## **APPENDIX A**

### **REFERENCES**

1. Federal Transit Laws, Title 49, United States Code, Chapter 53; also public transportation provisions of Title 23, United States Code.
2. Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, (SAFETEA-LU), Public Law 109-59, August 10, 2005, as amended by the SAFETEA-LU Technical Corrections Act, 2008, Public Law 110-244, June 6, 2008.
3. Transportation Equity Act for the 21st Century 1998 (TEA-21), Public Law 105-178 as amended by TEA-21 Restoration Act 1998, Public Law 105-206.
4. 7 U.S.C. Sections 2131 *et seq.*—Animal Welfare Act.
5. 15 U.S.C. Sections 205a *et seq.*—Metric Conversion.
6. 15 U.S.C. Section 644 note—Repeal of Labor Surplus Area Programs.
7. 18 U.S.C. Section 874—Copeland Anti Kickback Act.
8. 20 U.S.C. Sections 1681 *et seq.*—Nondiscrimination on the Basis of Sex.
9. 23 U.S.C. Section 512 note—Intelligent Transportation Systems.
10. 29 U.S.C. Sections 201 *et seq.*—Fair Labor Standards.
11. 29 U.S.C. Sections 621 through 634—Age Discrimination in Employment.
12. 29 U.S.C. Section 794—Nondiscrimination under Federal Grants (on the Basis of Disability).
13. 29 U.S.C. Section 794d—Electronic and Information Technology (Accessibility).
14. 31 U.S.C. Section 1352—Limitation on Use of Appropriated Funds to Influence Certain Federal Contracting and Financial Transactions (Lobbying).
15. 31 U.S.C. Section 5112(p)—Section 104 of the Presidential \$1 Coin Act of 2005.
16. 31 U.S.C. Sections 7501 *et seq.*—Single Audit Act Amendments of 1996.
17. 33 U.S.C. Sections 1251 through 1377—Clean Water.
18. 35 U.S.C. Sections 200 *et seq.*—Patent Rights.

19. 40 U.S.C. Section 502(a)(3)—General Services Administration (GSA) Schedule Use by the District of Columbia.
20. 40 U.S.C. Section 502(c) (Section 211 of the E-Government Act of 2002)—GSA Schedule Use for Information Technology.
21. 40 U.S.C. Section 502(d), (Section 833 of the John Warner National Defense Authorization Act for Fiscal Year 2007)—GSA Schedule Use for Major Disaster or Emergency Relief.
22. 40 U.S.C. Chapter 11—Architectural Engineering Procurement Requirements (Brooks Act).
23. 40 U.S.C. Sections 3141 *et seq.*—Prevailing Wages.
24. 40 U.S.C. Section 3702—Wage and Hour Restrictions.
25. 40 U.S.C. Section 3701(b)(3)(A)(iii) (Section 4104(c) of the Federal Acquisition Streamlining Act of 1994)—Increased Thresholds for Contract Work Hours and Safety Standards Act.
26. 40 U.S.C. Section 3704—Construction Safety.
27. 41 U.S.C. Section 253m—Design-Build Selection Procedures Process.
28. 41 U.S.C. Section 403(11)—Federal Simplified Acquisition Threshold.
29. 42 U.S.C. Sections 289 *et seq.*—Protection of Humans.
30. 42 U.S.C. Sections 2000d *et seq.*—Title VI of the Civil Rights Act of 1964, as amended.
31. 42 U.S.C. Section 2000e *et seq.*—Equal Employment Opportunity.
32. 42 U.S.C. Section 5150—Major Disaster or Emergency Relief.
33. 42 U.S.C. Sections 6101 *et seq.*—Nondiscrimination on the Basis of Age.
34. 42 U.S.C. Sections 6321 *et seq.*—Energy Conservation.
35. 42 U.S.C. Section 6962—Resource Conservation and Recovery.
36. 42 U.S.C. Sections 7401 through 7671q—Clean Air.
37. 42 U.S.C. Sections 7701 *et seq.*—Seismic Safety.
38. 42 U.S.C. Sections 12101 *et seq.*—Accessibility for Persons with Disabilities.
39. 46 U.S.C. Section 55305—Cargo Preference.

40. 48 U.S.C. Section 1469e—Use of GSA Supply Schedules by Insular Areas.
41. 49 U.S.C. Section 114(s)—Sensitive Security Information.
42. 49 U.S.C. Sections 303(b) and 303(c)—Department of Transportation (DOT) statutory protections for Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites.
43. 49 U.S.C. Section 40118—Fly America.
44. 49 U.S.C. Section 40119(b)—Sensitive Security Information.
45. DOT regulations, “Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments,” 49 CFR Part 18.
46. DOT regulations, “Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations,” 49 CFR Part 19.
47. DOT regulations, “Protection of Human Subjects,” 49 CFR Part 11.
48. DOT regulations, “Protection of Sensitive Security Information,” 49 CFR Part 15.
49. DOT regulations, “New Restrictions on Lobbying,” 49 CFR Part 20.
50. DOT regulations, “Nondiscrimination in Federally Assisted Programs of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act,” 49 CFR Part 21.
51. DOT regulations, “Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs,” 49 CFR Part 24.
52. DOT regulations, “Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance,” 49 CFR Part 25.
53. DOT regulations, “Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs,” 49 CFR Part 26.
54. DOT regulations, “Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance,” 49 CFR Part 27.
55. DOT regulations, “Nonprocurement Suspension and Debarment,” 2 CFR Part 1200.
56. DOT regulations, “Transportation Services for Individuals with Disabilities (ADA),” 49 CFR Part 37.
57. Joint ATBCB/DOT regulations, “Americans with Disabilities (ADA) Accessibility Specifications for Transportation Vehicles,” 36 CFR Part 1192 and 49 CFR Part 38.

58. DOT regulations, "Seismic Safety," 49 CFR Part 41 at Sections 41.117 and 41.120.
59. Federal Transit Administration (FTA) regulations, "Charter Service," 49 CFR Part 604.
60. FTA regulations, "School Bus Operations," 49 CFR Part 605.
61. FTA regulations, "Capital Leases," 49 CFR Part 639.
62. FTA regulations, "Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations," 49 CFR Part 655.
63. FTA regulations, "Buy America," 49 CFR Part 661.
64. FTA regulations, "Pre-Award and Post-Delivery Audits of Rolling Stock Purchases," 49 CFR Part 663.
65. FTA regulations, "Bus Testing," 49 CFR Part 665.
66. Joint Federal Highway Administration(FHWA)/FTA regulations, "Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites," 23 CFR Parts 771 and 774, and 49 CFR Part 622.
67. Federal Acquisition Regulation (FAR), 48 CFR Chapter 1.
68. FAR Subpart 6.3, 48 CFR Chapter 1, Subpart 6.3 (Federal Procurement by Noncompetitive Proposals).
69. FAR Subparts 25.1 and 25.2, 48 CFR Chapter 1, Subparts 25.1 and 25.2 (Federal Buy American Regulations).
70. FAR Part 31, 48 CFR Chapter 1, Part 31 (Federal Cost Principles).
71. FAR Subpart 31.2, 48 CFR Chapter 1, Subpart 31.2 (Contracts with Commercial Organizations).
72. Department of Homeland Security regulations, "Protection of Sensitive Security Information," 49 CFR Part 1520.
73. Department of Labor (DOL) regulations, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in part by Loans or Grants from the United States," 29 CFR Part 3.
74. DOL regulations, "Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction (also Labor Standards Provisions Applicable to Nonconstruction Contracts Subject to the Contract Work Hours and Safety Standards Act)," 29 CFR Part 5.

75. DOL guidelines, "Section 5333(b), Federal Transit Law," 29 CFR Part 215.
76. DOL regulations, "Age Discrimination in Employment Act," 29 CFR Part 1625.
77. DOL regulations, "Safety and Health Regulations for Construction," 29 CFR Part 1926.
78. Department of Agriculture regulations, "Animal Welfare," 9 CFR Subchapter A, Parts 1, 2, 3, and 4.
79. Department of the Treasury regulations, "Surety Companies Doing Business with the United States," 31 CFR Part 223.
80. Architectural and Transportation Barriers Compliance Board (ATBCB) regulations, "Electronic and Information Technology Accessibility Standards," 36 CFR Part 1194.
81. Department of Commerce regulations, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms," 37 CFR Part 401.
82. Department of Commerce, Export Administration Regulations, 15 CFR Parts 730 *et seq.*
83. Environmental Protection Agency regulations, "Comprehensive Procurement Guideline for Products Containing Recovered Materials," 40 CFR Part 247.
84. EPA regulations, "Control of Air Pollution from Mobile Sources," 40 CFR Part 85.
85. EPA regulations, "Control of Air Pollution from New and In-Use Motor Vehicles and New and In-Use Motor Vehicle Engines," 40 CFR Part 86.
86. EPA regulations, "Fuel Economy of Motor Vehicles," 40 CFR Part 600.
87. Council on Environmental Quality regulations, "Other Requirements of NEPA," 40 CFR Part 1506.
88. Department of Health and Human Services regulations, "Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance," 45 CFR Part 90.
89. GSA, "Federal Property Management Regulations," 41 CFR Parts 101-42 through 101-46, and 101-48, 101-49.
90. GSA regulations, "Use of United States Flag Air Carriers," 41 CFR Sections 301-10.131 through 301-10.143.
91. Maritime Administration regulations, "Cargo Preference U.S. Flag Vessels," 46 CFR Part 381.

92. Executive Order No. 11246, "Equal Employment Opportunity," September 24, 1965, as amended by Executive Order No. 11375, "Amending Executive Order No. 11246 Relating to Equal Employment Opportunity," October 13, 1967.
93. Executive Order No. 12770, "Metric Usage in Federal Government Programs," 15 U.S.C. Section 205a note.
94. Executive Order No. 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," February 11, 1994, 42 U.S.C. Section 4321 note.
95. Executive Order No. 13043, "Increasing Seat Belt Use in the United States," August 16, 1997, 23 U.S.C. Section 402 note.
96. Executive Order No. 13132, "Federalism," August 4, 1999, 5 U.S.C. Section 601 note.
97. Executive Order No. 13166, "Improving Access to Services for Persons with Limited English Proficiency," August 11, 2000, 42 U.S.C. Section 2000d-1 note.
98. Executive Order No. 13202, "Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects," February 17, 2001, as amended by Executive Order No. 13208, April 6, 2001, 41 U.S.C. Section 251 note.
99. Office of Management and Budget (OMB) "Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," 2 CFR Part 180.
100. OMB Guidance for Grants and Agreements, "Cost Principles for Educational Institutions (OMB Circular A-21)," 2 CFR Part 220.
101. OMB Guidance for Grants and Agreements, "Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87)," 2 CFR Part 225.
102. OMB Guidance for Grants and Agreements "Cost Principles for Non-profit Organizations (OMB Circular A-122)," 2 CFR Part 230.
103. OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations," as revised.
104. GSA Order ADM 4800.2E, "Eligibility to Use GSA Sources of Supply and Services."
105. DOT Order 5610.2, "Department of Transportation (DOT) Order To Address Environmental Justice in Minority Populations and Low-Income Populations," 62 FR 18377, April 15, 1997.
106. DOT, "Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons," December 14, 2005.

107. FTA Circular 4702.1, "Title VI and Title VI-Dependent Guidelines for FTA Recipients," 05-13-07.
108. FTA Circular 5010.1C, "Grant Management Guidelines," 10-01-98.
109. FTA Circular 9030.1C, "Urbanized Area Formula Program Grant Application Instructions Grant Application Instructions," 10-01-98.
110. FTA Circular 9300.1A, "Capital Program Grant Application Instructions," 10-01-98.
111. FTA Circular 9400.1A, "Federal Transit Administration Design and Art in Transit Projects," 06-09-95.
112. FTA, "Notice of Final Agency Guidance on the Eligibility of Joint Development Improvements under Federal Transit Law," 72 FR 5788, February 7, 2007.
113. FTA Notice, "FTA National ITS Architecture Policy on Transit Projects" 66 FR 1455 *et seq.*, January 8, 2001.
114. FTA, Master Agreement (PDF).
115. FTA, "Best Practices Procurement Manual."
116. FTA, "Pricing Guide for FTA Grantees."
117. Defense Contract Audit Agency Audit Manual.

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**APPENDIX B**

**FTA REGIONAL AND METROPOLITAN OFFICE CONTACT INFORMATION**

<b>Office</b>	<b>Area Served</b>	<b>Contact Information</b>
Region I	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont	Transportation Systems Center Kendall Square 55 Broadway, Suite 920 Cambridge, MA 02142-1093 Phone: 617-494-2055 Fax: 617-494-2865
Region II	New York and New Jersey	One Bowling Green, Room 429 New York, NY 10004-1415 Phone: 212-668-2170 Fax: 212-668-2136
Region III	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia	1760 Market Street, Suite 500 Philadelphia, PA 19103-4124 Phone: 215-656-7100 Fax: 215-656-7260
Region IV	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee, and U.S. Virgin Islands	230 Peachtree St., N.W., Suite 800 Atlanta, GA 30303 Phone: 404-865-5600 Fax: 404-865-5605
Region V	Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin	200 West Adams Street, Suite 320 Chicago, IL 60606 Phone: 312-353-2789 Fax: 312-886-0351
Region VI	Arkansas, Louisiana, New Mexico, Oklahoma, and Texas	819 Taylor Street, Room 8A36 Forth Worth, TX 76102 Phone: 817-978-0550 Fax: 817-978-0575
Region VII	Iowa, Kansas, Missouri, and Nebraska	901 Locust, Suite 404 Kansas City, MO 64106 Phone: 816-329-3920 Fax: 816-329-3921
Region VIII	Colorado, Montana,	12300 W Dakota Avenue, Suite 310

Office	Area Served	Contact Information
	North Dakota, South Dakota, Utah, and Wyoming	Lakewood, CO 80228-2583 Phone: 720-963-3300 Fax: 720-963-3333
Region IX	Arizona, California, Hawaii, Nevada, Guam, American Samoa, and the Northern Mariana Islands	201 Mission Street, Room 1650 San Francisco, CA 94105-1839 Phone: 415-744-3133 Fax: 415-744-2726
Region X	Alaska, Idaho, Oregon, and Washington	915 Second Avenue, Suite 3142 Seattle, WA 98174-1002 Phone: 206-220-7954 Fax: 206-220-7959
Lower Manhattan Recovery Office	Lower Manhattan	1 Bowling Green, Room 436 New York, NY 10004 Phone: 212-668-1770 Fax: 212-668-2505
New York Metropolitan Office	New York Metropolitan Area	One Bowling Green, Room 428 New York, NY 10004-1415 Phone: 212-668-2201 Fax: 212-668-2136
Philadelphia Metropolitan Office	Philadelphia Metropolitan Area	1760 Market Street, Suite 510 Philadelphia PA 19103-4124 Telephone: 215-656-7070 Fax: 215-656-7269
Washington, DC Metropolitan Office	Washington, DC Metropolitan Area	1990 K Street NW, Suite 510 Washington, DC 20006-1178 Telephone: 202-219-3562/219-3565 Fax: 202-219-3545
Chicago Metropolitan Office	Chicago Metropolitan Area	200 West Adams Street, Suite 2410 Chicago, IL 60606 Telephone: 312-886-1616 Fax: 312-886-0351
Los Angeles Metropolitan Office	Los Angeles Metropolitan Area	888 S. Figueroa, Suite 1850 Los Angeles, CA 90012 Telephone: 213-202-3950 Fax: 213-202-3961

**APPENDIX C**  
**THIRD PARTY CONTRACTING CHECKLISTS**

CHAPTER II, Sec. 2	APPLICABILITY OF THE CIRCULAR	CHECK
Sec. 2.a	Participants in FTA Assisted Procurements	
Sec. 2.a(1)	Recipients of FTA Grants or Cooperative Agreement s	
Sec. 2.a(1)(a)	States	
Sec. 2.a(1)(a) <u>1</u>	Governmental Subrecipients of the State	
Sec. 2.a(1)(a) <u>2</u>	Private Non-Profit Subrecipients of the State	
Sec. 2.a(1)(b)	Recipients and Subrecipients that are not States	
Sec. 2.a(2)	Subrecipients of FTA Assistance	
Sec. 2.a(3)	Recipients of Both FTA Assistance and Funds Provided by Another Federal Agency	
Sec. 2.a(4)	Recipients of "Other Agreement" Assistance	
Sec. 2.a(5)	Third Party Contractors and Subcontractors	
Sec. 2.a(5)(a)	Status	
Sec. 2.a(5)(b)	Effect of Federal Requirements	
Sec. 2.b	Project Types and Third Party Contracts	
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**APPENDIX D**

**FEDERALLY REQUIRED AND OTHER MODEL CLAUSES**

**A. REQUIRED THIRD PARTY CONTRACT CLAUSES**  
(excluding micro-purchases, except for construction contracts over \$2,000)

<b>REQUIREMENT</b>	<b>COMMENTS</b>	<b>MASTER AGREEMENT REFERENCE</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>All FTA Assisted Third Party Contracts and Subcontracts</b>					
No Federal Government Obligations to Third Parties (by Use of a Disclaimer)		§ 2.f			
False or Fraudulent Statements or Claims – Civil and Criminal Fraud		§ 3.f			
Access to Third Party Contract Records		§ 15.t			
Changes to Federal Requirements		§ 2.c(1)			
Termination	Contracts exceeding \$10,000 (49 CFR Part 18)	§ 11			
Civil Rights (Title VI, EEO, ADA)		§ 12			
Disadvantaged Business Enterprises (DBEs)	Contracts awarded on the basis of a bid or proposal offering to use DBEs.	§ 12.d			
Incorporation of FTA Terms	Per FTA C 4220.1F	§ 15.a			
Suspension and Debarment	Contracts exceeding \$25,000	§ 3.b			
<b>Awards Exceeding the Simplified Acquisition Threshold (\$100,000)</b>					
Buy America	When tangible property or construction will be acquired.	§14.a			
Resolution of Disputes, Breaches, or Other Litigation		§ 52			
<b>Awards Exceeding \$100,000 by Statute</b>					
Lobbying		§ 3.d			
Clean Air		§ 25.b			
Clean Water		§ 25.c			

**FEDERALLY REQUIRED AND OTHER MODEL CLAUSES**

**A. REQUIRED THIRD PARTY CONTRACT CLAUSES (Continued)**

(excluding micro-purchases, except for construction contracts over \$2,000)

REQUIREMENT	COMMENTS	MASTER AGREEMENT REFERENCE	1	2	3
<b>Transport of Property or Persons</b>					
Cargo Preference	When acquiring property suitable for shipment by ocean vessel	§ 14.b			
Fly America	When property or persons are transported by air between U.S. and foreign destinations, or between foreign locations	§ 14.c			
<b>Construction Activities</b>					
Construction Employee Protections – Davis-Bacon Act	For contracts exceeding \$2,000	§ 24.a			
Construction Employee Protections – Contract Work Hours & Safety Standards Act	For contracts exceeding \$100,000	§ 24.b			
Construction Employee Protections – Copeland Anti-Kickback Act	All contracts	§ 24.a			
Bonding for Construction Activities Exceeding \$100,000	5% bid guarantee bond 100% performance bond Payment bond equal to: – 50% for contracts < \$1M – 40% for contracts > \$1M – < \$5M – \$2.5M for contracts > \$5M	§ 15.o(1)			
Seismic Safety	Construction contracts for new buildings or for existing buildings	§ 23.e			
<b>Nonconstruction Activities</b>					
Nonconstruction Employee Protection – Contract Work Hours & Safety Standards Act	For all turnkey, rolling stock, and operational contracts (excluding transportation services contracts) in excess of \$100,000	§ 24.b			
<b>Transit Operations</b>					
Transit Employee Protective Arrangements		§ 24.d			
Charter Bus Operations		§ 28			
School Bus Operations		§ 29			
Drug Use and Testing	Safety sensitive functions	§ 32.b			
Alcohol Misuse and Testing	Safety sensitive functions	§ 32.b			

**FEDERALLY REQUIRED AND OTHER MODEL CLAUSES**

**A. REQUIRED THIRD PARTY CONTRACT CLAUSES (Continued)**

(excluding micro-purchases, except for construction contracts over \$2,000)

REQUIREMENT	COMMENTS	MASTER AGREEMENT REFERENCE	1	2	3
<b>Planning, Research, Development, and Demonstration Projects</b>					
Patent Rights		§ 17			
Rights in Data and Copyrights		§ 18			
<b>Special Notification Requirements for States</b>					
Special Notification Requirement for States		§ 37			
<b>Miscellaneous Special Requirements</b>					
Energy Conservation		§ 26			
Recycled Products	Contracts when procuring \$10,000 or more per year of items designated by EP	§ 15.k			
Conformance with National ITS Architecture	Contracts and solicitations for ITS projects	§ 15.m			
ADA Access	Contracts for rolling stock or facilities construction/renovation	§ 12.g			
Assignability Clause	Procurements through assignments	§ 15.a			

**FEDERALLY REQUIRED AND OTHER MODEL CLAUSES**

**B. REQUIRED CERTIFICATIONS, REPORTS, AND FORMS**

<b>REQUIREMENT</b>	<b>COMMENTS</b>	<b>MASTER AGREEMENT REFERENCE</b>	<b>1</b>	<b>2</b>	<b>3</b>
Bus Testing Certification	Procurements of buses and modified mass produced vans	§ 15.n(4)			
TVM Certifications	All rolling stock procurements	§ 12.d(1)			
Buy America Certification	Procurements of steel, iron or manufactured products exceeding \$100,000	§ 14.a			
Preaward Review	Rolling stock procurements exceeding procurements exceeding \$100,000	§ 15.n(3)			
Preaward Buy America Certification	Rolling stock procurements exceeding procurements exceeding \$100,000	§ 15.n(3)			
Preaward Purchaser's Requirement	Rolling stock procurements exceeding procurements exceeding \$100,000	§ 15.n(3)			
Post Delivery Review	Rolling stock procurements exceeding procurements exceeding \$100,000	§ 15.n(3)			
Post Delivery Buy America Certification	Rolling stock procurements exceeding procurements exceeding \$100,000	§ 15.n(3)			
Post Delivery Purchaser's Requirement	Rolling stock procurements exceeding procurements exceeding \$100,000	§ 15.n(3)			
On-Site Inspector's Report	Rolling Stock procurements for more than 10 vehicles	§ 15.n(3)			
Federal Motor Vehicles Safety Standards (Preaward and Post Delivery)	Motor vehicle procurements (49 CFR 571)	§ 15n(3)			
Lobbying	Procurements exceeding \$100,000	§ 3.d(1)			
Standard Form LLL and Quarterly Updates (when required)	Procurements exceeding \$100,000 where contractor engages in lobbying activities	§ 3.d(1)			

**FEDERALLY REQUIRED AND OTHER MODEL CLAUSES**

**C. OTHER REQUIRED ITEMS**

REQUIREMENT	COMMENTS	FTA C 4220.1F REFERENCES	1	2	3
Contract Administration System		§ 7.b			
Record of Procurement History		§ 7.i			
Protest Procedures		§ 7.l			
Selection Procedures		§8.c			
Cost/Price Analysis		§ 10a-b			
Justification for Noncompetitive Awards	If Applicable	§ 9.h			
No Excessive Bonding Requirements		§ 8.a			
No Exclusionary Specifications		§ 8.a			
No Geographic Preferences	Except for A&E Services	§8.b			
Evaluation of Options	If Applicable	§ 9.I			

**FEDERALLY REQUIRED AND OTHER MODEL CLAUSES**

**APPLICABILITY OF THIRD PARTY CONTRACT CLAUSES**

(excluding micro-purchases, except for construction contracts over \$2,000)

TYPE OF PROCUREMENT					
CLAUSE	Professional Services/A&E	Operations/ Management	Rolling Stock Purchase	Construction	Materials & Supplies
No Federal Government Obligations to Third Parties (by Use of a Disclaimer)	All	All	All	All	All
False Statements or Claims Civil and Criminal Fraud	All	All	All	All	All
Access to Third Party Contract Records	All	All	All	All	All
Changes to Federal Requirements	All	All	All	All	All
Termination	All	All	All	All	All
Civil Rights (Title VI, EEO, ADA)	>\$10,000	>\$10,000	>\$10,000	>\$10,000	>\$10,000
Disadvantaged Business Enterprises (DBEs)	All	All	All	All	All
Incorporation of FTA Terms	All	All	All	All	All
Suspension and Debarment	>\$25,000	>\$25,000	>\$25,000	>\$25,000	>\$25,000
Buy America			>\$100,000	>\$100,000	>\$100,000
Resolution of Disputes, Breaches, or Other Litigation	>\$100,000	>\$100,000	>\$100,000	>\$100,000	>\$100,000
Lobbying	>\$100,000	>\$100,000	>\$100,000	>\$100,000	>\$100,000
Clean Air	>\$100,000	>\$100,000	>\$100,000	>\$100,000	>\$100,000
Clean Water	>\$100,000	>\$100,000	>\$100,000	>\$100,000	>\$100,000
Cargo Preference			Involves property transported by ocean vessel	Involves property transported by ocean vessel	Involves property transported by ocean vessel
Fly America	Involves foreign transport or travel by air	Involves foreign air transport or travel	Involves foreign transport or travel	Involves foreign transport or travel	Involves foreign air transport or travel
Davis-Bacon Act				>\$2,000 (including ferry vessels)	
Contract Work Hours and Safety Standards Act		>\$2,500 (except transportation services)	>\$2,500	>\$2,000 (including ferry vessels)	

**FEDERALLY REQUIRED AND OTHER MODEL CLAUSES**

**APPLICABILITY OF THIRD PARTY CONTRACT CLAUSES**

(excluding micro-purchases, except for construction contracts over \$2,000)

TYPE OF PROCUREMENT					
CLAUSE	Professional Services/A&E	Operations/ Management	Rolling Stock Purchase	Construction	Materials & Supplies
Copeland Anti-Kickback Act				>\$2,000 (including ferry vessels)	
Bonding				\$100,000	
Seismic Safety	A&E for New Buildings & Additions			New Buildings &	
Transit Employee Protective Arrangements		Transit Operations			
Charter Service Operations		All			
School Bus Operations		All			
Drug Use and Testing		Transit Operations			
Alcohol Misuse and Testing		Transit Operations			
Patent Rights	Research & Development				
Rights in Data and Copyright Requirements	Research & Development				
Energy Conservation	All	All	All	All	All
Recycled Products		Contracts for items designated by EPA, when procuring \$10,000 or more per year		Contracts for items designated by EPA, when procuring \$10,000 or more per year	Contracts for items designated by EPA, when procuring \$10,000 or more per year
Conformance with ITS National Architecture	ITS Projects	ITS Projects	ITS Projects	ITS Projects	ITS Projects
ADA Access	A&E	All	All	All	All
Notification of Federal Participation for States	Limited to States	Limited to States	Limited to States	Limited to States	Limited to States

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**King County Department of  
Transportation  
Transit Division**

EXHIBIT I

**&  
New Flyer of America**

**Manufacture and Delivery of 60 Foot Heavy Duty  
Articulated Low Floor Diesel-Fueled  
Hybrid and Standard Drive Transit Buses**

**Contract MB 06-2**

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**Legal and Procedural Documents  
Specifications  
Addenda**

**May 16, 2007**

**Includes Addenda 1-5 and Negotiation Items  
Conformed Copy**



*We'll Get You There*

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## SECTION A1 - INSTRUCTIONS FOR PROPOSERS

### A1.01 Procurement

#### A1.01

King County, a home rule charter county of the state of Washington, by and through its Department of Transportation, Metro Transit Division, (hereinafter referred to as 'the County') anticipates purchasing the following:

Up to 515 plus an option quantity of up to 200 60 ft diesel-fueled heavy duty low floor hybrid drive, or standard drive, or a combination of both types of buses, by means of a multi-year procurement over a five-year period. All deliveries must be complete no later than 18 months after the last order for a requirement of buses.

Buses will have an FTA-service life of 12 years or 500,000 miles. This Request for Proposals (RFP) calls for the supply and delivery of these transit buses to the County, to be delivered complete and operable (except as otherwise provided in the Contract Documents) and suitable for revenue service in both local and express service on urban and suburban bus routes throughout King County and adjacent counties in the State of Washington. The County will award a contract through the competitive negotiation process set forth in this solicitation document and applicable laws and regulations. The County reserves the right to reject all proposals, or to reject those proposals that do not conform to the specifications set forth herein.

### A1.02 Proposal Submission

#### A1.02.01

Proposals for this procurement shall contain all required attachments and information, be sealed and submitted no later than 3:00 p.m. Pacific Time on the date specified in Attachment 29. Proposals shall be submitted to the following office:

King County Department of Transportation  
Transit Division  
Transit Fleet Group MS/KSC-TR-0342  
201 S. Jackson St.  
Seattle, WA 98104-3856

Proposals shall be labeled:

### PROPOSAL FOR CONTRACT MB 06-2

#### A1.02.02

Each Proposal shall be signed by the Proposer or the Proposer's authorized representative and include the Proposer's address. If the Proposal is made by an individual, the name, signature and post office address must be shown; if made by a partnership or joint venture, the name and post office address of the partnership or joint venture and the signature of at least one of the general partners or authorized joint venture partners must be shown; if made by a corporation, the name of the state under the laws of which the corporation is chartered, the name and post office address of the corporation and the title of the person who signs on behalf of the corporation must be shown.

See Section A3 of this RFP for additional proposal submission requirements.

### A1.03 Schedule

The procurement schedule is included as Attachment 29 to this RFP.

#### **A1.04 Postponement and Cancellation**

##### **A1.04**

The County reserves the right to postpone proposal submittal for its own convenience and/or to cancel the RFP.

#### **A1.05 Obtaining the RFP**

##### **A1.05**

Interested vendors may inspect and obtain the RFP between 8:00 AM and 4:00 PM at the following location, and copies may also be obtained by written request from:

King County Department of Transportation  
Transit Division  
Transit Fleet Group MS/KSC-TR-0342  
201 S. Jackson St.  
Seattle, WA 98104-3856

Fax: (206)  
684-1651

Copies will be sent via U.S. mail; special overnight or expedited delivery will be accommodated **at the expense of the requester.**

#### **A1.06 Communications**

##### **A1.06**

Communications by or on behalf of any person or firm regarding this procurement with County staff, King County Council members, consultants and/or employees other than those listed below during the proposal preparation and evaluation phases of this RFP are prohibited and shall be cause for the person or firm involved to be subject to rejection of its proposal or disqualification by the County.

Written inquiries concerning the requirements set forth in this RFP shall be directed to the office listed in Section A1.05.

Verbal inquiries regarding the County requirements of this RFP shall be directed to:

Mr. Michael Voris  
Phone (206) 684-1629  
Fax (206) 684-1651.

No responses to inquiries shall be binding on the County unless confirmed in writing by the County.

#### **A1.07 Proposals as Public Records**

##### **A1.07.01**

Except to the extent permitted by Washington State or federal law, proposals shall be considered public documents and available for review and copying by the public following award.

##### **A1.07.02**

If a Proposer considers portions of its proposal to be protectable under Washington State public disclosure law or the federal Freedom of Information Act, the Proposer shall identify and clearly mark such portions as "CONFIDENTIAL," "PROPRIETARY," or "BUSINESS SECRET." Such portions of the proposal shall be submitted separately in a sealed envelope.

##### **A1.07.03**

Pursuant to Washington State law, the County shall make proposals available to the public for review after a final decision and notice of award are made. If a member of the public or vendor requests to review those portions of proposals marked and separately submitted according to the above requirement, the County will notify the affected Proposer prior to releasing such portions. The Proposer may take such legal actions as it deems necessary to protect its interests. If the Proposer has not commenced such actions within three (3) business days after receipt of the notice from the County of a demand to review such portions of its proposal, and provided the County written notice of the actions, the County will make such portions available for review and copying by the public.

##### **A1.07.04**

The Proposer asserting that portions of its proposal are legally protectable shall bear all costs of defending such assertion, including reimbursing the County for its administrative, expert and legal costs, including attorney's fees, involved in defending itself in actions arising from such assertions by the Proposer. By submitting a proposal with

portions marked "CONFIDENTIAL," "PROPRIETARY," or "BUSINESS SECRET," the Proposer has thereby agreed to the provisions of this Section A1.07, including the defense and reimbursement obligations of this Subsection A1.07.04.

With regard to information and material received in response to this solicitation and marked 'CONFIDENTIAL', 'PROPRIETARY', or 'BUSINESS SECRET', and subject to the requirements of Washington State public disclosure law, the county will employ practices no less diligent than those used for the protection of the County's own confidential information and all of its licensed technology, software, documentation, drawings, schematics, manuals, data, and other information and material. The Proposer shall be responsible for appropriately marking its data in accordance with the statutory provisions of the state and/or county in which the County resides.

#### **A1.08 Clarifications, Deviations and Approved Equals**

##### **A1.08.01**

A prospective Proposer may request clarification of any part of the RFP, a different brand name component as an approved equal, or an amendment or waiver to the RFP. These requests are collectively called Requests for Deviation (RFDs). RFDs must be submitted in writing and according to the schedule in Attachment 29. RFDs may also be submitted during negotiations. RFDs must be submitted to the **County address** in Section A1.05 on a copy of form EA1.08 included in this RFP.

The County will review each RFD and will respond in writing and issue any necessary addenda. RFDs shall be subject to the public disclosure provisions described in Section A1.07.

Any request for an Approved equal must be fully supported with technical data, test results, transit revenue experience, or other pertinent information which confirms that the substitute offered is equal to or better than the specified item and will not compromise any aspect of the bus's performance. In addition, any test requirements in the RFP that pertain to an item under consideration for an Approved equal must be submitted with the request for an Approved equal whether the request is filed before or after proposal submittal.

RFDs may also be transmitted electronically, provided the County has Approved the format and protocol of the Proposer and the transmission is received within the applicable time frame. The determination of the County to accept or reject the proposed equal or change shall be final.

##### **A1.08.02**

The County reserves the right to seek clarifications and allow changes to proposals in the course of negotiations. The County will issue addenda during negotiations as necessary to reflect changes in the County's requirements or industry standards including, but not limited to, changes in or clarifications to the County's evaluation criteria.

##### **A1.08.03**

No requests for clarifications, approved equals or changes may be included in proposals or Best and Final Offers (BAFOs).

#### **A1.09 Responsibility for Items Specified by Name**

##### **A1.09**

Specifying a brand name, component or equipment in this RFP shall not relieve the Proposer from its responsibility to supply buses that comply in all respects with the performance, warranty and other requirements of this Contract. The Proposer is responsible for notifying the County of any brand name, component or equipment called for in the specification which the Proposer believes is inappropriate, and to propose a suitable substitute for consideration in their proposal.

#### **A1.10 Changes to the RFP**

##### **A1.10.01**

The County reserves the right to modify any part of the RFP by issuing a written addendum at any time prior to the date established by the County for submittal of BAFOs. Addenda will be consecutively numbered in the order they are issued. All addenda shall become part of the RFP and any subsequently awarded Contract.

##### **A1.10.02**

The County will deliver addenda issued prior to the proposal submittal date to all prospective Proposers. A prospective Proposer is a Person or firm that has given its name and address to the County and has indicated interest in receiving addenda, either by requesting a copy of the RFP or otherwise.

##### **A1.10.03**

The County will deliver addenda issued after the proposal submittal date to all Proposers that are within the competitive range at the time the addendum is issued. A Proposer is a Person that has properly and timely submitted a proposal to the County. The County will establish the competitive range. If the competitive range has not been

established at the time an addendum is issued, the County will deliver the addendum to all Proposers. The determination regarding which proposals are in the competitive range is the responsibility of the County's evaluation team. Proposers will be notified in writing regarding the status of their proposals. Those deemed within the competitive range may be asked to submit a BAFO offer as part of the final selection process.

#### **A1.10.04**

Delivery of an addendum to a Proposer or prospective Proposer shall be deemed accomplished when the County has placed the addendum in the regular U.S. Mail, addressed to the Proposer or prospective Proposer at the last address furnished to the County. Proposers and prospective Proposers must notify the County promptly in writing of any changes in address and/or fax number. The notification must identify the contract number of this RFP and be addressed to the person named in Section A1.06. The County will also fax a copy of all addenda to Proposers and prospective Proposers if requested in writing.

### **A1.11 Procurement Process**

#### **A1.11.01**

The County will evaluate each Proposal using the evaluation criteria set forth in this RFP and any applicable addenda. Using the evaluation criteria set forth in this RFP and any applicable addenda, the County shall determine which Proposals are in the competitive range for the purpose of conducting written or oral discussions. The competitive range shall include those Proposals that are determined to have a reasonable chance of being selected for award of a contract. If the County determines that a Proposal does not have a reasonable chance of being selected for award of a contract, the Proposal shall be excluded from further consideration and the County shall notify the Proposer of such decision in writing.

At the County's sole discretion, written and/or oral discussions may be conducted with those Proposers whose Proposals are determined to be within the competitive range. Discussions may include, but are not limited to, deficiencies, inconsistencies and suspected mistakes in any portion of a Proposal, the technical requirements, the contractual terms and conditions set forth in the RFP, and questions and issues raised by the County or a Proposer.

Upon completion of discussions, the County may, if it deems it appropriate, request revised proposals from all Proposers in the competitive range. If revised proposals are requested, the County may conduct additional discussions or conduct a final evaluation and scoring based upon the revised proposals.

If discussions are held and a final evaluation is not made based upon revised proposals, the County may request Best and Final Offers from all Proposers that continue to be within the competitive range. The request will include notice that discussions are concluded, an invitation to submit a BAFO, notice

that any changes to a proposal must be fully substantiated with supporting data and documentation, and a designated date, time and location for submission of written BAFOs.

The County reserves the right to award a contract without written and/or oral discussions with the Proposers and without an opportunity for Proposers to submit BAFOs, when deemed to be in the County's best interests.

In consideration of the County considering its Proposal, each Proposer, by submitting a Proposal under this RFP, agrees it shall have no claim against the County for costs incurred in participating under this RFP, including, but not limited to, preparation and presentation costs, the cost of providing additional information, or any cost related to any modification made either to its Proposal or the internal structure or systems of the Proposer or its organization.

**A1.11.02**

After selection of a BAFO for consideration for award of contract as provided in Section A6.06.01, the County may conduct discussions with the selected Proposer to finalize contract terms and conditions.

**A1.12 Rejection of Proposals and BAFOs**

**A1.12.01**

The County reserves the right to reject any or all proposals and to determine which proposal is, in the judgment of the County, the most advantageous to and in the best interest of the County. The County also reserves the right to waive any immaterial irregularities or informalities in any proposal or BAFO.

**A1.12.02**

The County reserves the right to reject any Proposal for any reason including, but not limited to, the following: any Proposal which is incomplete, obscure, irregular or lacking necessary detail and specificity; any Proposal which has any qualification, addition, limitation or provision attached to the Proposal except as authorized in this RFP; any Proposal from Proposers who (in the sole judgment of the County) lack the qualifications or responsibility necessary to satisfactorily perform the Work; any Proposal for which a Proposer fails or neglects to complete and submit additional or supplementary information within the time specified by the County; and any Proposal submitted by a Proposer which is not registered or licensed as may be required by applicable law, including the laws of the State of Washington or local government agencies.

In consideration for the County's review and evaluation of its Proposal, the Proposer waives and releases any claims against the County arising from any rejection of its Proposal, or portions thereof, including any claim for costs, expenses, fees or damages incurred by Proposers in the preparation and presentation of Proposals submitted in response to this RFP.

**A1.12.03**

By submitting a proposal or BAFO, the Proposer shall thereby be deemed to have accepted without reservation or amendment the whole of the RFP. Proposals or BAFOs that contain conditions different from those in the RFP or those that vary from or take exception to the specification without prior written approval from the County may be rejected.

**A1.12.04**

Price proposals must be submitted on the forms provided. Price proposals submitted in any other form may be rejected.

**A1.13 Modification of Proposals and BAFOs**

**A1.13.01**

A modification of a proposal or BAFO already received will be considered only if the modification is received prior to the time and date established for submittal of proposals or BAFOs. During these phases price proposals cannot be modified without the written approval of the County's Contract Officer. All modifications shall be made in writing, executed and submitted in the same form and manner as the original proposal.

## **A1.14 Single Proposal**

### **A1.14.01**

In the event a single proposal is received, the County will conduct a price or cost analysis of the proposal, and the Proposer hereby agrees to such analysis and to fully cooperate with the County in providing requested information and access to the Proposer's records. The County will determine the scope of the price or cost analysis and inform the Proposer in writing. The County may submit the price or cost analysis to the Federal Transit Administration (FTA). An award may be made to the Proposer if final contract terms can be negotiated and are considered to be in the County's best interest; or the County may reject such proposal.

### **A1.14.02**

The County shall return proposal guaranties as provided in Section A6.04.03.

## **A1.15 Protests and Appeals to the County**

### **A1.15.01**

Any actual or prospective Proposer, including subcontractors and suppliers showing a substantial potential economic interest in the proposal, who is allegedly aggrieved in connection with the solicitation or award of this Contract may protest to the County in accordance with the procedures set forth herein. Protests based on the specifications or other terms in this RFP which are apparent prior to the date established for submission of proposals shall be submitted to and received by the County not later than ten (10) calendar days prior to said date. Protests based on other circumstances shall be submitted to and received by the County within five (5) calendar days after the allegedly aggrieved party knows or should have known of the facts and circumstances upon which the protest is based; provided, however, that in no event shall a protest be considered if all proposals are rejected or after a contract is executed. Full compliance with the procedures for filing and documenting a protest shall be a condition precedent to filing any further protest with the FTA or to filing litigation.

### **A1.15.02**

In order to be considered, a protest shall be in writing and shall include:

1. The name and address of the allegedly aggrieved party;
2. The contract number and contract title under which the protest is submitted;
3. A detailed description of the specific grounds for protest and any supporting documentation;
4. The specific ruling or relief requested; and
5. Evidence that all persons with a financial interest in the procurement have been give notice of the protest or if such persons are unknown, a statement to that effect.

The written protest shall be addressed to:

King County Department of Transportation,  
Proposal Protest  
General Manager - Transit Division - MS/KSC-TR-0415  
201 S. Jackson St.  
Seattle, WA 98104-3856

### **A1.15.03**

Upon receipt of a written protest, the County's Transit Division General Manager or designee will promptly consider the protest. If any of the required information is omitted or incomplete, the County will immediately notify the protester in writing. The missing information must then be submitted to the County within five (5) calendar days of receipt of the County's notification if the protest is to be further considered. The County will notify other Proposers and interested parties of the protest and its basis. Other Proposers and interested persons will be given an opportunity to respond and submit relevant information.

The County reserves the right to collect data, interview interested parties and review material information without restriction to determine facts and reach a decision regarding the protest. The General Manager or designee may, but is not required to, meet with the protester and other interested parties.

**A1.15.04**

If the protest is not resolved by mutual agreement of the protester and the County, the County will issue a decision in writing within thirty (30) calendar days after receipt of the written protest or missing information, as applicable. The decision will state the reasons for the action taken and inform the interested parties of the right to appeal the decision to the Director of the King County Department of Transportation (the Director) or designee. A copy of the decision shall be mailed (by certified mail, return receipt requested) or otherwise promptly furnished to the protester and any other interested parties.

The decision will be considered final and conclusive unless the protester appeals to the County Director of Transportation. If the protester appeals to the Director, then the subsequent determination of the Director or designee shall be final and conclusive. The recognized justifications for appeal shall be limited to: (1) new data that was unavailable at the time the original protest was filed; (2) an error of law or regulation, and 3) the claim that an arbitrary or capricious decision was made by the County. An appeal must be filed with the Director within five (5) calendar days of the date the protest decision is issued. The Director or designee may, but is not required to, meet with the protester and other interested parties or conduct a formal hearing if necessary. The Director may interview interested parties, request and collect new data and review all information submitted by staff and interested parties to reach a decision about the appeal.

**A1.15.05**

When a protest has been timely filed with the County before contract award, the County shall not make an award prior to five (5) calendar days after issuing a decision on the protest, or if a protest has been filed with the FTA, during the pendency of the protest, unless in either situation the County determines that:

1. The items are urgently required;
2. Delivery or performance will be unduly delayed by failure to make the award promptly; or
3. Failure to make prompt award will otherwise cause undue harm to the County or the Federal government.

**A1.15.06**

Failure to comply with these protest procedures will render a protest untimely and/or inadequate and result in rejection thereof by the County. Compliance with these protest procedures shall be a condition precedent to commencement of litigation on the protest issues.

**A1.16 Appeals to FTA**

**A1.16.01**

After a Proposer or other interested party has exhausted all administrative remedies with the County, a protest may be filed with FTA pursuant to the procedures outlined in FTA Circular 4220.1E as amended by FTA. Proposers are advised that the FTA will only entertain a protest that alleges the County does not have or failed to adhere to its protest procedures or that alleges a violation of federal law.

**A1.16.02**

Protesters shall file a protest with FTA not later than five (5) working days after a final decision is rendered under the County's protest and appeal procedure. In instances where the protester alleges that the County failed to make a final determination on the protest, protesters shall file a protest with FTA not later than five (5) working days after the protester knew or should have known of the County's failure to timely render a final determination on the protest. The protesting party must notify the County if it has filed a protest with FTA.

### **A1.17 Financing Options**

#### **A1.17.01**

The County reserves the right to utilize whatever financing options may be available to it in the procurement of the vehicles to be delivered under the Contract. These options could include, but are not limited to, cross-border leasing, certificates of participation, capital leasing, etc. The use of any of these or other financing methods may require the submission of additional information by the Contractor, the presence of the Contractor at meetings, the execution by the Contractor of various documents in connection with such financing and other reasonable forms of cooperation and assistance. By responding to this RFP, Proposer agrees to provide support in the event the County uses any of the financing options available to it and to fully cooperate in the implementation of such options for the County's benefit at no additional cost to the County.

## SECTION A2 - FEDERAL, STATE, AND COUNTY REQUIREMENTS

(Federal requirements taken from the FTA website, Best Practices Procurement Manual, Appendix A.1, Federally Required and Other Model Contract Clauses.)

### **A2.01 Fly America Requirements 49 U.S.C. 40118 41 CFR Part 301-10**

#### **Fly America Requirements**

The Contractor agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and sub recipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S. Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

### **A2.02 Buy America Requirements 49 U.S.C. 5323(j) 49 CFR Part 661**

**Buy America** - The Contractor agrees to comply with 49 U.S.C. 5323(j) and 49 CFR Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 CFR 661.7, and include final assembly in the United States for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, microcomputer equipment, and software. Separate requirements for rolling stock are set out at 5323(j)(2)(C) and 49 CFR 661.11. Rolling stock not subject to a general waiver must be manufactured in the United States and have a 60 percent domestic content.

The certification at EA2.02 must be completed and submitted with all proposals on FTA-funded contracts, except those subject to a general waiver. Proposals that are not accompanied by a completed Buy America certification must be rejected as non-responsive. This requirement does not apply to lower tier Subcontractors.

**Procurement of Spare Parts** – All spare parts supplied to the County must meet the Buy America requirements set forth in 49 U.S.C. 5323(j) and 49 CFR Part 661.6. 49 CFR Part 661.6 'Certification requirement for procurement of steel or manufactured products' states in part; "If steel or manufactured products (as defined in Sec. Sec. 661.3 and 661.5 of this part) are being procured, the appropriate certificate" (Certification of Compliance or Certification of Non-Compliance) at EA2.02B must be completed and submitted with each sale of spare parts to the County on FTA-funded contracts. For those spare parts subject to a general waiver, the Contractor must identify the specific waiver exception invoked.

### **A2.03 Not Used For Bus Procurement**

**A2.04 Cargo Preference Requirements**  
**46 U.S.C. 1241**  
**46 CFR Part 381**

**Cargo Preference - Use of United States-Flag Vessels** – In the event that transportation by ocean is required for any equipment, material or commodities pursuant to this Contract, the Contractor agrees: a. to use privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels; b. to furnish within 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of leading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in the preceding subsection to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the County (through the Contractor in the case of a Subcontractor's bill-of-lading.) c. to include these requirements in all subcontracts issued pursuant to this Contract when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

**A2.05 Not Used For Bus Procurement**

**A2.06 Energy Conservation Requirements**  
**42 U.S.C. 6321 et seq.**  
**49 CFR Part 18**

**Energy Conservation** - The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act. The Contractor agrees to include this clause in all subcontracts awarded under this Contract.

**A2.07 Clean Water Requirements**  
**33 U.S.C. 1251**

**Clean Water** - (1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. The Contractor agrees to report each violation to the County and understands and agrees that the County will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.  
(2) The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

**A2.08 Bus Testing**  
**49 U.S.C. 5323(c)**  
**49 CFR Part 665**

The Contractor [Manufacturer] agrees to comply with 49 U.S.C. A 5323 (c) and FTA's implementing regulation 49 CFR Part 665 and shall perform the following:

- 1) A manufacturer of a new bus model or a bus produced with a major change in components or configuration shall provide a copy of the final test report to the recipient at a point in the procurement process specified by the recipient which will be prior to the recipient's final acceptance of the first vehicle.
- 2) A manufacturer who releases a report under paragraph 1 above shall provide notice to the operator of the testing facility that the report is available to the public.
- 3) If the manufacturer represents that the vehicle was previously tested, the vehicle being sold should have the identical configuration and major components as the vehicle in the test report, which must be provided to the recipient prior to recipient's final acceptance of the first vehicle. If the configuration or components are not identical, the manufacturer shall provide a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing.
- 4) If the manufacturer represents that the vehicle is "grandfathered" (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), the manufacturer shall provide the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.

The certification at EA2.08 must be completed and submitted with all proposals. Proposals that are not accompanied by a completed Bus Testing certification will be rejected as non-responsive.

**A2.09 Pre-Award and Post Delivery Audits Requirements**  
**49 U.S.C. 5323**  
**49 CFR Part 663**

**Pre-Award and Post-Delivery Audit Requirements** - The Contractor agrees to comply with 49 U.S.C. § 5323(l) and FTA's implementing regulation at 49 C.F.R. Part 663 and to submit the following certifications:

(1) Buy America Requirements: The Contractor shall complete and submit a declaration certifying either compliance or noncompliance with Buy America. If the Proposer certifies compliance with Buy America, it shall submit documentation which lists 1) component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin and costs; and 2) the location of the final assembly point for the rolling stock, including a description of the activities that will take place at the final assembly point and the cost of final assembly.

(2) Solicitation Specification Requirements: The Contractor shall submit evidence that it will be capable of meeting the proposal specifications.

(3) Federal Motor Vehicle Safety Standards (FMVSS): The Contractor shall submit 1) manufacturer's FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or 2) manufacturer's certified statement that the contracted buses will not be subject to FMVSS regulations.

The County will conduct the number of pre-award and post delivery audits that the County deems necessary to satisfy federal requirements.

The certification at EA2.09 must be completed and submitted with all proposals. Proposals that are not accompanied by a completed Buy America certification must be rejected as non-responsive.

**A2.10 Lobbying**  
**31 U.S.C. 1352**  
**49 CFR Part 19**  
**49 CFR Part 20**

**Byrd Anti-Lobbying Amendment, 31 U.S.C. 1352, as amended by the Lobbying Disclosure Act of 1995, P.L. 104-65 [to be codified at 2 U.S.C. § 1601, et seq.]** - Contractors who apply or propose for an award of \$100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

The certification at EA2.10 must be completed and submitted with all proposals. Proposals that are not accompanied by a completed Lobbying certification must be rejected as non-responsive.

**A2.11 Access To Records and Reports**  
**49 U.S.C. 5325**  
**18 CFR 18.36 (i)**  
**49 CFR 633.17**

**Access to Records** - The following access to records requirements apply to this Contract:

1. Where the Purchaser is not a State but a local government and is the FTA Recipient or a sub grantee of the FTA Recipient in accordance with 49 C. F. R. 18.36(i), the Contractor agrees to provide the County, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 C. F. R. 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a) 1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311.

2, 3 and 4 Not Used For Bus Procurement.

5. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

6. The Contractor agrees to maintain all books, records, accounts and reports required under this contract for a period of not less than three (3) years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same until the County, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. Reference 49 CFR 18.39(i)(11).

7. FTA does not require the inclusion of these requirements in subcontracts.

**A2.12 Federal Changes  
49 CFR Part 18**

**Federal Changes** - Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Agreement (Form FTA MA (12) dated October 1, 2005) between the County and FTA, as they may be amended or promulgated from time to time during the term of this Contract. Contractor's failure to so comply shall constitute a material breach of this Contract.

**A2.13 Bonding Requirements**

See Sections A6.04 and B5.02 for the County bonding requirements.

**A2.14 Clean Air  
42 U.S.C. 7401 et seq  
40 CFR 15.61  
49 CFR Part 18**

**Clean Air** - (1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq. The Contractor agrees to report each violation to the County and understands and agrees that the County will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

(2) The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

**A2.15 Recycled Products**  
**42 U.S.C. 6962**  
**40 CFR Part 247**  
**Executive Order 12873**

**Recovered Materials** - The Contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

**A2.16 Not Used For Bus Procurement**

**A2.17 Contract Work Hours And Safety Standards Act**  
**40 U.S.C. §§ 3701 et seq.**  
**29 C.F.R. § 5 (1999)**  
**29 C.F.R. § 1926 (1998)**

(1) **Overtime requirements** - No Contractor or Subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages** - In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any Subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) **Withholding for unpaid wages and liquidated damages** - Purchaser shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or Subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) **Subcontracts** - The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for compliance by any Subcontractor or lower tier Subcontractor with the clauses set forth in this section.

(5) **Payrolls and basic records** - (i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

**A2.18 Reserved**

**A2.19 No Government Obligation To Third Parties**

**No Obligation by the Federal Government.**

(1) The County and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying Contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to the County, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying Contract.

(2) The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the Sub-contractor who will be subject to its provisions.

**A2.20 Program Fraud And False Or Fraudulent Statements  
And Related Acts  
31 U.S.C. 3801 et seq.  
49 CFR Part 31 18 U.S.C. 1001  
49 U.S.C. 5307**

**Program Fraud and False or Fraudulent Statements or Related Acts.**

(1) The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § § 3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying Contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying Contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

(2) The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

(3) The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the Sub-contractor who will be subject to the provisions.

**A2.21 Termination  
49 U.S.C. Part 18  
FTA Circular 4220.1E**

See Section B6.10 for contract termination provisions.

**A2.22. Government-Wide Debarment And Suspension (Nonprocurement)  
49 CFR Part 29  
Executive Order 12549**

**Certification Regarding Debarment, Suspension, and Other Responsibility Matters** - Lower Tier Covered Transactions.

1. By signing and submitting this bid or proposal, the prospective lower tier participant is providing the signed certification as required below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the County may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the County if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "persons," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549 [49 CFR Part 29]. You may contact the County for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized in writing by the County.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction", without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List issued by U.S. General Service Administration.
8. Nothing contained in the foregoing shall be construed to require establishment of system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under Paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to all remedies available to the Federal Government, the County may pursue available remedies including suspension and/or debarment.

The certification at EA2.22 must be completed and submitted with all proposals. Proposals that are not accompanied by a completed Debarment and Suspension certification must be rejected as nonresponsive.

**A2.23 Not Used For Bus Procurement**

**A2.24 Civil Rights Requirements  
29 U.S.C. § 623, 42 U.S.C. § 2000  
42 U.S.C. § 6102, 42 U.S.C. § 12112  
42 U.S.C. § 12132, 49 U.S.C. § 5332  
29 CFR Part 1630, 41 CFR Parts 60 et seq.**

**Civil Rights** - The following requirements apply to the underlying Contract:

(1) Nondiscrimination - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

(2) Equal Employment Opportunity - The following equal employment opportunity requirements apply to the underlying Contract:

(a) Race, Color, Creed, National Origin, Sex - In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(b) Age - In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § § 623 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(c) Disabilities - In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(3) The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

**A2.25 Breaches And Dispute Resolution**  
**49 CFR Part 18**  
**FTA Circular 4220.1E**

See Sections B2.15, B6.03, B6.04, B6.11 and B7.09 for provisions regarding breaches and dispute resolution.

**A2.26 Not Used For Bus Procurement**

**A2.27 Not Used For Bus Procurement**

**A2.28 Disadvantaged Business Enterprise (DBE)**  
**49 CFR Part 26**

1.a. This Contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs*. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. The agency's overall goal for DBE participation is 7%. A separate contract goal has not been established for this procurement.

Deleted: (

b. The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted Contract. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as the County deems appropriate.

Each subcontract the Contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).

c. Not used.

d. The Contractor is required to pay its subcontractors performing work related to this Contract for satisfactory performance of that work no later than 30 days after the Contractor's receipt of payment for that work from the County.

e. The Contractor must promptly notify the County whenever a DBE subcontractor performing work related to this Contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The Contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of the County.

2. Each transit vehicle manufacturer (TVM), as a condition of being authorized to propose on federally-assisted transit vehicle procurements, must certify that it has complied with the requirements of 49 CFR Part 26.

The certificate at EA2.28 must be completed and submitted with all proposals. Proposals that are not accompanied by a completed TVM DBE certification must be rejected as non-responsive.

#### **A2.29 Reserved**

#### **A2.30 Incorporation of Federal Transit Administration (FTA) Terms FTA Circular 4220.1E**

**Incorporation of Federal Transit Administration (FTA) Terms** - The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding Contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1E, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Contract. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any County requests which would cause the County to be in violation of the FTA terms and conditions.

#### **A2.31 Drug and Alcohol Testing 49 U.S.C. § 5331 49 CFR Parts 653 and 654**

##### **Drug and Alcohol Testing**

The Contractor agrees to establish and implement a drug and alcohol testing program that complies with 49 CFR Parts 653 and 654, produce any documentation necessary to establish its compliance with Parts 653 and 654, and permit any authorized representative of the United States Department of Transportation or its operating administrations, the State Oversight Agency of Washington, or Purchaser, to inspect the facilities and records associated with the implementation of the drug and alcohol testing program as required under 49 CFR Parts 653 and 654 and review the testing process. The Contractor agrees further to certify annually its compliance with Parts 653 and 654 before the date the Contract is signed and to submit the Management Information System (MIS) reports before February 15 to King County Drug and Alcohol Program Administrator, 200 S. King St., MS: KSC-TR-0113, Seattle, WA 98104. To certify compliance the Contractor shall use the "Substance Abuse Certifications" in the "Annual List of Certifications and Assurances for Federal Transit Administration Grants and Cooperative Agreements," which is published annually in the Federal Register.

#### **A2.32 Access Requirements for Individuals with Disabilities**

The County and the Contractors are required to comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA), 42 USC §§ 12101, *et seq.*; Section 504 of the Rehabilitation Act of 1973, as amended, 29 USC § 794; and 49 USC § 5301(d), and the following regulations and any amendments thereto:

- A. U.S. Department of Transportation regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 CFR Part 37;
- B. U.S. Department of Transportation regulations, "Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance," 49 CFR Part 27;
- C. U.S. Department of Transportation regulations, "Americans With Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 49 CFR Part 38;

- D. U.S. Department of Justice (DOJ) regulations, "Nondiscrimination on the Basis of Disability in State and Local Government Services," 28 CFR Part 35;
- E. DOJ regulations, "Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities," 28 CFR Part 36;
- F. U.S. General Services Administration regulations, "Accommodations for the Physically Handicapped," 41 CFR Subpart 101-19;
- G. U.S. Equal Employment Opportunity Commission (EEOC) "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 CFR Part 1630;
- H. U.S. Federal Communications Commission regulations, "Telecommunications Relay Services and Related Customer Premises Equipment for the Hearing and Speech Disabled," 47 CFR Part 64, Subpart F; and
- I. FTA regulations, "Transportation for Elderly and Handicapped Persons," 49 CFR Part 609.
- J. The certificate at Form EA2.32 shall be completed and submitted with the Proposal. Proposals that are not accompanied by a completed A.D.A. certification must be rejected as non-responsive.

### **A2.33 – 34 Reserved For Expansion**

#### **A2.35 Washington State Requirements**

##### **A2.35.01**

Pursuant to RCW 46.70, the State of Washington regulates and licenses vehicle manufacturers.

Before the County awards this Contract, the Proposer will have provided evidence to the County that the manufacturer is licensed by the State of Washington and in compliance with RCW 46.70. See Attachment 30 for State of Washington Department of Licensing information.

##### **A2.35.02**

Any corporation, partnership, joint venture, etc. submitting a proposal for this Contract must be registered with the Washington State Department of Revenue.

Before the County awards this Contract, the Proposer will have provided evidence to the County that the Proposer is registered with the Department of Revenue. See Attachment 28 for a copy of a Department of Revenue information sheet.

#### **A2.36 King County Requirements**

##### **A2.36.01 Conflicts of Interest - Current and Former Employees**

The County seeks to eliminate and avoid actual or perceived conflicts of interest and unethical conduct by current and former County employees in transactions with the County. Consistent with this policy, no current or former County employee may contract with, influence, advocate, advise, or consult with a third party about a County transaction, or assist with the preparation of Proposals submitted to the County while employed by the County or within one (1) year after leaving the County's employment, if he/she participated in determining the Work to be done or process to be followed while a County employee.

All Bidders, vendors or Contractors who anticipate contracting with the County shall identify at the time of offer, such current or former County employees involved in preparation of bids or the anticipated performance of the Work if awarded the Contract. Failure to identify former County employees involved in this transaction may result in the County's denying or terminating this Contract. In addition, after award, the Contractor is responsible for notifying the County's Contract Officer of current or former County employees who may become involved in the Contract any time during the term of the Contract.

**A2.36.02 Nondiscrimination and Equal Employment Opportunity**

A. Nondiscrimination in Employment and Provision of Services

During the performance of this Contract, neither the Contractor nor any party subcontracting under the authority of this Contract shall discriminate nor tolerate harassment on the basis of race, color, sex, religion, nationality, creed, marital status, sexual orientation, age, or the presence of any sensory, mental, or physical disability in the employment or application for employment or in the administration or delivery of services or any other benefits under this Contract. King County Code Chapter 12.16 is incorporated herein by reference, and such requirements shall apply to this Contract.

**B. Nondiscrimination in Subcontracting Practices**

During the solicitation, award and term of this Contract, the Contractor shall not create barriers to open and fair opportunities to participate in County contracts or to obtain or compete for contracts and subcontracts as sources of supplies, equipment, construction and services. In considering offers from and doing business with subcontractors and suppliers, the Contractor shall not discriminate against any person on the basis of race, color, creed, religion, sex, age, nationality, marital status, sexual orientation or the presence of any mental or physical disability in an otherwise qualified disabled person.

**C. Compliance with Laws and Regulations**

The Contractor shall comply fully with all applicable federal, state, and local laws, ordinances, executive orders, and regulations that prohibit discrimination.

Unfair Employment Practices. King County Code Chapter 12.18 is incorporated by reference as if fully set forth herein and such requirements apply to this Contract.

**D. Record-keeping Requirements and Site Visits**

The County may, at any time, visit the project site, Contractors' and Subcontractors' offices to review records related to the solicitation, utilization, and payment to subcontractors and suppliers in compliance with Executive Order 11246 as amended by Executive Order 11375. This provision includes compliance with any other requirements of this section. The Contractor shall provide all reasonable assistance requested by King County during such visits. The Contractor shall maintain, for six (6) years after completion of all Work under this Contract, the following:

1. Records, including written quotes, bids, estimates or proposals submitted to the Contractor by all businesses seeking to participate on this Contract, and any other information necessary to document the actual use of and payment to subcontractors and suppliers in this Contract.
2. The Contractor shall make the foregoing records available to King County for inspection and copying upon request. Any violation of the mandatory requirements of the provisions of this subsection shall be a material breach of this Contract, which may result in termination of this Contract or such other remedy as the County deems appropriate, including but not limited to damages or withholding payment.

**E. Discrimination In Contracting**

King County Code Chapter 12.17 is incorporated by reference as if fully set forth herein and such requirements apply to this Contract. During the performance of this Contract, neither Contractor nor any party subcontracting under the authority of this Contract shall discriminate or engage in unfair contracting practices prohibited by KCC 12.17.

**A2.36.03 Non-Discrimination in Benefits to Employees with Domestic Partners**

King County's Equal Benefits (EB) Ordinance 14823 states that to be eligible for award of contracts at a cost of \$25,000.00 or more, firms must not discriminate in the provisions of employee benefits between employees with spouses, and employees with domestic partners. The successful Contractor, bidder or Proposer shall be required to complete a Worksheet and Declaration form. Compliance with Ordinance 14823 is a mandatory condition for execution of a contract.

The form at EA2.36.03 must be completed and submitted after award of the Contract per section B5.01.01.

**A2.36.04**

The Personnel Inventory Report form at EA2.36.04 must be completed and submitted after award of the Contract per section B5.01.01.

**A2.36.05**

The Affidavit And Certificate Of Compliance With King County Code Chapter 12.16, Discrimination and Affirmative Action In Employment By Contractors, Subcontractors, and Vendors form at EA2.36.05 must be completed and submitted after award of the Contract per section B5.01.01.

**A2.36.06**

The Statement of Compliance with King County Code Chapter 12.16 by the Contractor's Union or Employee Referral Agency form at EA2.36.06 must be completed and submitted after award of the Contract per section B5.01.01.

**A2.36.07**

The 504/ADA Self-evaluation form and Assurance of Compliance form at EA2.36.07 must be completed, and the Assurance of Compliance form must be completed and submitted after award of the Contract per section B5.01.01.

## SECTION A3 SUBMITTAL OF PROPOSAL

### A3.01 Information in Proposals and BAFOs

#### **A3.01.01 Information to Include**

To be considered for evaluation, each proposal and BAFO shall include all of the information below in the order and in the categories in which it is listed. Only information submitted in response to the questions in this section (and the price proposal) are evaluated.

Supply the following quantities of information in the proposal and BAFO, unless otherwise noted:

#### A3.01.01.01 Information on Proposer

1. 2 copies
2. 2 copies - Proposal only
3. 2 copies
4. 2 copies - BAFO only
5. 2 copies
6. 2 copies

#### A3.01.01.02 Certificates and Forms

1. 1 original plus 1 copy
2. 1 original plus 1 copy
3. 1 original plus 1 copy
4. 1 original plus 1 copy
5. 1 original plus 1 copy
6. 1 original plus 1 copy
7. 1 original plus 1 copy
8. 1 original plus 1 copy

#### A3.01.01.03 Proposal

1. 2 copies
2. 2 copies
3. 2 copies
4. 2 copies
5. 2 copies
6. 2 copies of parts manuals, maintenance manuals, parts price lists, operator's manuals  
2 copies of information on manuals, price lists on electronic media  
1 copy of Vendor maintenance manuals (engine, etc.)
7. 2 copies
8. 2 copies
9. 2 copies
10. 2 copies
11. 2 copies
12. 2 copies
13. 2 copies
14. 2 copies
15. 2 copies
16. 2 copies - Proposal only
17. Proposal only
18. 2 copies
19. Not Used For Bus Procurement
20. 2 copies
21. 2 copies

**A3.01.01.01 Information on Proposer:**

1. Fill out and submit Form E2A, Proposer Information Statement.
2. Fill out and submit Form E2B, Proposer Financial Information.
3. The Proposer may request a meeting with a King County Senior Financial Analyst before submittal of the Proposal in order to present all of the financial information required in Form E2B to the County.  
  
The Proposer shall specify in the Proposal which method is being used to present the financial information.
4. Fill out and submit Form E2C, Changes to Proposer Financial Information.
5. Proof that the Proposer is registered with the Washington State Department of Revenue. See Attachment 28.
6. Proof that the Proposer is registered with the Washington State Department of Licensing. See Attachment 30.

**A3.01.01.02 Certificates and Forms:**

The following certificates and forms, copies of which are included in this RFP in Part E, signed by authorized representatives of the Proposer:

1. Buy America
2. Cargo Preference
3. Bus Testing
4. Pre-Award and Post-Delivery Audit
5. Lobbying
6. ADA
7. Debarment
8. Disadvantaged Business Regulations

**A3.01.01.03 Proposal:**

The Proposer must supply:

1. Fully completed Bus Data Sheets for each different bus model proposed, a blank copy of which is included in this RFP as Form EA3.01.
2. The following, if the proposed bus has been involved in a structurally-related fleet defect (failures requiring replacement, repairs, retrofitting or design revision on ten percent (10%) or more of any bus order) at any transit property in the United States or Canada in the last five (5) years: a description of the failure; the results of a detailed investigation of the failure; a detailed structural analysis; and repair or re-design information, including any necessary finite element analysis of the complete structure to eliminate any effect on any part of the structure. All failures involving basic body structure, axles, and suspension are considered structurally related failures for the purposes of this paragraph.

Any investigations of failures and any structural analysis must be completed by a reputable, independent transit industry consultant whose credentials are acceptable to the County. The analysis shall not be limited to the finite element modeling but shall be confirmed by actual track testing with suitable time concentration to prove the capability of the modified structure to perform for the design life of the bus without further failure. Any engineering reports submitted to the County shall be detailed and must include proof of accuracy of loads and other operating conditions.

3. Certification by the Proposer that the proposed vehicle meets all of the requirements in Section C2.13. The certification must state the dates of compliance testing. The County will consider these requirements satisfied if the Proposer certifies the dates of the original compliance testing for the vehicle and certifies that all components that have been modified or added since that date have been tested and found to comply with those requirements.
4. All information, charts, diagrams and performance statistics required in Attachment 1 to this RFP.
5. Answers to all questions in Attachment 2 to this RFP.

6. Current, complete parts, maintenance (including all separate Vendor maintenance manuals) and operator's manuals, and the current price list for all parts listed in the parts manual; the County requests one to three preceding price lists if available. If the maintenance manuals do not include detailed maintenance information on all electronic components, explain why it is not available. Manuals and price lists may be supplemented with descriptions or examples of changes that the Proposer commits to provide in manuals and lists for the County on this Contract.

Current and planned capability to provide maintenance/parts manuals and price lists (and revisions) using any electronic means. Proposers shall include information about electronic documentation interchange (EDI) capability and/or any other electronic on-line exchange.

7. Actual samples of service letters, catalog revisions and any revisions to technical or parts publications.
8. Identification of the mean repair times for all routine maintenance activities, including preventive maintenance (P.M.) inspections, brake relining, small component replacement, and all other frequently required maintenance tasks.

Attachment 31 to this RFP shows the P.M. schedules used by the County for the size and type of vehicle being procured. The Proposer shall review these schedules and make a list of items that can be deleted from, and that must be added to, the County schedules.

9. A list of all similar buses delivered by the Proposer in the last five (5) years. Include the model number, quantity, and year of delivery, type of fuel and name and location of the receiving transit property.  
  
Late deliveries: For the last three (3) years, list all contracts where any buses were delivered late per the delivery schedule in effect when the contract was signed. List the number of buses and the days late as well as the reasons for late delivery.

10. A detailed description of the Proposer's field service and support network to be provided for this Contract. Include names, phone numbers, locations and size of territory.

The support described in Section B4.05.11 is a minimum; describe any additional service representative support that the Proposer commits to.

11. A description of the parts supply system for the bus, including locations of parts warehouses, percentage of parts routinely stocked in the U.S., and average time between receipt of parts order and shipment of order.

Describe your parts ordering procedure, including any "coach down" or emergency procedures. Are bar-coded parts available now? If not, when?

12. A description of the Proposer's warranty processing system including a sample claim form acceptable to the Proposer.

13. An organization chart of the Proposer's engineering department or subdivision that will support this Contract with names, function/specialties and registered engineer status. Describe briefly what types of work are contracted out.
14. A preliminary "Buy America" worksheet in the format shown in 57 FR 10835 (March 31, 1992). This information is required to satisfy the FTA's requirement for Pre-Award and Post-Delivery Audits of Rolling Stock Purchases, 49 CFR 663.  
  
A copy of the Proposer's self-certification that the bus being proposed meets the FMVSS.
15. A copy of the test report if the bus being proposed is identical or basically similar to a bus that has been tested in the FTA test program (ref: 49 CFR Part 665).  
  
A list of all buses manufactured by the Proposer that have been tested at Altoona or are presently undergoing testing.
16. Identify any terms and provisions in the Contract Documents to which the Proposer intends to take exception for purposes of negotiations under Section A5.01.  
  
This requirement is for the Proposal only. No exceptions may be taken when BAFOs are submitted.
17. A recent production bus for demonstration and inspection by the County in Seattle during the negotiation period for four (4) working days. This bus will be evaluated by the County and will not be placed in revenue service. This bus is preferably the size and type being procured. This demonstrator bus will be evaluated for maintenance accessibility, manufacturing and assembly quality control, driveability, wiring and any other relevant features that can be determined from a bus built for another transit property. Please provide a one-page handout with the bus describing the features on the demonstrator bus that are like those on the bus proposed to the County and those features that are different.  
  
Contact the Transit Fleet Group office at the address provided in Section A1.02.01 to make arrangements for the demonstrator bus.
18. For each brand of engine, hybrid drive or transmission being proposed, provide the following, in writing, from each engine, hybrid drive and transmission Vendor: confirmation that the warranty provisions in Section B4 will be honored and, if exceptions are to be taken, describe these exactly; information about technical services supplied by the Vendor over and above the requirements in this RFP, and a description of parts availability.
19. Not Used For Bus Procurement.
20. A written description, Contractor's or Vendor's literature, or other information necessary to describe each option in Section C9, if any.
21. A proposed bar chart schedule by week of significant events, beginning with Notice to Proceed and ending with delivery of the buses. The bar chart should be no larger than 11 inches X 17 inches.

### **A3.02 Initial Proposal Submittals**

#### **A3.02.01**

Submit the number of copies of each item in the proposal as requested in Section A3.01.01. Proposals may not be submitted by fax.

#### **A3.02.02 Price Proposals**

Sealed price proposals are to be submitted with the initial Proposal and with the BAFOs.

#### **A3.02.03 Multiple Proposals**

A Proposer may submit more than one proposal. Each proposal shall be submitted separately and be complete by itself in all respects. The County will evaluate each proposal without reference to other proposals submitted by the same Proposer. If more than one proposal falls within the competitive range, the County may negotiate with the Proposer regarding multiple proposals simultaneously.

### **A3.03 Late Proposals**

#### **A3.03.01 Late Proposals**

A proposal or BAFO is late if the County receives it after the deadline stated in this RFP or by addenda. The County will reject a late proposal without evaluation unless:

1. the Proposer notified the County prior to the deadline that the proposal would be late for a good reason which is beyond the Proposer's control or which the Proposer could not reasonably have anticipated soon enough to avoid delay; or
2. the proposal is the only one submitted.

A proposal shall be deemed received by the County when it has been physically received by the County's Transit Fleet Contract Management Group. Delays due to mail handling including, but not limited to, the County's internal mail handling will not excuse late submittal of a proposal postmarked later than three (3) business days prior to the date specified for receipt of proposals.

#### **A3.04 Proposal Supplements**

##### **A3.04.01 Proposal Supplements**

Each Proposer entitled to receive an addendum may supplement its proposal once in response to that addendum. Proposers also may supplement their proposals in response to a written request by the County for supplemental information. The County will consider no other proposal supplements unless the Proposer offering the supplement demonstrates by clear and convincing evidence that it is in the best interests of the County to allow the supplement.

Supplements must be submitted in writing in the same manner as proposals, except that the envelope containing a supplement must prominently bear the word "**SUPPLEMENT**" in addition to other markings required for proposals. Supplements received by the County after the date designated by the County for the close of negotiations will be treated in the same manner as late proposals.

#### **A3.05 Examination of RFP Documents**

##### **A3.05.01**

Each Proposer shall thoroughly examine and be familiar with all provisions and requirements of the RFP, including, but not limited to, the attachments, the legal and procedural documents, general conditions, special conditions, specifications, drawings and addenda, if any, and with the Federal, state or local regulations, laws, ordinances, resolutions, environmental documents and other material referenced in the RFP. Each Proposer shall also thoroughly investigate and become familiar with the conditions under which the vehicles will be operated, including, but not limited to, climate, terrain, grades, traffic congestion, legal speed limits (maximum and minimum), road configurations and anticipated loads. The submission of a proposal and BAFO shall constitute representation upon which the County may rely that the Proposer has thoroughly examined and is familiar with all requirements of the RFP as well as with such regulations, laws, ordinances, resolutions, environmental documents and local conditions that may effect or relate to performance of the Contract, and, if awarded the Contract, Proposer agrees to comply with same. The failure or neglect of a Proposer to receive, investigate, examine or evaluate any of these requirements or other factors shall in no way relieve the Proposer from any obligations with respect to their proposal and BAFO or to the Contract. No claim for additional compensation will be allowed which is based upon a lack of knowledge or misunderstanding of any provision in the RFP, Federal, state or local regulations, laws, ordinances, resolutions, environmental documents, local conditions or any other materials referenced in the RFP.

### **A3.06 Contract Requirements and Variations**

#### **A3.06.01**

As provided in Section A1.12.03, by submitting a proposal, the Proposer shall be deemed to have accepted without reservation or amendment all Contract requirements set forth or referenced in the RFP. In the event the proposal selected for award of Contract includes variations from requirements which are not material to the Contract as set forth or referenced in the RFP, the County may, if it desires to accept such variations, conduct discussions with the selected Proposer to make definite an understanding on final Contract terms and conditions. If the County does not accept a variation and the Proposer can demonstrate to the satisfaction of the County that the non-accepted variation is such a material factor that the Proposer's performance of the Contract would be significantly and adversely affected, the County will allow the Proposer to withdraw its proposal without forfeiture of the Proposer's Proposal Guaranty.

## SECTION A4 - EVALUATION OF PROPOSALS

### A4.01 Evaluation of Proposals

#### A4.01

The County will appoint an evaluation committee that will evaluate Proposals received as a result of this RFP. The committee will employ those evaluation criteria set forth in Section A4.02 of this RFP, or in addenda that may be issued.

### A4.02 Evaluation Criteria - Proposals

#### A4.02.01.01 Price (35)

The evaluation quantity of the different types of vehicles, plus all mandatory options.

#### A4.02.01.02 Responsibility (15)

This section evaluates:

- The Proposer's performance on similar contracts;
- The Proposer's demonstrated commitment and capability to satisfy warranty, repair and parts supply requirements on other contracts;
- The amount of effort required by other transit properties to secure satisfactory performance from the Proposer;
- The character, reputation and engineering capabilities of the Proposer; and
- The Proposer's economic standing in industry and the strength of its financial resources.

#### A4.02.01.03 Support and Documentation (10)

This section evaluates:

- The Proposer's parts supply, warranty and field service support as applied to this Contract;
- The timeliness and proposed costs of that support; and
- Completeness, clarity and format of maintenance, parts, and operating manuals, price lists and drawings.

#### A4.02.01.04 Vehicle Characteristics (30)

This section evaluates:

- The seating capacity and interior layout, accessibility for maintenance, operating characteristics, maintainability, exterior and interior noise levels, weight, and general conformance to the technical specifications;
- The general quality and finish characteristics of the proposed vehicle; and
- Power train and non-mandatory options.

#### A4.02.01.05 Hybrid Experience (10)

This section evaluates:

The Proposer's experience building hybrid buses.

The Proposer's experience working with hybrid propulsion suppliers.

#### A4.02.01.06 Points Awarded

The numbers in parentheses above represent the maximum points that a Proposal can receive in a particular criterion. Points will be assessed by individual evaluators; final group scores may be given by averaging scores.

#### A4.02.02 Evaluation Criteria

The County's evaluation committee may use more detailed unpublished sub-criteria as long as those sub-criteria generally correlate with the criteria stated in this RFP. The County may revise the evaluation criteria during the course of negotiations. Those revisions will be made by written addenda. All Proposers still under consideration will be allowed to supplement their Proposals in response to revisions in evaluation criteria.

**A4.02.03 Competitive Range**

The County's evaluation committee will evaluate and score all properly submitted Proposals from qualified and responsible Proposers. Responsible Proposers will have adequate financial resources, the ability to meet delivery requirements, have a satisfactory history of performance, an industry reputation of satisfactory business ethics and integrity, and be otherwise able to perform. Based upon that initial evaluation, the committee will establish a competitive range. A Proposal will be included within the competitive range if the evaluation committee determines the Proposal has a reasonable chance of being selected for award based on the factors set forth in this RFP and the comparative rankings of the Proposals. The County reserves the right to determine which Proposals are included in the competitive range after the initial evaluation is completed.

**A4.02.04**

After Proposals within the established competitive range are selected, the County will convene one or more negotiating meetings, as described in Section A5, with each selected Proposer to discuss its Proposal and to address any technical or other questions of the County. The Proposer will fully cooperate with the County to schedule meetings with knowledgeable employees, technicians, Vendors and consultants and to provide technical data, testing results, drawings and designs and price or cost backup information as the County may deem necessary to understand and evaluate the Proposal. All such efforts shall be at the Proposer's expense.

**A4.02.05**

The Contract will be awarded to a Proposer whose Proposal conforms to the RFP requirements; who is deemed responsible; who demonstrates that it possesses the management, financial, technical and facility capabilities necessary to meet the requirements of the RFP; and which is judged, by an overall assessment of the general considerations and specific factors identified above, to be most advantageous to the County. The County reserves the right to reject all Proposals at any point in the process.

## SECTION A5 - NEGOTIATIONS

### A5.01 Negotiations

#### A5.01.01

The evaluation committee or a designated member of the committee will negotiate separately with each Proposer whose Proposal is deemed to be within the competitive range. The extent of negotiations will vary with the nature and quality of the Proposals. Negotiations may include meetings or telephone conversations between individual Proposers and all or part of the County's evaluation committee, or written correspondence between the County and the Proposer. The written correspondence may be in the form of addenda issued by the County and responsive supplements submitted by the Proposers.

#### A5.01.02

During negotiations, the County may advise each Proposer of noted ambiguities, deficiencies, or technical questions in the Proposal which may be corrected or clarified. The County has no obligation to advise Proposers of technical deficiencies due to lack of diligence or competence.

#### A5.01.03

During negotiations the County may notify Proposers in writing of the negotiations closing date. If no other time is designated for close of negotiations, negotiations shall be deemed closed at the time by which BAFOs must be submitted to the County. The County will treat written revisions to Proposals received after close of negotiations in the same manner as late Proposals.

#### A5.01.04

Information received or reviewed during the negotiation process shall not be shared with other Proposers or made available as a public record to the extent protectable under Washington State or federal law. Changes or clarifications in the County's requirements resulting from discussions with Proposers shall be identified to all Proposers within the competitive range through the issuance of addenda.

## SECTION A6 - BEST AND FINAL OFFER

### A6.01 Best and Final Offer (BAFO)

#### A6.01.01

Each Proposer included within the competitive range at the close of negotiations will be allowed to submit a final Proposal denominated the 'Best and Final Offer' (BAFO). The BAFO shall consist of: 1) Final Proposal; 2) Price Proposal and Delivery; and 3) Proposal Guaranty.

BAFOs for this procurement will be received at the office given in Section A1.02 according to the schedule in Section A1.03.

The BAFO shall contain all information and documents necessary to state the Proposer's entire Proposal without reference to the original Proposal or to any supplements that may have been submitted during negotiations. The County will utilize the BAFO to determine which Proposal is, in the judgment of the County, the most advantageous to and in the best interests of the County.

BAFOs submitted to the County shall constitute an irrevocable offer to contract with the County under the terms of this RFP.

#### A6.01.02 Other Material Considered

The County shall have the right to consider all submissions from Proposers, including the Final Proposal and qualifications, information received from reference checks and other industry contacts, approval items required in the specifications and drawings, as a part of the Proposal. The specifications shall control if there is any conflict between them and the Final Proposal, or any brochures, manuals or other submissions by the Proposer; provided, however, that the County (in its sole option and discretion and only by written confirmation before the contract is executed) may require the Proposer to meet higher requirements, guarantees, warranties, and standards of quality or performance incorporated in the Proposer's Final Proposal (or any brochures, manuals or other submissions) if they differ from the specifications at the Final Price Proposal amount. The Proposer's Proposal or BAFO, as applicable and including all attachments shall become a part of any Contract awarded. However, if any terms of the Proposal or BAFO are in conflict with the provisions of this RFP, said RFP provisions shall take precedence.

#### A6.01.03 Contract Requirements and Variations

As provided in Section A1.12.03, by submitting a BAFO, the Proposer shall be deemed to have accepted without reservation or amendment all Contract requirements set forth or referenced in the RFP. In the event the BAFO selected for award of Contract includes variations from requirements which are not material to the Contract as set forth or referenced in the RFP, the County may, if it desires to accept such variations, conduct discussions with the selected Proposer to make definite an understanding on final Contract terms and conditions. If the County does not accept a variation and the Proposer can demonstrate to the satisfaction of the County that the non-accepted variation is such a material factor that the Proposer's performance of the Contract would be significantly and adversely affected, the County will allow the Proposer to withdraw its BAFO without forfeiture of the Proposer's Proposal Guaranty.

#### A6.01.04 Signatures on BAFO

The name, post office address and telephone number of the Proposer shall be included in its BAFO. If the BAFO is made by an individual, his/her signature must be shown; if made by firm or partnership or joint venture, the signature of at least one of the general partners or authorized joint venture partners must be shown; if made by a corporation, the BAFO shall show the name of the state under the laws of which the corporation is chartered and the title of the person who is duly authorized to sign on behalf of the corporation. If the BAFO is made by a corporation, a certified copy of the bylaws or resolution of the board of directors of the corporation shall be furnished, showing the authority of the officer signing the BAFO to execute contracts on behalf of the corporation. If the BAFO is made by a firm, partnership or joint venture, a certified copy of the resolution or agreement authorizing such representative to execute the BAFO and bind the firm, partnership or joint venture, shall be furnished.

#### A6.01.05 Alterations, Errors, or Mistakes

Proposers are warned against making erasures or alterations of any kind. Proposals that contain omissions, erasures or irregularities of any kind may, in the sole discretion of the County, be rejected. No oral or telephonic Proposals or modifications will be considered. No consideration will be given by the County to a claim of error in a BAFO unless such claim is made to the County in writing and under oath within 48 hours after the time and date the BAFO was submitted to the County. Each such claim shall include all supporting evidence.

### A6.02 Final Proposal

#### **A6.02.01**

The BAFO shall contain a Final Proposal consisting of the items in Section A3.01 without reference to the original Proposal or to any supplements that may have been submitted during negotiations. The County may include in its evaluation of the BAFO any information received during the evaluation of the original Proposal that is not superseded by information in the BAFO.

Each final Proposal shall be enclosed in sealed envelopes labeled as follows:

**'BEST AND FINAL OFFER FOR CONTRACT MB 06-2'.**

### **A6.03 Price Proposal and Delivery**

#### **A6.03.01 Forms and Price Proposal**

The BAFO shall include price proposals on the forms included in Part E of this RFP and entitled Price Proposal Parts, I, II, III, IV, and V.

Each Proposer shall enter on the Price Proposal Part II the Base Unit Price (including delivery) and the Total Base Quantity Contract Price, exclusive of any optional items.

#### **A6.03.02 Unit Price Contract**

The County intends to execute a unit price contract except for the additional items specifically noted on Part II of the Price Proposal. Price proposals shall include all items necessary for design, testing, manufacture and acceptance testing of the buses, for the preparation and delivery of operating manuals, maintenance manuals, illustrated parts books and other materials and information required in the specifications and for compliance with all other requirements in the Contract. Prices shall be quoted in United States dollars and shall include all customs charges, royalties, license fees, taxes and governmental charges as applicable, except as noted specifically below.

#### **A6.03.03 Option Prices**

The Proposer shall propose a price per bus or item for each mandatory option listed in Part III of the Price Proposal. The Proposer may also indicate that the item or feature is offered at no cost or as a cost reduction. The Proposer may, but is not required to, propose a price for non-mandatory options, if any, listed in Part IV of the Price Proposal. A Proposer electing to offer a price for non-mandatory options shall enter the price of each optional item or indicate any item offered at no cost or as a cost reduction, or not offered, by appropriate notations in the spaces on Part IV of the Price Proposal.

#### **A6.03.04 Washington State Sales Tax and Federal Excise Tax**

Except as otherwise provided herein, prices shall not include any allowance for Washington State retail sales or use tax (Chapters 82.08 and 82.12 Revised Code of Washington) or Federal excise tax. Payment of State sales and use tax shall be made pursuant to Section B7.11. Exemption from Federal excise tax shall be pursuant to Section B5.09. Any other taxes which the Proposer may be required to pay related to the Contract, including, but not limited to, retail sales/use taxes on equipment and supplies used or consumed within the State of Washington in performing work under the Contract, business and occupation taxes, income taxes, etc. shall be included in the Proposer's proposed prices. No adjustments will be made in the amount to be paid by the County under the Contract because of any misunderstanding or any lack of knowledge of the Proposer as to liability for, or the amount of, any taxes or assessments which the Proposer may be liable or responsible for by law or under the Contract.

#### **A6.03.05 Payment Terms**

Payment of the Base Unit Price shall be made in accordance with Section B7.02 herein.

#### **A6.03.06 Delivery Schedule**

Each Proposer shall include with the BAFO on the forms provided a proposed schedule for delivery of the buses as noted below. The schedule shall be the most cost effective for the Proposer so as to result in the lowest possible prices. The schedule shall be applicable to the quantity given under "PRICE" in the Price Schedule. The proposed delivery schedule must be supported with evidence that the buses can be built at the times stated given the Proposer's backlog of actual and potential orders.

The Proposer shall include the following information in the delivery schedule:

1. Proposed date of delivery of the prototype bus.
2. Proposed date of delivery of the first production bus in each delivery group.
3. Proposed date of delivery of the last bus in each delivery group.
4. An estimated maximum and minimum of buses to be delivered in each week.

#### **A6.03.07 Delivery Requirements**

##### **A6.03.07.01 Prototype Vehicle**

The County requires delivery of the prototype bus to support analysis of design details and manufacturing procedures prior to the start of actual production.

The Contractor will give the County 60 days notice before the start of manufacture of the prototype bus.

##### **A6.03.07.02 Production Vehicles**

The remainder of the buses shall be delivered in one continuous run or in scheduled groups.

For each delivery group, the Contractor will give the County 60 days notice before the start of manufacture of the group, and will provide a detailed delivery schedule for that group at that time.

The County prefers that each delivery group, including any quantity options, be built as one continuous production run.

The County desires that the first group of 20 buses be delivered by March 31, 2008.

Not more than ten (10) buses may be delivered in any week. The ten-bus rule is the maximum intake capability of the County, regardless of how many bus contracts are active at any given time. If the County is the delivery and service prep location for Sound Transit buses, the ten-bus rule still applies, and Contractors must adjust deliveries accordingly. The County will endeavor to keep the Contractor informed concerning any other contract that may result in bus deliveries in the same time period.

Buses delivered after the dates in the Contractor's delivery schedule will be subject to liquidated damages for late delivery as provided in Section B6.03.01. The County will inform the Contractor of expected deliveries from other contracts, if any.

##### **A6.03.08 Out-Year Requirements**

The following are bus requirements by year based on the County's current fleet plan. Buses would be ordered approximately 12 months before they are required. Buses can be hybrid, or standard, or a mix of both types.

2011 – 180 buses

2012 – 120 buses

2013 – 40 buses

If the 'Transit Now' ballot proposal passes in 2006, the following additional buses may be required:

2010 – 50 buses

2011 – 30 buses

If local highway construction mitigation funds are made available, the following additional buses may be required:

2009 – 75 buses

An option quantity of up to 200 buses, hybrid, or standard drive, or a combination of both types of buses may be added to the total above.

Several years' requirements for buses may be ordered at one time. Bus quantities above are approximate only and subject to change. At the discretion of the County (Section B3.06) a [prototype bus](#) may be required, for reasons including, but not limited to, when there is a gap of 12 or more months between deliveries of buses, or when significant component changes are made in the buses because of County Change Orders, bus builder changes, changes in federal regulations, or Vendor changes, [unless the County specifically releases the Contractor from this requirement](#). Changing from hybrid to standard drive, or vice versa, is a significant component change. [See Section B7.12 for price escalation](#).

#### **A6.04 Proposal Guaranty**

##### **A6.04.01 Proposal Guaranty**

The BAFO shall include a Proposal Guaranty for payment to the County in the sum stated on the form and in one of the following forms: (1) the Proposal Guaranty Bond form set forth in Form EA6.04 herein duly completed by a Surety authorized to carry on business in the State of Washington; (2) a certified or cashier's check drawn upon a banking institution with a branch office in the State of Washington; or (3) a letter of credit issued as an irrevocable documentary letter of credit drawn on or confirmed by a banking institution with a branch office in the State of Washington. The surety signing the Proposal Guaranty Bond shall be registered with the Washington State Insurance Commissioner, and the surety's name shall appear in the current Authorized Insurance Company List in the State of Washington published by the Office of the Insurance Commissioner. The certified or cashier's check shall be subject to the provisions set forth in this Section A6.04.01. The letter of credit shall include instructions and provisions consistent with the provisions set forth in this Section A6.04.01, and shall be subject to approval by the County in its sole discretion.

If the Proposer is awarded the Contract and within the time specified herein fails or neglects to fulfill all requirements that are conditions related to formation of the Contract including, but not limited to, executing and delivering to the County (i) the Agreement in the form set forth herein, (ii) satisfactory evidences of insurance, and (iii) the performance/payment security required herein, the amount of the Proposal Guaranty shall be forfeited to the County, as necessary to pay the County, both (i) the difference in price between the total amount of the Proposer's Proposal Price and the amount for which the County contracts with another Proposer to fulfill the Contract if the latter amount is in excess of the former and (ii) reimbursement of any other damages, costs, expenses or fees incurred by the County resulting from the Proposer's failure or neglect.

##### **A6.04.02 Interest Bearing Account**

If a certified or cashier's check is submitted under Subsection A6.04.01, the County shall deposit the check into an interest-bearing account in a bank in Seattle, Washington. All interest shall accrue to the benefit of the Proposer that submitted the check but shall remain in the account until the principal amount is returned to the Proposer, unless forfeited under Subsection A6.04.01. In the case of forfeiture, both the principal amount and the accrued interest shall be available to the County.

##### **A6.04.03 Return of Proposal Guaranties to Proposers**

After issuing a notice of award of contract, the County will return proposal guaranties to Proposers, except the County will continue to hold the proposal guaranties of the Proposer whose BAFO has been accepted and the next two BAFOs that received the highest scores under Section A6.06. Upon execution of the Contract by the County, all proposal guaranties will be returned.

Notwithstanding the process outlined above, all proposal guaranties will be returned within one hundred forty (140) days of the receipt of BAFOs, unless the BAFOs are extended by agreement of the Proposers.

#### **A6.05 BAFO Effectiveness Date**

##### **A6.05.01**

All BAFOs shall be effective for a period of one hundred twenty (120) Calendar Days from the date established for submittal of BAFOs. The County reserves the right to request extensions of such Proposals.

#### **A6.06 Evaluation Criteria - BAFOs**

##### **A6.06.01**

The County's evaluation committee will employ the criteria listed in Section A4.02 in evaluating BAFOs to select an apparent successful Proposer.

If the County determines through the BAFO evaluation process that the highest rated Proposer is not offering the lowest price, the County reserves the right, but is not obligated, to conduct an additional price/technical tradeoff analysis to determine whether the highest rated Proposer's technical superiority warrants the price premium associated with its offer and therefore the best value. The County may reopen negotiations with all Proposers within

the competitive range to the extent it deems necessary to address issues raised by this price/technical tradeoff analysis, or other information gathered during the negotiation process.

## **A6.07 Single BAFO**

### **A6.07.01**

In the event a single BAFO is received, the County will conduct a price or cost analysis of the BAFO, and the Proposer hereby agrees to such analysis and to fully cooperate with the County in providing requested information and access to the Proposer's records. The County will determine the scope of the price or cost analysis and inform the Proposer in writing. The County may submit the price or cost analysis to the Federal Transportation Administration (FTA). An award may be made to the Proposer if final Contract terms can be negotiated and are considered to be in the best interest of the County; or the County may reject such Proposal in its sole discretion.

## **A6.08 Cost/Price Analysis**

### **A6.08.01**

If, after reviewing the BAFOs, the County concludes that a cost and/or price analysis is necessary, the County will request cost and/or price data from all Proposers within the competitive range. Each Proposer must submit data specified by the County. Allowability of costs and the reasonableness of prices will be determined in accordance with applicable Federal Acquisition Regulations. The County may re-open negotiations with all Proposers within the competitive range to the extent necessary to address issues raised by cost and price analyses.

Upon completion of such negotiations, the County may allow such Proposers to submit a revised Price Proposal.

### **A6.08.02**

If it is necessary to conduct a cost and/or price analysis, the County will use King County employees or retain independent parties, in the sole discretion of the County, to conduct the cost/price analysis.

### **A6.08.03 Price Reduction for Defective Cost or Pricing Data**

If any price, including profit or fee, negotiated in connection with this Contract, was increased by any significant amount because:

1. The Contractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost and Pricing Data; or
2. The Contractor furnished cost or pricing data that were duplicative, as certified in its Certificate of Current Cost and Pricing Data; or
3. A Vendor or prospective Vendor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost and Pricing Data; or
4. Any of these parties furnished data of any description that were not accurate, then the price or cost shall be reduced accordingly and the Contract shall be modified to reflect this reduction.

If, after award, cost or pricing data are found to be inaccurate, incomplete, duplicative or non-current as of the date of the final agreement on price, the County is entitled to a price adjustment, including profit or fee, of any significant amount by which the price was increased because of the defective data.

The County shall allow an offset for any understated cost or pricing data submitted in support of price negotiations, up to the amount of its claim for overstated pricing data arising out of the initial pricing of the Contract. In addition to the price adjustment, the County is entitled to recover any overpayment plus interest on the overpayments.

The Certificate of Current Cost and Pricing Data at EA6.08.03 must be completed and submitted after award of the Contract per section B5.01.01.

## SECTION A7 CONTRACT AWARD

### A7.01 Acceptance of Options

#### A7.01.01

At the time of Contract award, except as noted below, the County will state which of the mandatory and non-mandatory options, if any, are accepted for the first group of buses. Acceptance of options will be at the sole discretion of the County. Subsequent orders of buses may include a different selection of mandatory and non-mandatory options, or none at all.

Options to order out year quantities of buses may be exercised at any time within the 60-month period beginning with the first award of this contract.

The County reserves the right to order hybrid drive or standard drive or a combination of both types of buses plus option items over the five-year period commencing with the date of contract award. The County will conduct a cost analysis and/or price analysis of any mandatory and/or non-mandatory options prior to exercising any options(s) under this contract. The County will conduct such analyses in accordance with Section A6.08 Cost/Price Analysis.

The Proposer hereby agrees to such analysis and to fully cooperate with the County in providing the requested information and access to the Proposer's records. The County will determine the scope of the cost or price analysis and inform the Proposer in writing.

The Certificate of Current Cost and Pricing Data at EA6.08.03 must be executed by the Proposer for each option or set of options exercised by the County in accordance with Section A6.08.03.

The price of any option or set of options shall be negotiated in accordance with the terms and conditions set forth in Section B7.03 Change Orders and Section B7.04 Change Order Procedures."

### A7.02 Award of Contract

#### A7.02.01

The County may select an apparent successful Proposer and conduct discussions to finalize terms and conditions. Such selection and discussions shall not constitute final acceptance of that Proposer's BAFO.

Within one hundred twenty (120) days after the deadline for submittal of BAFOs, the County will act either to award a Contract, reject all BAFOs or request an extension of one or more BAFOs. Final acceptance of a BAFO will be evidenced by a notice of award of Contract in writing delivered in person or by registered mail to the Proposer whose BAFO is accepted. No other act of the County shall constitute acceptance of a BAFO. Within ten (10) days after receipt of such notice, the Proposer whose BAFO has been accepted shall execute the agreement form set forth herein, furnish the guaranties as set forth in Section B5.02 herein, furnish evidences of insurance as set forth in Section B5.11 herein, and perform all other acts required by the Contract as conditions precedent to formation of the Contract with the County.

## SECTION B1 - DEFINITIONS AND ABBREVIATIONS

### B1.01 Definitions

#### **B1.01.01**

##### Acceptance, Accepted, Accepts

A bus shall be considered to be accepted when, after the successful completion of acceptance testing, the County provides the Contractor with a written Notice of Acceptance.

##### Approval, Approve, Approved

Any time these words are used it means that the County must approve, in writing, the specific part, design, process, etc. referred to. This includes those approvals routinely sought by the Contractor during the design or prototype review process. Reference Attachment 4 for a listing of those Contract sections requiring County approval.

##### Audible Discrete Frequency

An audible discrete frequency is determined to exist if the sound power level in any 1/3-octave band exceeds the average of the sound power levels of the two adjacent 1/3-octave bands by 4 decibels (dB) or more.

##### Best and Final Offer (BAFO)

The final Proposal submitted by a Proposer and including: (1) Final (technical) Proposal; (2) Final Price Proposal; and (3) Proposal Guaranty.

##### Calendar Day

Same as "day".

##### Capacity Load

An operating condition of the bus with 130 percent of a Seated Load, but not to exceed GAWRs.

##### Change Order (C.O.)

A written agreement entered into between the Contractor and the County to supplement, clarify or alter the plans, specifications or Contract or to otherwise provide for unforeseen or additional work, and other matters not contemplated by or completely provided for in the Specifications.

##### Component

A subsystem, constituent element or end item part of a bus.

##### Contract or Contract Documents

The written documents and specifications for this bus procurement Contract embodying the legally binding obligations between the County and the Contractor, including Sections A, B and C, addenda thereto (Part D), forms (Part E), Best and Final Offer, and the documents, information or materials required therein and Change Orders.

##### Contract Officer

The point of contact in the County for all communication from the Contractor. The Contract Officer will be designated at the time of Contract award.

##### Contractor

The individual, firm, company, joint venture, or corporation which is solely responsible for satisfying all of the requirements of the Contract Documents pursuant to an award of the Contract by the County.

##### **County**

King County, a home rule charter county of the State of Washington.

##### **Day**

A calendar day of 24 hours that may be any day of the week, including a business day, a Saturday, Sunday or holiday. Same as calendar day.

##### Decibel (dB)

A unit of measure of relative sound intensity. See 'sound pressure level' and 'noise level'.

##### Defect

Patent or latent malfunction or failure in material, workmanship, manufacture or design of a bus or of any component of a bus.

##### Delivery, Delivered

MB 06-2 C Attachment Section CONFORMED.DOC

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A bus shall be considered to be delivered when the County's representative at the Contractor's manufacturing site has provided the Contractor with a signed Notice of Approval for delivery, and the Contractor or its agent places the vehicle with the County at the County's designated delivery location for acceptance testing as evidenced by the signing of the common carrier's manifest by an authorized representative of the County.

Department of Transportation

King County Department of Transportation.

Director

Unless otherwise provided in the Contract Documents, the director shall be the Director of the King County Department of Transportation.

Design Objective

A requirement that the Contractor design for and include the specified feature into the buses to the best extent practicable. The Contractor shall submit information and documentation for the County's review and approval demonstrating that the feature is being supplied or that an adequate design effort was made to meet the requirements of the Contract Documents.

Design Operating Profile

This duty cycle consists of three (3) phases to be repeated in sequence: a central business district (CBD) phase of 2 miles with 7 stops per mile and a top speed of 20 mph, an arterial route phase of 2 miles with 2 stops per mile and a top speed of 40 mph, and a commuter phase of 4 miles with 1 stop and a maximum speed of 55 mph and a 5 minute idle phase.

Phase	Stops/Mile	Top Speed (mph)	Miles	Accel. Dist. (ft.)	Accel. Time (s)	Cruise Dist. (ft.)	Cruise Time (s)	Decel. Rate (fpsps)	Decel. Dist. (ft.)	Decel. Time (s)	Dwell Time (s)	Cycle Time (min-s)	Total Stops
CBD	7	20	2	155	10	540	18.5	6.78	60	4.5	7	9-20	14
Idle	-	-	-	-	-	-	-	-	-	-	-	5-0	-
Arterial	2	40	2	1035	29	1350	22.5	6.78	255	9	7	4-30	4
CBD	7	20	2	155	10	510	18.5	6.78	60	4.5	7	9-20	14
Arterial	2	40	2	1035	35	1350	22.5	6.78	255	9	7	4-30	4
CBD	7	20	2	155	10	510	18.5	6.78	60	4.5	7	9-20	14
Commuter	1 stop for phase	Max. or 55	4	5500	90	2 miles + 4580 ft.	188	6.78	480	12	20	5-10	1
Total			14									47-10	51
Average Speed - 17.8 mph													

The bus shall be loaded to SLW and shall average approximately 18 mph while operating on this duty cycle. Operation shall continue regardless of the ambient temperature or weather conditions. The passenger doors shall be opened and closed at each stop, and the bus shall be knelt at each stop during the CBD phase. The braking profile shall be:

16 percent of the stops at 3 ft/sec/sec  
50 percent of the stops at 6 ft/sec/sec  
26 percent of the stops at 9 ft/sec/sec  
8 percent of the stops at 12 ft/sec/sec

These percentages of stops shall be evenly distributed over the three phases of the duty cycle. For scheduling purposes, the average deceleration rate is assumed. This Design Operating Profile is not intended as a simulation of the Metro Transit route structure.

Desired

Preferred but not mandatory.

Directed

'Directed,' 'designated,' 'permitted,' 'required,' and 'accepted' and words of like import wherever and whatever manner used means as directed, designated, permitted, required, and accepted by the County unless otherwise specifically indicated or a contrary meaning is required by the context.

Down Time

The total time during which a bus is not in acceptable operating condition and is not available for revenue service as reasonably determined by the County.

Driver

The employee required to operate a bus in revenue service. Synonymous with 'operator'.

Execute the Contract

To do all things required in the Contract Documents for the formation of the Contract between a Contractor and the County.

FMVSS

Federal Motor Vehicle Safety Standard, a regulation by the U.S. Department of Transportation. There are several such standards, identified by number, e.g., FMVSS 108.

FR

The Federal Register.

FTA

Federal Transit Administration of the United States Department of Transportation (formerly the Urban Mass Transportation Administration).

File or Submit

Refers to the date of receipt by Department of Transportation.

Financial Interest

A direct and substantial economic interest.

**Fleet Number**

The number assigned to a bus by the County.

GAWR

Gross axle weight rating.

GVWR

Gross vehicle weight rating.

**General Manager**

Unless otherwise specified in the Contract, the General Manager of the Metro Transit Division, King County Department of Transportation.

**Herein**

'Herein,' 'hereinafter' and words of similar import shall refer to the Contract Documents.

Hotel Loads

Auxiliary loads on a bus such as heating and lights.

HV

High Voltage (>50V)

Inspector

Same as Revenue Fleet Inspector

**KCC**

King County Code

Low Floor Bus

A bus with a floor height above the ground of 14 to 16 inches at both doorways. No stairs are necessary to reach the aisle floor. The floor will be essentially level, but the rear of the bus will be at a higher level reached by not more than two (2) steps. No wheelchair lift is allowed; instead, a deployable ramp is provided at the front door.

Maintenance Personnel Skill Levels

APTA's Standard Bus Procurement Guidelines provide the following maintenance personnel skill levels. Approximate County equivalents are noted.

**5M:** Specialist Mechanic or Class A Mechanic Leader - Lead Mechanic at the County.

**4M:** Journeyman or Class A Mechanic – Mechanic at the County.

**3M:** Service Mechanic or Class B Servicer – No equivalent at the County.

**2M:** Mechanic Helper or Bus Servicer – Closest at the County is Equipment Service Worker.

**1M:** Cleaner, Fueler, Oiler, Hostler, or Shifter – Closest at the County is Utility Service Worker.

May

'May,' wherever and in whatever manner used is permissive.

Metro or Metro Transit

The Metro Transit Division of the King County Department of Transportation.

Month

Calendar month or the period between the same numbered days of consecutive months, e.g., four months after March 15 is July 15.

Noise Level (dBA)

The weighted sound pressure level in decibels measured using a Type A frequency weighting network as defined in ANSI Specification S1.4 or IEC Publication 179. Where the unit 'dBA' is used, it refers to such a measurement. See 'sound pressure level'.

OEM

Original equipment manufacturer.

Operator

Synonymous with 'driver'.

Percent Grade

Percent grade is defined as the vertical rise in feet per 100 feet of horizontal distance.

Person

Any individual, partnership, corporation, association, governmental subdivision or unit thereof, or public or private organization or entity of any character.

Preferred

Desirable, but not mandatory.

Procurement

Buying, purchasing, renting, leasing, or otherwise acquiring any equipment, material, supply, nonprofessional and professional services and capital construction projects.

Procurement Officer

Unless otherwise provided in the Contract, the Supervisor, Transit Fleet Contract Management Group of the Metro Transit Division, King County Department of Transportation.

Proposal

Offer or response to the RFP.

Proposer

The individual, firm, company, joint venture or corporation, acting directly or through an authorized representative, formally submitting a Proposal or Best and Final Offer, as applicable, hereunder.

Protest

Written complaint regarding intended contract award filed with the General Manager.

Protest Appeal

Written appeal filed with the Director regarding the General Manager's determination of a Protest.

Provide

To supply complete and installed without additional charge.

Purchaser

Synonymous with 'the County'.

RCW

Revised Code of Washington.

RFP

Request for Proposal.

Related Defect

Damage inflicted on any component as a direct result of a defect.

Revenue Fleet Inspector

The representative of the County, appointed by the Contract Officer, who is authorized to witness tests, review and approve inspections, approve vehicle acceptance documentation, etc., at the Contractor's plant and at County facilities.

### Safety

Ensuring, to the maximum extent possible, freedom from conditions that cause, or create a risk of, injury or death to persons or damage to or loss of equipment or property, including, but not limited to, compliance with all laws, regulations and codes related to public and employee health and safety.

### Seated Load, Seated Load Weight

An operating condition of a bus with every seat occupied, a driver aboard, all tanks filled and all equipment installed. Each person is assumed to weigh 150 pounds (68 kg) and each mobility aid device 600 pounds (45 kg.) when occupied.

### Service Life

#### FTA policy from Circular 9030.1C.

- a. Large, heavy-duty transit buses (approximately 35'- 40', and articulated buses):  
at least 12 years of service or an accumulation of at least 500,000 miles.
- b. Medium-size, heavy duty transit buses (approximately 30'):  
10 years or 350,000 miles
- c. Medium-size, medium-duty transit buses (approximately 30'):  
7 years or 200,000 miles
- d. Medium-size, light-duty transit buses (approximately 25-35'):  
5 years or 150,000 miles
- e. Other light-duty vehicles such as small buses and regular and specialized vans:  
4 years or 100,000 miles.

### Shall or Will

'Shall' or 'will' whenever used to stipulate anything means shall or will be done or performed by either the Contractor or the County. The act required is mandatory, not optional.

### Slope

Defined as 'n:n' where the first number equals the rise in inches from 90 degrees true horizontal and the second number equals the distance in inches.

### Singular

Singular words or abbreviations include the plural.

### Sound Pressure Level

Twenty (20) times the logarithm to the base ten (10) to the ratio of the root mean square sound pressure to the reference pressure, 0.00002 Newtons per square meter, expressed in decibels. See 'noise level'.

### Specifications

The requirements set forth in Section C of the Contract.

### Specified

'Specified,' 'described' or 'noted' wherever and in whatever manner used means as specified, described or noted in the Contract Documents.

### Standard Floor Bus

A bus with a floor height above the ground of 30 to 36 inches, an essentially level floor, and doorways with two (2) or three (3) steps. A wheelchair lift is necessary to board mobility aid devices and persons with disabilities.

### Subcontractor

An individual, firm, company, corporation, or other entity acting for or on behalf of the Contractor in performance of all or any part of the Contract.

### Submitted

'Submitted' wherever and in whatever manner used means submitted to the County.

### Sufficient

'Sufficient,' 'necessary,' or 'proper,' 'acceptable,' 'satisfactory,' 'desirable,' and words of like import wherever and in whatever manner used mean sufficient, necessary, properly, acceptable, satisfactory and desirable in relation to the Contract Documents as determined by the County.

### **Vendor**

Any sub-supplier to the Contractor.

**VIN**

Vehicle Identification Number, as assigned by the vehicle manufacturer in accordance with federal regulations.

**Wet Weight**

The weight of a complete bus with all equipment installed and all tanks filled but without passengers or driver.

Wheelchair

Includes common wheelchairs and mobility aids belonging to a class of three (3) or four (4) wheeled devices, usable indoors, designed for and used by persons with mobility impairments, which do not exceed 30 inches in width and 48 inches in length, measured 2 inches above the ground, and do not weight more than 600 pounds when occupied.

Work, the Work

Work, or 'the Work' means and includes anything and everything necessary or appropriate to be done for the setting out, execution, completion and fulfillment of the Contract.

Work Day or Working Day

A 24-hour period extending from midnight to midnight. This term shall apply to local time at the location of the party to be notified or to whom an item is delivered, and it shall exclude Saturdays, Sundays and holidays observed by the County.

**B1.02 Abbreviations**

**B1.02.01**

Whenever the following abbreviations are used, the intent and meaning shall be interpreted as follows. The list may not be exhaustive. The intent of the County has been to use abbreviations in a manner that is clear and in conformance with general engineering practice; however, all Persons are urged to request clarification from the County in any case where the meaning of an abbreviation is in doubt as no claims of misinterpretation of abbreviations used or referenced in the Contract will be entertained after the execution of the Contract.

<b>approx.</b>	Approximate	<b>kWh</b>	Kilowatt hour
<b>A</b>	Ampere	<b>l</b>	Liter
<b>ac</b>	Alternating current	<b>l/min</b>	Liters per minute
<b>C</b>	Degrees Celsius	<b>m</b>	Meter
<b>cfm</b>	Cubic feet per minute	<b>mA</b>	Milliampere
<b>cm</b>	Centimeter	<b>max.</b>	Maximum
<b>dB</b>	Decibel, 'A' scale	<b>mi.</b>	Mile
<b>dc</b>	Direct current	<b>min.</b>	Minimum
<b>F</b>	Degrees Fahrenheit	<b>mm</b>	Millimeter
<b>ft</b>	Foot	<b>mpg</b>	Miles per gallon
<b>g</b>	Gravity	<b>mph</b>	Miles per hour
<b>Hz</b>	Hertz	<b>no.</b>	Number
<b>in</b>	Inch	<b>psi</b>	Pounds per square inch
<b>kg</b>	Kilogram	<b>r.m.s.</b>	Root mean square
<b>km</b>	Kilometer	<b>rpm</b>	Revolutions per minute
<b>km/h</b>	Kilometers per hour	<b>s</b>	Second
<b>lb</b>	Pound	<b>V</b>	Volt
<b>x</b>	Multiplied by		

**B1.03 Footnotes**

**B1.03.01**

Footnotes are used for convenience in some places but such use is not exhaustive. Use of footnotes or footnoting some sections and failing to footnote others that may have application shall not be considered to emphasize some sections over others or to amend or modify the import or meaning of the Contract Documents in any way.

**B1.04 Dimensions**

**B1.04.01**

Where two dimensions are given, e.g. 10 in (254 mm), the first stated shall control in case of dispute.

## SECTION B2 - COUNTY/CONTRACTOR RELATIONS

### B2.01 Performance of the Work

#### B2.01.01

The performance of the Work shall be done in complete conformance with the Contract Documents, and consistent with the best standards within the industry for the manufacture of the transit buses referenced in section A1.01.

It is expressly stipulated, however, that these Specifications and other Contract Documents do not purport to control the means or methods of performing the Contractor's Work. The Contractor assumes the entire responsibility for planning, design and testing and for methods of manufacturing and assembling the buses.

The Work performed and the buses delivered to the County shall demonstrate the Contractor's consistent adherence to the best industry standards of design, manufacture and assembly.

The County supports the New Bus Manufacturing Inspection Guidelines published by the American Public Transportation Association (APTA) in August 1995.

### B2.02 County Representatives

#### B2.02.01

The Contract Officer is the County's designated representative for all contacts by the Contractor. The Contract Officer will be designated by the County at the time of award of this Contract and this person's name, address, phone number, fax number, and email address will be given to the Contractor.

The County's Contract Officer shall answer or give progress updates to all written communications from the Contractor within seven (7) working days from receipt.

#### B2.02.02

The Contract Officer will appoint a Revenue Fleet Inspector. It is the County's intention to have one or more representatives present at the site of the Contractor's worksites continuously during the manufacture or assembly of the buses. The Inspector will normally be available eight (8) hours per day, five (5) days per week at the Contractor's worksite. Overtime, holiday work, swing shift, graveyard shift or split shift work will be at the discretion of the County. The failure of the County to provide an on-site representative for other than day shift work will not be a reason or excuse for delay in the manufacture and delivery of the buses.

The County's Inspector shall answer or give progress updates to all written communications from the Contractor within seven (7) working days from receipt.

#### B2.02.03

The function of the Inspector is to represent the County at the site of the Contractor as required to:

1. Perform technical liaison functions;
2. Assist in the interpretation of Contract Documents;
3. Inspect and approve the Work as it progresses for conformity to the Contract;
4. Witness performance and quality assurance tests; and
5. Conduct the pre-shipment inspection of production units.

#### B2.02.04

The County's Inspector shall have complete access to any and all design offices, testing facilities and workshops at all times when Work is being performed on this Contract, including subcontractor workshops where any major component, subassembly or assembly is being fabricated or assembled. The Contractor shall provide the Inspector with all information, equipment or facilities necessary to perform assigned tasks, including insuring conformity of the material or equipment to the specifications as required by the Inspector. The Inspector shall have authority to retain components for examination and testing and to document by photography or video or both all parts of the buses as well as any disputed process or technique used in the manufacture of the buses. The Contractor shall give a minimum of three (3) Work Days prior notice on any tests or inspections at which the presence of the Inspector is required by the Contract or requested by the Inspector.

#### B2.02.05

Whenever the Inspector(s) is (are) present at the Contractor's worksite, the Contractor shall make available a private and lockable office adjacent to the final inspection area with:

1. Lockable desk (one per inspector);
2. A minimum of one bookcase;
3. A minimum of one four-drawer file cabinet;
4. Telephone service providing all inside lines, one outside line; (Contractor pays telephone charges); and
5. Office supplies as needed.

**B2.02.06**

If English is not the prevalent language used at the worksite, an interpreter fluently proficient in the other language(s) used and in English shall be available to the Inspector during all working hours. All documentation shall be supplied in English including, but not limited to design drawings, inspection reports and any other Contract documentation.

**B2.02.07**

In the event the County's Inspector or a delegate is or becomes unacceptable to the Contractor, the Contractor will notify the County's Contract Officer. The County and the Contractor will promptly discuss the matter and attempt to arrive at a mutually satisfactory remedy or replacement.

**B2.03 Contractor's Appointed Representative(s)****B2.03.01**

At the time of execution of the Contract, the Contractor shall appoint a representative as a point of contact for The County. The Contractor shall immediately supply the name, address, phone number, fax number, and email address of this person to the County's Contract Officer. This representative shall be the contract liaison agent through whom the County will communicate with the Contractor. The Contractor shall respond to all written communications from the County's Contract Officer within seven (7) working days from receipt.

**B2.03.02**

The Contractor shall also appoint a representative who will be the contact point in the Contractor's plant for the County's Inspector. The Contractor's plant representative shall be the contract liaison agent through whom the County's Inspector will communicate with the Contractor. Correspondence from the Contractor's representative will be binding on the Contractor.

The Inspector and the Contractor will jointly establish in a timely manner the procedure to be followed relating to identification and control of letters of transmittal, telephone memoranda, reports and drawings, and the Contractor shall comply with such procedure. The Contractor shall answer or give progress updates to all written communications from the County's Inspector within seven (7) working days from issuance.

**B2.03.03**

In the event a Contractor's appointed plant representative is or becomes unacceptable to the County, the Contractor shall promptly discuss and consider the matter with the County and attempt to arrive at a mutually satisfactory solution. If no such solution is developed, the Contractor shall replace the plant representative with a person acceptable to the County.

**B2.04 Paragraph Headings****B2.04.01**

Headings to parts, sections, forms, articles and sub-articles are inserted for convenience of reference only and shall not affect the interpretation of these Contract Documents.

**B2.05 Successor's Obligation****B2.05.01**

All grants, covenants, provisos, and claims, rights, powers, privileges and liabilities contained in the Contract Documents shall be read and held as made by and with and granted to and imposed upon the Contractor and the County and their respective heirs, executors, administrators, successors and assigns.

**B2.06 Contractor's Plant, Equipment and Employees****B2.06.01**

The Contractor alone shall at all times be responsible for the availability, adequacy, efficiency and sufficiency of its and its subcontractor's plant, equipment and employees.

**B2.07 Assignment of Contract****B2.07.01**

Neither party will assign or subcontract its rights or obligations under the Contract without the prior written permission of the other party, and no such assignment or subcontract will be effective until approved in writing by the other party. Involuntary assignment of the Contract caused by the Contractor being adjudged bankrupt, assignment of the Contract for the benefit of Contractor's creditors or appointment of a receiver on account of Contractor's insolvency shall all be considered as a failure to comply with the provisions of the Contract and subject to the termination for default provisions contained herein.

**B2.08 Subcontracts****B2.08.01**

The Contractor shall perform, with its own organization, not less than one third of the Work and shall not sublet to one subcontractor or supplier more than one half of the Work without the previous written consent of the County. No subcontractor or supplier will be recognized as having a contract with the County and all persons engaged in the Work will be considered employees of the Contractor or subcontractor. All subcontractor and supplier Work shall be subject to the provisions of the Contract through the terms and provisions of their subcontract that shall comply, in all pertinent respects, with the Contract Documents. No provision herein is intended to allocate or determine liability or responsibility between the Contractor and its subcontractors and suppliers. The provisions herein allocate or determine liability and responsibility only between the Contractor and the County.

The Contractor will provide to auditors representing or designated by the County, the name, address, phone number, fax number, and email address of any subcontractor or supplier who is engaged in the Work or supplying parts for the Contractor as it relates to this Contract. If such Work or parts information is needed for the specific purpose of certifying the Buy America requirements of 49 CFR Part 661 and 663 or any other requirements of this Contract, or if otherwise reasonably required, the County reserves the right to audit or otherwise inspect the subcontractor's facilities, equipment and records.

## **B2.09 Service of Notices**

### **B2.09.01**

Any notice, order, direction, request or other written communication given by the County to the Contractor under the Contract shall be deemed to be well and sufficiently given the Contractor if delivered to the Contractor's appointed representative, or if hand carried, sent by mail, or sent by telegraph or by fax to the Contractor at the address or fax number designated as that of the Contractor's appointed representative with receipt thereof acknowledged. Notice shall also be deemed to be well and sufficiently given three (3) days after mailing said notice by registered mail to the Contractor's last known place of business.

## **B2.10 Deviation from Contract**

### **B2.10.01**

The Contractor shall not make any alterations or variation in or addition to or deviation or omission from the terms of this Contract without the prior written consent of the County.

## **B2.11 Suggestions to Contractor**

### **B2.11.01**

Any plan or method of work suggested by the County to the Contractor, but not specified or required in writing under the Contract, if adopted or followed by the Contractor in whole or part shall be used at the risk and responsibility of the Contractor, and the County shall assume no responsibility therefore.

## **B2.12 Wages and Benefits of Employees**

### **B2.12.01**

Pursuant to the requirements of the Revised Code of Washington, Chapter 39.12, (as amended or supplemented), the Contractor and each subcontractor or other Person doing the whole or any part of the Work to be performed under the Contract in the State of Washington shall pay if required by said statutes each employee working in the State of Washington an amount not less than the general prevailing rate of wage as specified by the Industrial Statistician of the Department of Labor and Industries of Washington State, paid in the vicinity of the Work to be performed under the Contract for the particular trade or occupation of each employee.

Any employee whose type of work is not covered by any of the classified wage rates specified by the Industrial Statistician of the Department of Labor and Industries of the State of Washington shall be paid not less than the rate of wage listed for the classification that most nearly corresponds to the type of work to be performed. In case any dispute arises as to who is to be paid and what are the prevailing rates of wages for work of a similar nature which cannot be adjusted by the parties in interest, including labor and management representatives, the matter shall be referred for arbitration to the Director of the Department of Labor and Industries of the State of Washington, whose decision therein shall be final and conclusive and binding on all parties involved in the dispute.

The Contractor will be held responsible for paying the prevailing wages and for taking any other actions required to comply with Chapter 39.12 RCW.

As may be required by law, the Contractor on or before the date of commencement of the Work shall file a statement under oath with the County and with the Director of Labor and Industries certifying the rate of hourly wage paid and to be paid each classification of laborers, workmen or mechanics employed upon the Work in the State of Washington by the Contractor or subcontractor which shall be not less than the prevailing rate of wage. Such statement and any supplemental statements that may be necessary shall be filed in accordance with the practices and procedures required by the Department of Labor and Industries.

### **B2.12.02 Worker's Benefits**

The Contractor shall make all payments required for unemployment compensation under the Revised Code of Washington Title 50 and for industrial insurance and medical aid required under RCW Title 51. The Contractor shall also obey all federal, state and local laws, ordinances, and regulations establishing safety standards for the protection of employees. If any payment required by RCW Title 50 or Title 51 is not made when due, the County may retain such payments from any money due the Contractor and pay the same into the appropriate fund. The Public Works Contract Division of the Department of Labor and Industries will provide the Contractor with applicable industrial insurance and medical aid classification and premium rates. Before release of any funds retained according to Section B7.09, the Contractor shall complete a "Request for Release" form and submit such form to the Department of Labor and Industries for approval for the purpose of obtaining a release with respect to the payments of industrial insurance and medical aid premiums. Such approved form shall be submitted to the County.

Under certain circumstances a Contractor whose entire operations are outside the State of Washington may not be required to make workers' benefits payments under the Revised Code of Washington. If the Contractor has determined this to be the case, the Contractor will provide the County with a signed statement to this effect no later than 30 days after Notice to Proceed.

#### **B2.12.03 Compliance with All Laws**

The Contractor shall give the notices, file information and pay taxes, deductions and premiums as may be required by law and shall at all times comply with all applicable federal, state, and local laws, ordinances, permit requirements, rules and regulations pertaining to the conduct of the Work, including but not limited to the contractual provisions required by the Federal Transit Administration and set forth in Section A2. The Contractor shall be liable for violations of same in connection with Work provided by the Contractor, and the Contractor shall cooperate with all governmental entities regarding inspection of the Work and compliance with such requirements.

#### **B2.12.04 Audits**

The County may inspect or audit the Contractor's wage and payroll records. The Contractor agrees to maintain all books, records, accounts and reports required under this Contract for a period of not less than three (3) years after the date of termination or expiration of this Contract, except in the event of litigation or settlement of claims arising from the performance of this Contract, in which case the Contractor agrees to maintain same until the County, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of such litigation, appeals, claims or exceptions related thereto. The Contractor shall also guarantee that wage and payroll records of all its subcontractors and agents shall be open to similar inspection and auditing for the same period of time. The County will give the Contractor reasonable notice of the starting date if an audit will begin more than 60 days after the Contract acceptance date.

### **B2.13 Contractor Variations**

#### **B2.13.01**

In the event the Contractor is a joint venture of two or more contractors, all grants, covenants, provisos and claims, rights, powers, privileges, and liabilities of the Contract shall be construed and held to be several as well as joint. Any notice, order, direction, request or other communications required to be or that may be given by the County to the Contractor under this Contract shall be well and sufficiently given to the joint venture if given to the Contractor's liaison or other designated contact. Any notice, request or other communication to the County under this Contract shall be deemed to have been given to the County if signed by the Contractor's liaison or other designated contact.

#### **B2.13.02**

In the event that the Contractor is not the bus manufacturer, then the manufacturer of the proposed bus shall be a party to this Contract for the purpose of guaranteeing full and complete performance in the event of default by the Contractor and providing the County with information and documentation necessary to assure the Contractor's complete performance and preserve all of the County's rights under the Contract. The manufacturer shall be bound by all grants, covenants, provisos, and claims, rights, powers and liabilities of the Contract. In the event of default by the Contractor, the County shall have the absolute right to require the manufacturer to fully perform under the terms of the Contract. Such right shall be in addition and not in lieu of any rights under the performance bond.

### **B2.14 Waiver of Rights by The County**

#### **B2.14.01**

No action or want of action on the part of the County at any time to exercise any rights or remedies conferred upon it under this Contract shall be deemed to be a waiver on the part of the County of any of its rights or remedies. The County shall be deemed to have waived a right or remedy only if issued or confirmed in writing as a waiver by the County. No waiver of one right or remedy shall act as a waiver of any other right or remedy or as a subsequent waiver of the same right and remedy.

### **B2.15 Dispute Resolution**

#### **B2.15.01**

All claims, counterclaims, disputes or other matters, arising out of the performance of this Contract that cannot be resolved by the Contract Officer and the General Manager shall be referred to the Director or designee for final resolution. The Director or designee shall make a determination within 30 days of such referral, provided the Director is given all facts, data and contentions which relate to the referral, and all other information and material necessary for its resolution. Such referral and determination by the Director or designee shall be a condition precedent to the commencement of a civil action to adjudicate such dispute.

#### **B2.16 Units of Measure**

##### **B2.16.01**

The Contractor may use either standard units of measure as used in the United States or metric units of measure in the conduct of the Work. If metric units are used, the standard equivalent shall be shown immediately adjacent to it. The chosen units of measure shall be applied consistently in all drawings and documentation. The County must approve any exception.

#### **B2.17 Not Used**

#### **B2.18 Errors and Omissions**

##### **B2.18.01**

If the Contractor in the course of the Work becomes aware of any errors or omissions in the Contract Documents or in the data as given in the instructions or if it becomes aware of any discrepancies in the Contract Documents, the Contractor shall immediately inform the County. Any Work done after such discovery until the Contractor has delivered written notification thereof to the County and one Work Day has elapsed, will be done at the Contractor's risk and expense.

#### **B2.19 Assignment of Options**

##### **B2.19.01**

The County may assign part or all of any option quantity of buses to another transit property or governmental entity under inter-governmental contracting procedures. The assignment of the deliverable buses under the option shall be accomplished in accordance with the terms of this Contract. The assignment shall be in writing, signed between the County and the assignee, and approved by the Contractor. Any assignment must be entered into no later than six (6) months after delivery to the County of the last bus in the order.

## SECTION B3 - DRAWINGS AND DESIGN REVIEW

### B3.01 Engineering Drawings

#### B3.01.01 General

Buses shall be manufactured according to the requirements of the Contractor's engineering drawings which shall completely describe and define the buses, consistent with both the requirements and the intent of the Contract Documents and all applicable federal, state, and local laws, regulations, rules, executive orders and codes. The Contractor shall submit such additional or revised drawings, diagrams, calculations, test results and demonstrative evidence as the County deems necessary to confirm the completeness and accuracy of the Contractor's engineering drawings.

#### B3.01.02 Distribution

One (1) copy of all design drawings, engineering process sheets, and other bus manufacturing documentation, including latest revisions, shall be supplied to the Inspector as they are produced.

Copies of all design drawings and other bus manufacturing documentation, including latest revisions, shall be supplied to the Contract Officer as they are produced, if requested.

#### B3.01.03 Standards

The drawings shall reference various engineering standards or standard specifications, as appropriate, which shall control material quality, assembly techniques and fabrication of the buses and components on them. English language copies of these standards shall be available to the Inspector.

### B3.02 Control of Changes to Bus Design

#### B3.02.01

No change that would alter the approved bus design shall be incorporated into a bus without prior approval in writing by the County. The Contractor shall submit a request for change in writing which describes the change and the reasons for it and includes the fleet number and VIN of the bus on which the change is proposed to have first application and detailed drawings of the portions of the bus affected by the proposed change. The Contractor shall fully explain and justify any change proposed which will affect cost or delivery dates. The County retains full authority to decide whether such a change should be authorized. The County will respond within ten (10) days of receipt of a notice requesting a change by denying, approving or requesting additional information. Unless otherwise approved in writing, the Contractor shall assume the additional cost of the change including any other related revisions to the design or modifications to the buses. The acceptance of any such change by the County shall not relieve the Contractor from responsibility for the efficiency, quality and performance of the bus as required by the Contract Documents.

### B3.03 English Language

#### B3.03.01

All schedules, drawings, manufacturing documentation, manuals, parts lists and any other written material or other communication required in the performance of the Contract shall be prepared using the English language as used in the U.S. throughout, so that the documents will be readily understood when in use in the maintenance facilities and by the staff members of the County, in King County, Washington. Drawings and diagrams of electrical or electronic circuits shall use symbols and notation as used in the U.S. electronics industry. The English language as used in the U.S. shall be used for all oral, written or other communications.

### B3.04 Standards

#### B3.04.01

The latest edition in effect on the date of submittal of BAFOs shall be used whenever a standard specification, code or recommended practice is referred to and it shall be considered to be a part of the Contract Documents insofar as it applies.

Standards or other publications of the following agencies may be referred to herein:

**ANSI** American National Standards Institute - published by: American Standards Association, Inc. Headquarters  
1819 L Street, NW, Suite 600  
Washington, DC 20036  
Phone: +1 (202) 293-8020  
Fax: +1 (202) 298-9287  
Web: <http://www.ansi.org>

**ASTM** American Society for Testing and Materials

100 Barr Harbor Drive  
P.O. Box C700  
West Conshohocken, PA 19428-2959 USA  
Phone: (610) 832-9500  
Fax: (610) 832-9555  
Web: <http://www.astm.org>

- APTA** American Public Transportation Association  
1666 K Street NW, 11<sup>th</sup> Floor  
Washington, DC 20006  
Phone: (202) 496-4800  
Fax: (202) 496-4321  
Web: <http://www.apta.org>
- BCI** Battery Council International  
401 N. Michigan Ave. 24<sup>th</sup> Floor  
Chicago, IL 60611  
Phone: (312) 644-6610  
Fax: (312) 527-6640  
Web: <http://www.batterycouncil.org>
- IEC** International Electrotechnical Commission  
3, rue de Varembe  
P.O. Box 131  
CH-1211 Geneva  
Switzerland  
Phone: +41 22 919 02 11  
Fax: +41 22 919 03 00  
E-mail: IEC Central Office  
Web: <http://www.iec.ch>
- NFPA** National Fire Protection Association, Inc.  
One Batterymarch Park,  
Quincy, MA 02169-7471  
Phone: 1-800-344-3555  
Web: <http://www.nfpa.org>
- SAE** Society of Automotive Engineers  
400 Commonwealth Drive, Warrendale, PA 15096-0001 USA  
Phone: 1-724-776-4841  
Fax: 1-724-776-0790  
Web: <http://www.sae.org>

### **B3.05 Design Review**

#### **B3.05.01**

The Contractor shall schedule a design review to be held prior to the start of manufacture or assembly of the prototype bus. Such review shall be conducted after all necessary design work has been completed and all documentary information needed to demonstrate that the design is in conformance with the specifications has been submitted to the County. The design review shall be conducted at a location determined by the County.

#### **B3.05.02**

The purposes of the design review include, but are not limited to, the following: a detailed review of the Contractor's engineering drawings to verify conformance of the design with the Specifications; review of substitute or equal materials or equipment not dealt with prior to Contract award; review of manufacturing or assembly methods or components submitted during the proposal process; review of the Contractor's critical path schedule for the Work; and review and approval of the Contractor's quality assurance program.

The information shall be sufficiently complete to assure that the buses and their components meet the specified levels of function and performance. The Contractor and the chief subcontractors shall present this design material over a period of several days according to a schedule established by the Contractor. All analyses and requests for approvals shall be submitted prior to the design review.

The design as refined and confirmed by the review shall constitute the approved design for the bus. The construction of the prototype bus should follow the design review and resolution of items of non-conformance.

#### **B3.05.03**

Any failure by the County to detect any defects or omissions in any design, material, method or program shall in no way relieve the Contractor from fully complying with the requirements and intent of the Contract Documents.

#### **B3.05.04**

The County participation in design or engineering drawing reviews or acceptance of any schedule, change proposal or drawing or any information shall not relieve the Contractor of its commitment and responsibility for compliance with the Specifications. The Contractor shall at its own expense remedy any deficiencies and defects that may develop even though prior tests have seemingly indicated compliance with the Specifications.

### **B3.06 Prototype Bus Review**

#### **B3.06.01**

A prototype bus shall be made available for inspection and testing at the County's facilities. The prototype review shall be scheduled by the Contractor when a vehicle has been completed with all equipment and furnishings installed, but early enough so minor design changes resulting from the review will not delay production or cause scrapping of production material. The prototype must be available for inspection and approval under the Contract Documents not less than sixty (60) days prior to start of production of any buses of its type. The Contractor shall bear the delay, expense and inefficiency resulting from failure to schedule and complete the prototype review sufficiently in advance of production.

The Contractor may wish to build an additional prototype, which will remain at the Contractor's plant during prototype review and testing by the County.

#### **B3.06.02**

Any failure by the County to detect any defects or omissions in this review shall in no way relieve the Contractor from fully complying with the Contract Documents. All prototype buses shall be brought up to the final production bus configuration in all respects at no additional cost to the County, except as may be agreed by Change Order(s).

### **B3.07 Compliance Testing**

#### **B3.07.01**

If the County wishes the Contractor to demonstrate that the bus complies with any requirement in the Specification, the Contractor shall submit a test plan for approval by the County not less than fourteen (14) days before the demonstration is scheduled to begin. The demonstration shall be conducted at a site proposed by the Contractor and approved by the County. If the demonstration requires specific test equipment, or requires the bus to be loaded with weight, or put in a cold room, the Contractor will supply all necessary items. Any defects found shall be corrected, and all necessary changes shall be incorporated in all production buses at no additional cost to the County. The Contractor will supply a written test report to the County within thirty (30) days of the completion of the test.

#### **B3.07.02**

The County shall be informed at least fourteen (14) days prior to any test or analysis used for verification of Contract compliance and may witness each such test or analysis. Certified results of tests not conducted strictly for this Contract may be submitted in lieu of conducting additional tests, if the Contractor can demonstrate to the County that the proposed test results are relevant and applicable.

## SECTION B4 - MATERIAL, EQUIPMENT, WORKMANSHIP AND WARRANTY

### B4.01 General Quality

#### B4.01.01

Material and equipment shall be new and of a quality equal to that specified or accepted as the best industry practice. Mechanical, electrical and electronic equipment and components shall be the products of manufacturers of established good reputations regularly engaged in the fabrication of such equipment and components.

The Work shall be executed in conformity with the best accepted standard practice of the trade so as to contribute to maximum efficiency of operation, accessibility, pleasing appearance and minimum cost of maintenance.

The fit and finish of exterior and interior components shall be to the best industry standards of the automotive trade.

#### B4.01.02

Whenever under the Contract Documents it is provided that the Contractor shall furnish materials or manufactured components or shall do Work for which no detailed specifications are set forth, the Work performed shall be in full conformity and harmony with the intent to secure the best standards of manufacture in the Work as a whole or in part. No advantage shall be taken by the Contractor in the omission of any part or detail which goes to make the bus complete and ready for service, even though such part or detail is not mentioned in the Specifications or in the Contractor's approved design.

#### B4.01.03

Components shall be current manufactured items that have been in successful transit revenue operation under comparable conditions for a period of at least two (2) years. This time requirement may not apply to minor details or to thoroughly demonstrated improvements in design or in materials of construction. Components not conforming to the time requirement may be used as proposed by the Contractor and approved by the County. The use of such components may require, at the option of the County, an extended warranty on the component or subsystem.

The two (2) year time requirement will not apply to changes to components made by the Contractor in response to changes in government regulatory requirements.

### B4.02 Material and Equipment Specified by Name

#### B4.02.01

Whenever any material or equipment is specified by patent, proprietary name or by the name of the manufacturer, such specification shall be considered as used for the purpose of describing the level of quality of the material or equipment desired and shall be considered as if followed by the words 'or approved equal', whether or not such words appear.

Attachment 5 lists manufacturers whose products, equipment, or components have been specified by brand name.

### B4.03 Proof of Compliance with Contract

#### B4.03.01

In order that the County may attempt to determine whether the Contractor has complied with the requirements of the Contract Documents not readily determinable through inspection and test of equipment, components or materials utilized in the Work, the Contractor shall, at any time when requested, submit to the County properly authenticated test results, design documents or other satisfactory proof as to its compliance with such requirements.

## B4.04 Defective Workmanship and Materials

### B4.04.01

When and as often as the County determines that the Work done or being done under the Contract, or the kind or quality of components, equipment or materials supplied in connection therewith, is not fully and completely in accordance with any requirement of the Contract Documents, it may give notice of such noncompliance to the Contractor in writing, and the Contractor shall immediately upon receipt of such notice do all things required to remedy such noncompliance at no additional cost to the County.

## B4.05 Warranty

### B4.05.01

The Contractor warrants and guarantees to the County each complete bus and specific components as follows:

1. **COMPLETE BUS:** The complete bus, as supplied by the Contractor, is warranted and guaranteed by the Contractor to be free from defects due to design or workmanship for one year or 50,000 miles, whichever comes first, beginning on the in-service date or date of acceptance, whichever comes first, for each bus. During this warranty period the bus shall maintain its structural integrity. The warranty is based on normal operation of the bus under the operating conditions prevailing in the service area of the County.
2. **COMPONENTS:** Specific components are warranted and guaranteed by the Contractor to be free from defects and related defects for the following times (beginning on the same date of the Complete Bus Warranty) or mileages:

<u>ITEM</u>	<u>(WHICHEVER OCCURS FIRST)</u>	
	<u>YEARS</u>	<u>MILEAGE</u>
<b>Engine</b> (includes all items supplied by engine manufacturer)	2	200,000
<b>Hybrid Drive or Transmission</b>	2	100,000
<b>Drive Axle</b>	2	100,000
<b>Brake System</b> (excluding friction material)	1	50,000
<b>Air Conditioning System</b>	2	Unlimited
<b>Basic Body Structure</b>	3	150,000
<b>Structural integrity corrosion</b>	7	350,000

### B4.05.02

Warranties in this Contract are specifically agreed to and in addition to any remedies or warranties imposed on the Contractor by statute or otherwise by law.

The Contractor shall insure in its procurement arrangements that the warranty requirements of this Contract are enforceable through and against the Contractor's suppliers, Vendors, material men and subcontractors. Any inconsistency or difference between the warranties extended to the County by the Contractor and those extended to the Contractor by its suppliers, Vendors, material men and subcontractors, shall be at the risk and expense of the Contractor. Such inconsistency or difference will not excuse the Contractor's full compliance with its obligations under the Contract Documents.

Upon request of the County, the Contractor promptly shall provide to the County complete copies of all written warranties or guarantees and of documentation of any other arrangement relating to such warranties or guarantees extended by the Contractor's suppliers, sub suppliers, Vendors, material men and subcontractors covering parts, components, and systems utilized in the bus.

The Contractor shall ensure that such suppliers, sub suppliers, Vendors, material men and subcontractors satisfactorily perform warranty related work.

### B4.05.03

These warranty requirements do not apply to normal wear and tear. Parts such as bulbs, brake linings, filters, belts, and wiper blades are not warranted unless they fail due to defective manufacture, improper installation by the Contractor or defects in the design, manufacture or installation of the part or the system within which the part functions.

### B4.05.04

All repairs to the buses, including warrantable repairs, may be performed by the County and the County's costs therefore shall be reimbursed by the Contractor. Repairs by the County will be made by the method which, in the reasonable judgment of the County, is most practicable given the existing conditions unless the County and the

Contractor have agreed to a specific repair. Warranty labor rate charged to the Contractor will be the day shift hourly wage rate of a Mechanic, Step E, plus 62% fringes plus 125% overhead. The wage rate, and therefore the warranty labor rate, are subject to adjustment once each year. Through November 1, 2006, the warranty rate is \$80.77/hour, based on the Mechanic wage rate of \$28.14/hour. The County shall maintain records of warranty repairs and such records shall be available to the Contractor to verify warranty claims.

#### **B4.05.05**

The Contractor will reimburse the County for the cost of parts used in a warranty repair. The reimbursement shall be at the price indicated on the Contractor's master price list at the time of repair including taxes where applicable and shipping to the County. When the Contractor can prove that a replacement OEM part for a given failure was purchased from other than the Contractor, the County will submit the warranty claim to the Contractor for those repair parts reflecting the County's actual cost for the replacement parts. The Contractor shall pay the total cost to return defective components covered by warranty to the factory. The County will not consider a parts exchange program.

#### **B4.05.06**

The warranty will include the cost of towing the bus or a coach change if either is necessary because of a failure of a warranted part. The cost of a coach change will consist of the warranty labor rate in section B4.05.04 above for the actual number of mechanics sent (one or two), plus a charge for a tow truck, if used, of \$50/hr.

#### **B4.05.07**

At its sole discretion, the County may require the Contractor or its designated representative to perform warranty-covered repairs which cannot be easily accommodated in the County's facilities or which require the specialized skill of the Contractor or its subcontractors or suppliers. If the County requires the Contractor to perform warranty-covered repairs, the Contractor's representative must begin, within ten (10) Working Days after receiving notification of a defect from the County, any Work necessary to effect repairs in a proper and timely manner. Whenever the Contractor makes warranty repairs, it shall use new parts, subcomponents and subsystems unless the repair of original parts is authorized in writing by the County. The County shall make the bus available to complete repairs timely with the Contractor's repair schedule. The Contractor shall provide at its own expense all spare parts, labor, tools and space required to complete repairs. The Contractor shall reimburse the County for all expenses incurred hostling buses between the County's facilities and Contractor's work site or the facilities of its subcontractors or suppliers. At The County's option, the Contractor may be required to remove the bus from the County's property while repairs are being effected. If the bus is removed from the County's property, repair procedures must be diligently pursued by the Contractor's representative. The schedule and scope of the repairs shall be approved in advance by the County.

#### **B4.05.08 Complete or Partial Replacement**

In the event of any defect in design, material, or workmanship of a component or an assembly under warranty, the County shall consider (in consultation with the Contractor) whether the component or assembly is to be changed in its entirety or whether the component or assembly is to be repaired and the defective parts replaced. The County's decision as to which alternative will be used will be based upon minimizing down time; total repair costs of the vehicle; whether or not the failure of the component might be detrimental to the life of the assembly and public safety; and convenience considerations.

#### **B4.05.09 Fleet Defects**

In the event that, during the warranty period, specific repairs or modifications for any part and/or any component of that part, necessitated by defects in design, material or workmanship are required on a specified portion of each type of bus delivered under this Contract, that shall be considered a fleet defect. For deliveries of fifty (50) or more buses of one type, the proportion shall be twenty percent (20%). For deliveries of four (4) to forty-nine (49) buses of one type, the proportion shall be twenty-five percent (25%). The Contractor shall promptly pay for all necessary labor and material to effect those repairs or modifications to all buses, including buses for which the warranty had expired. Such repairs or modifications shall commence within sixty (60) days unless otherwise approved by the County. The warranty on parts or components used to remedy fleet defects shall begin again when the fleet defect is remedied and shall be extended for the time and/or miles of the original warranty. This extended warranty shall begin on the repair/replacement date for the corrected parts.

When the remedy for a fleet defect requires the Contractor to supply parts to the County, the parts shall be shipped to the County in individual kits, each kit consisting of all of the parts and only the parts necessary to complete the repair on one bus.

#### **B4.05.10 Warranty Extension**

In the event that, during the warranty period, repairs or modifications made necessary by defective design, material or workmanship are not completed due to lack of material or inability to provide the proper repair, the delay running beyond the end of the warranty period, such delay shall not be considered in computing the warranty period. The

same warranty will remain in effect as if the repair or modification was still within the warranty period, said warranty being extended day for day by the period of delay.

**B4.05.11 Service Personnel**

The Contractor shall provide qualified factory authorized service personnel at the facilities of the County from the time the first bus is delivered until sixty (60) days after the last bus is accepted. Maintenance or repair instructions or suggestions from these representatives affecting warranty shall be in writing. The Contractor shall authorize its service personnel to accept and approve warranty claims and make timely decisions to repair or cure defects.

**B4.05.12 Warranty Claims**

The County will endeavor to file a warranty claim within sixty (60) days after discovering a warrantable defect. Filing is understood to mean sending an e-mail or putting a letter into the U.S. Postal Service via regular first class mail. The County will add fifteen percent (15%) handling charge on the cost of parts to cover warranty processing costs.

The Contractor will resolve all claims for warranty made by the County within sixty (60) days from the latter of these two dates: (1) date of County invoice or (2) date parts are shipped from the County to the Contractor. Warranty claims unpaid after sixty (60) days of the invoice date will be charged and accrue interest at the rate of one percent (1%) per month until the claim is paid. Payment of warranty claims shall be by check only, not by credit memorandum. Warranty claims remaining unpaid more than ninety (90) days after the invoice date may be deducted from Contract amounts earned by the Contractor at the County's discretion, provided the County gives the Contractor ten (10) days advance notice of its intent to deduct. Denials of the claims must be written and must contain the reason(s) for denial. Denials may be subject to negotiation between the Contractor and the County.

**B4.05.13 Additional Warranties**

The Contractor shall provide the County with complete copies of all warranties and service agreements for components, assemblies and parts utilized in the buses delivered under this Contract. If any Vendor to the Contractor offers a warranty on a component that is longer or more comprehensive than the required warranties stated above, the Contractor shall inform the County of this additional warranty and pass it through to the County at no additional cost to the County.

**B4.06 Spare Parts**

**B4.06.01 General**

Parts shall be available both as separate components and built-up assemblies. Parts or rebuild kits shall be offered for all repairable or rebuildable components on the bus.

The County may relieve the Contractor of a portion of the responsibility for providing spare parts once the established warranty periods have ended. If the Contractor desires to reduce its responsibility for providing spare parts, it shall establish direct purchasing by the County from the Contractor's subcontractors and suppliers or from open market distributors. Such direct purchasing may take the form of agreements between the County and various spare parts suppliers facilitated by the Contractor.

When parts are shipped to the County, the Contractor will include priced packing slips with all shipments.

The County is interested in purchasing directly from subcontractors, suppliers and/or open market distributors spare parts included in the following bus systems:

- |                                |                           |
|--------------------------------|---------------------------|
| 1. Engine                      | 7. Air System             |
| 2. Hybrid Drive & Transmission | 8. Bearings               |
| 3. Brake System                | 9. Wheelchair Ramp Parts  |
| 4. Axles                       | 10. Flat Glass            |
| 5. Suspension (wear items)     | 11. Electrical Components |
| 6. Seating                     |                           |

After the execution of this Contract, a separate parts contract will be negotiated between the Contractor and the County.

After the warranty period, the County may use substitute parts. Where it is feasible to make a substitution, and the Contractor has prior knowledge or experience, the Contractor will share any knowledge and technical information on parts substitutions. The Contractor shall respond to the County in writing within ten (10) Working Days, and agrees, if requested by the County, to provide any information in the Contractor's possession regarding the potential parts substitution.

**B4.06.02 Initial Parts Order**

The Contractor shall make a good faith effort to send to the County an initial suggested stocking list for every major system and subsystem, to include engine, transmission, suspension, axles, brakes, electrical, and body parts, and their location in the parts catalog, at least 120 days, and in no event less than 90 days before the delivery of the first production bus. The suggested stocking list of parts shall contain all of the information on the parts that is required in Sections C8.01.03 and C8.01.04. The County will return completed orders within thirty (30) days of receiving the suggested list, price list and a draft parts catalog.

The Contractor will make a good faith effort to supply 100 percent (100%) of the County's initial order, taken from the Contractor's suggested parts stocking list, at least thirty (30) days prior to the delivery of the first production bus.

Failure by the Contractor to ship, or to make a documented good faith effort to ship, all or a significant part of the initial order of parts within thirty (30) days from receipt and acceptance of the initial purchase order at the Contractor's warehouse, shall entitle the County to collect liquidated damages of \$100.00 per day for each day of late delivery. The \$100.00 per day late delivery damages charge may be waived by agreement between the Contractor and the County in those cases where an alternative source is available and the Contractor purchases and arranges shipment on behalf of the County.

**B4.06.03 Parts Availability Guaranty** The Contractor hereby guarantees to provide, within reasonable periods of time, the spare parts, software and all equipment necessary to maintain and repair the buses supplied under this Contract for a period equal to the service life stated in section A1.01 after the date of acceptance of the last bus in the order, and preferably for two (2) additional years. Parts shall be interchangeable with the original equipment and be manufactured in accordance with the quality assurance provisions of this Contract. Prices shall not exceed the Contractor's then current published catalog prices.

Where the parts ordered by the County are not received within two (2) Working Days of the agreed upon time/date and a bus procured under this Contract is out-of-service due to the lack of said ordered parts, then the Contractor shall provide the County, within eight (8) hours of the County's verbal or written request, the original suppliers' and/or manufacturers' part numbers, company names, addresses, telephone and fax numbers and contact persons' names for all of the specific parts not received by the County.

Where the Contractor fails to honor this parts guaranty or parts ordered by the County are not received within thirty (30) days of the agreed upon delivery date, then the Contractor shall provide the County, within seven (7) days of the County's verbal or written request, the design and manufacturing documentation for those parts manufactured by the Contractor and the original suppliers' and/or manufacturers' part numbers, company names, addresses, telephone and fax numbers and contact persons' names for all of the specific parts not received by the County. Subject to Washington State public disclosure laws, Contractor's design and manufacturing documentation provided to the County shall be for its sole use in regard to the buses procured under this Contract and for no other purpose.

**B4.06.04 Returned Parts**

The County shall be able to return parts purchased from the Contractor according to the terms and conditions set forth in separate spare parts contract(s) the County may negotiate with the Contractor per Section B4.06.02.

**B4.06.05 Consumables**

The following list of consumable items shall be available in the U.S. from U.S. suppliers:

- Ventilating air filters
- Belts
- Lamps
- Fuses
- Brake lining material
- Hoses and lines - air, coolant and hydraulic
- Wire terminations and connectors
- Shock absorbers
- Air bags
- Brake drums
- Suspension bushings

**B4.06.06**

In the event the County incurs costs due to Contractor's failure to deliver parts and assesses damages as provided in B4.06.02, or becomes aware of payments under prices that were not fair or reasonable or were clearly in excess of

standard industry pricing for similar parts in accordance with B4.06.07, or the Contractor fails or refuses to provide cash or credit for returned parts as provided in Section B4.06.04, which results in damages to the County, then the County shall be entitled to deduct from the Contract the County's actual costs.

**B4.06.07 Pricing of Spare Parts**

**B4.06.07.01**

The Contractor pricing to the County shall reflect a most favored customer status during the contractually required spare parts stocking period, and similar requirements shall be placed in all supplier, subsupplier and Vendor agreements. The County will review the prices for spare parts submitted by the Contractor to determine if the pricing appears to be fair and reasonable. The County shall have the right to conduct a cost/price analysis on specific spare parts if pricing appears to be in excess of standard industry pricing for similar parts. Any differences shall be subject to negotiations to the satisfaction of the County.

**B4.06.07.02**

Competitive pricing is defined as the circumstances in which the County could obtain bids or proposals from alternative sources for the same parts. Proprietary parts and noncompetitive parts will be considered sole source parts requiring cost/price justification.

**B4.06.07.03**

The Contractor shall maintain records related to pricing of spare parts as required by Section B5.12. The County shall have access to such records for audit purposes as provided in Section B5.13.

## SECTION B5 - LEGAL RESPONSIBILITY, SAFETY AND INSURANCE

### B5.01 Execution of Contract Agreements

#### B5.01.01

The Contract Documents shall be executed in duplicate on the forms provided. The Proposer to whom the County awards the Contract shall return the signed forms together with the Performance or Payment Security, required County forms in section A2.36, and evidences of insurance, within ten (10) days after receiving written notice of the award of contract. After receipt of the executed Contract Documents from the successful Proposer, the Contract will be executed for the County by a duly authorized officer. The date of execution by the County shall be deemed to be the date of execution of the Contract. After execution by the County, one (1) fully executed copy will be returned to the Contractor.

The Contractor shall not begin work until after receipt of Notice to Proceed (NTP). NTP shall be issued by the County within ten (10) days of execution of the Contract by the County.

### B5.02 Performance and Payment Security

#### B5.02.01

Within ten (10) days after receipt of notice of award of contract provided by the County under Subsection A7.02.01, the Contractor shall furnish a performance and payment bond on the form provided herein as security for the faithful performance and completion of the Work, including the correction of defects, the payment of all persons furnishing materials and supplies and performing labor on the Work, and all payments of taxes, fees and assessments arising from the performance of the Work due the State of Washington pursuant to Washington State laws and regulations. The performance and payment bond shall be payable to King County. The bond amount is given on the form.

In a multi-year procurement, a separate performance and payment bond is required for each separate order of buses.

The performance and payment bond will be returned by the County to the Contractor in ordinary course of business upon the expiration of 45 days following the acceptance of the last bus delivered under this Contract or separate order of buses, whichever comes first, subject to the following conditions:

- (1) the Contractor has fulfilled all of its responsibilities on the separate order of buses; and
- (2) the Contract is closed out (after the final separate order of buses).

#### B5.02.02

The performance and payment bond shall be executed by a duly licensed surety(ies) registered with the Washington State Insurance Commissioner and listed in the current Circular 570 of the U.S. Treasury Department as being acceptable surety on federal bonds. The surety's(ies) name(s) shall appear in the current Authorized Insurance Company List in the state of Washington published by the Office of the Insurance Commissioner. No surety's(ies) liability on the bond shall exceed the underwriting limitations for the respective surety. The County may require the surety(ies) to appear and qualify themselves upon the bond. If at anytime the County determines, in its sole judgment, that the surety(ies) are insufficient, The County may require the Contractor to furnish additional surety in form and arrangement satisfactory to the County and in an amount not exceeding that originally required. Payments will not be made on the Contract until sufficient surety as required is furnished.

#### B5.02.03

In lieu of a performance and payment bond, the Contractor may provide a letter of credit as performance and payment security. Such letter of credit shall be in the amount set forth on the bond form and issued as an irrevocable documentary letter of credit issued by a banking institution licensed to conduct business in the State of Washington. The letter of credit shall reference this Contract and include instructions and provisions consistent in all material respects with those provisions set forth in the performance and payment bond herein. The provisions in the letter of credit shall be subject to approval by the County in its sole discretion. The letter of credit shall be payable to King County.

#### B5.02.04

The scope of the performance and payment bond or the form thereof, or the provisions in the letter of credit, as applicable, shall in no way affect or alter the liabilities of the Contractor to the County under this Contract.

### B5.03 Indemnification and Defense

#### B5.03.01

To the maximum extent permitted by law and except to the extent caused by the sole negligence of the County, the Contractor shall indemnify and hold harmless King County, its officers, officials, agents and employees, from and against any and all suits, claims, actions, losses, costs, penalties and damages of whatsoever kind or nature arising out of, in connection with, or incident to the goods and /or services provided by or on behalf of the Contractor. In addition, the Contractor shall assume the defense of King County and its officers and employees in all legal or claim proceedings arising out of, in connection with, or incident to such goods and/or services: shall pay all defense

expenses, including reasonable attorney's fees, expert fees and costs incurred by King County on account of such litigation or claims. This indemnification obligation shall include, but is not limited to, all claims against King County by an employee or former employee of the Contractor or its subcontractors, and the Contractor, by mutual negotiation, expressly waives all immunity and limitation on liability, as respects the County only, under any industrial insurance act, including Title 51 RCW, other worker's compensation act, disability benefit act, or other employee benefit act of any jurisdiction which would otherwise be applicable in the case of such claim. In the event of litigation between the parties to enforce the rights under this paragraph, reasonable attorney fees shall be allowed to the prevailing party.

#### **B5.04 Liability of Contractor**

##### **B5.04.01**

The mention of any specific duty or liability imposed upon the Contractor shall not be construed as a limitation or restriction of any general liability or duty imposed upon the Contractor by law or by the Contract, the reference to any specific duty or liability being made herein merely for the purpose of explanation. The Contractor shall be completely and solely responsible for the health and safety of its employees, subcontractors and suppliers engaged in the performance of the Work. The Contractor shall maintain all Work sites and perform all Work so as to comply with all applicable federal, state, and local laws, codes and safety regulations.

No provision herein is intended to allocate or determine liability between the Contractor and its subcontractors and suppliers. The provisions herein allocate or determine liability only between the Contractor and the County.

#### **B5.05 Damage to Work**

##### **B5.05.01**

The Contractor shall bear the risk of loss or damage to each bus until the bus has been Delivered to the County. If any loss or damage occurs to the bus for which the Contractor is responsible hereunder, the Contractor shall immediately repair or replace and make good any such loss or damage, and in the event of the Contractor refusing or neglecting to do so, the County may itself or by the employment of some other person repair or replace and make good any such loss or damage, and the cost and expense of so doing shall be charged to the Contractor. The Contractor shall reimburse the County such costs within thirty (30) days of written demand from the County. If the Contractor refuses or fails to pay these costs within thirty (30) days, the County may withhold said costs from any payments then due or to become due to the Contractor.

## **B5.06 Laws, Regulations and Permits**

### **B5.06.01**

The Contractor shall give all notices required by law and comply with all applicable federal, state, and local laws, ordinances, rules and regulations relating to the conduct of the Work. The Contractor shall be liable for all violations of the law in connection with Work furnished by the Contractor and its subcontractors, suppliers and Vendors.

### **B5.06.02**

Unless otherwise specified herein, permits and licenses which are necessary for and during the manufacture and Delivery and until acceptance of each bus pursuant to Section B6.08 shall be secured and paid for by the Contractor. Permits and licenses which are necessary after acceptance of each bus pursuant to Section B6.08 will be secured and paid for by the County. Prior to the Delivery of each bus, the Contractor shall provide a Manufacturer's Statement of Origin ("MSO") for the bus. The County will use the MSO and other documents to apply for legal title and registration of the bus and secure proper license plates from the Washington State Department of Licensing.

## **B5.07 Patent and Royalties**

### **B5.07.01**

The Contractor shall indemnify, defend and hold harmless the County and its elected officials, officers, agents and employees against liability, including costs, for infringement of any United States patent arising out of or in any way connected with the design, manufacture, Delivery or repair of buses under this Contract.

### **B5.07.02**

The County will inform the Contractor as soon as is practicable of any claim, suit or other action alleging infringement of patent rights and shall give the Contractor authority, assistance and information at the Contractor's expense for the defense or settlement of same.

### **B5.07.03**

Should the Contractor, or the County, or their elected officials, officers, agents or employees or any of them, be enjoined from furnishing or using any item supplied or required to be supplied under the Contract, the Contractor shall either:

1. Substitute as soon as is practicable other non-infringing items of equivalent type and quality satisfactory to the County; or
2. Pay such royalties and secure such licenses as may be requisite and necessary for the Contractor to furnish, and the County, its elected officials, officers, agents and employees to use, such items without being disturbed or in any way interfered with by any proceeding in law or equity on account thereof.

### **B5.07.04**

Should the Contractor neglect or refuse to make the substitution within a reasonable time or to pay such royalties or secure such licenses as may be necessary for the County to use or dispose of the item, then in that event, the County shall after thirty (30) days of giving written notice to the Contractor have the right to make such substitution or pay such royalties and secure such licenses and charge and recover the amount from the Contractor, even though final payment under the Contract may have been made. The Contractor shall reimburse the County such costs within thirty (30) days of written demand from the County. If the Contractor refuses or fails to pay these costs within thirty (30) days, the County may withhold said costs from any payments then due or to become due to the Contractor.

**B5.08 Worker's Compensation Insurance,  
Industrial Insurance and Medical Aid Premiums**

**B5.08.01**

As to any portion of the Work performed by the Contractor and its subcontractors in the State of Washington, the Contractor shall maintain worker's compensation insurance in the amount and type required by law for all employees employed under this Contract who may come within the protection of worker's compensation laws, and the Contractor shall make all payments arising from the performance of this Contract due the State of Washington pursuant to Titles 50 and 51 of the Revised Code of Washington.

**B5.09 Federal Excise Tax Exemption**

**B5.09.01**

Buses purchased by the County are not subject to Federal Excise Tax.

**B5.10 Applicable Law, Forum and Consent to Jurisdiction**

**B5.10.01**

Except as herein specifically provided, this Contract shall be governed by and construed according to the laws of the State of Washington.

**B5.10.02**

In the event that any litigation may be filed between the parties respecting any matter of fact or law relating to the Contract, the County and the Contractor agree that venue shall rest in King County Superior Court, in Seattle, Washington, and by entering into this Contract the Contractor has thereby consented to personal and subject matter jurisdiction by the King County Superior Court.

**B5.11 Insurance**

**B5.11.01**

Evidences and Cancellation of Insurance

Prior to execution of the Contract, the Contractor shall file with the County evidence of insurance and endorsements from the insurer(s) certifying to the coverage of all insurance required herein. All evidence of insurance shall be certified by a properly authorized officer, agent, general agent or qualified representative of the insurer(s) and shall certify the name of the insured, the type and amount of insurance, the location and operations to which the insurance applies, the expiration date, and that the County received notice at least 45 days prior to the effective date of any cancellation, lapse or material change in the policy.

The Contractor shall, upon demand of the County, deliver to the County all such policies of insurance, and all endorsements and riders, and the receipts for payment of premiums thereon.

Failure to provide such insurance in a timeframe acceptable to the County shall enable the County to suspend or terminate the Contractor's Work hereunder in accordance with Contract provisions regarding "Termination for Convenience/Default/Non-appropriation." Suspension or termination of this Contract shall not relieve the Contractor from its insurance obligations hereunder.

**B5.11.02 Insurance Requirements**

**B5.11.02.01**

The Contractor shall obtain and maintain the minimum insurance set forth below. By requiring such minimum insurance, the County shall not be deemed or construed to have assessed the risks that may be applicable to the Contractor under this Contract. The Contractor shall assess its own risks and, if it deems appropriate and/or prudent, maintain greater limits and/or broader coverage.

Nothing contained within these insurance requirements shall be deemed to limit the scope, application and/or limits of the coverage afforded, which coverage shall apply to each insured to the full extent provided by the terms and conditions of the policy(ies). Nothing contained with this provision shall affect and/or alter the application of any other provision contained with this Contract.

For all coverages:

Each insurance policy shall be written on an 'occurrence' form; excepting that insurance for professional liability, errors and omissions when required, may be acceptable on a 'claims made' form.

If coverage is approved and purchased on a 'claims made' basis, the Contractor warrants continuation of coverage, either through policy renewals or the purchase of an extended discovery period, if such extended coverage is available, for not less than three (3) years from the date of completion of the Work which is the subject of this Contract.

#### **B5.11.02.02 Minimum Scope of Insurance**

Coverage shall be at least as broad as:

1. General Liability

Insurance Services Office form number (CG 00 01 Ed. 11-88) covering COMMERCIAL GENERAL LIABILITY

2. Automobile Liability

Insurance Service form number (CA 00 01 Ed. 12-90) covering BUSINESS AUTO COVERAGE, symbol 1 'any auto'; or the combination of symbols 2, 8 and 9.

3. Professional Liability

Professional Liability, Errors and Omissions coverage

In the event that services pursuant to this Contract either directly or indirectly involve or require professional services, Professional Liability, Errors and Omissions coverage shall be provided.

4. Worker's Compensation

Worker's Compensation coverage, as required by the Industrial Insurance Act of the State of Washington, as well as any similar coverage required for this Work by applicable federal or 'Other States' state law.

5. Employers Liability or 'Stop Gap'

The protection provided by the Workers Compensation Policy Part 2 (Employers Liability) or, in states with monopolistic state funds, the protection provided by the 'Stop Gap' endorsement to the General Liability policy.

#### **B5.11.02.03 Minimum Limits of Insurance**

The Contractor shall maintain limits **no less than the following**, for:

1. General Liability: \$5,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage, and for those policies with aggregate limits, a \$5,000,000 aggregate limit.
2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
3. Professional Liability, Errors and Omission: \$1,000,000 per claim and in aggregate.
4. Worker's Compensation: Statutory requirements of the state of residency.
5. Employers Liability Stop Gap: \$1,000,000.

#### **B5.11.02.04 Deductibles and Self-insured Retentions**

Any deductibles or self-insured retentions shall be declared to, and approved by, the County. The deductible and/or self-insured retention of the policies shall not limit or apply to the Contractor's liability to the County and shall be the sole responsibility of the Contractor.

#### **B5.11.02.05 Other Insurance Provisions**

The insurance policies required in this Contract are to contain, or be endorsed to contain the following provisions:

1. Liability Policies:

- a. The County, its officers, officials, employees and agents are to be covered as additional insureds as respects liability arising out of activities performed by or on behalf of the Contractor in connection with this Contract. Use the above exact language on the Endorsement Form.
- b. To the extent of the Contractor's negligence, the Contractor's insurance coverage shall be primary insurance as respects the County, its officers, officials, employees and agents. Any insurance and/or self-insurance maintained by the County, its officers, officials, employees or agents shall not contribute with the insurance or benefit the Contractor in any way.
- c. The Contractor's insurance shall apply separately to each insured against whom a claim is made and/or lawsuit is brought, except with respect to the limits of the insurer's liability.

**B5.11.02.06 Acceptability of Insurers**

Unless otherwise approved by the County:

Insurance is to be placed with insurers with a Bests' rating of no less than A:VIII, or, if not rated with Bests', with minimum surpluses the equivalent of Bests' surplus size VIII.

If at any time one of the foregoing policies shall be or become unsatisfactory to the County, as to form or substance, or if a company issuing any such policy shall be or become unsatisfactory to the County, the Contractor shall, upon notice to that effect from the County, promptly obtain a new policy, and shall submit the same to the County, with the appropriate certificates and endorsements, for approval.

**B5.11.02.07 Subcontractors**

The Contractor shall include all subcontractors as insureds under its policies, or shall furnish separate certificates of insurance and policy endorsements for each subcontractor. Insurance coverages provided by subcontractors as evidence of compliance with the insurance requirements of this Contract shall be subject to all of the requirements stated herein.

**B5.11.02.08 Work Site Safety**

The Contractor shall have the 'right to control' and bear the sole responsibility for the job site conditions and job site safety. The Contractor shall comply with all applicable federal, state and local safety regulations governing the job site, employees and subcontractors. The Contractor shall be responsible for the subcontractor's compliance with these provisions.

**B5.11.02.09 Endorsements**

Endorsement must be included with insurance form, i.e. standard industry forms: CG 2010 11/85 or its equivalent. The County requires this endorsement to complete the Contract.

## **B5.12 Retention of Records**

### **B5.12.01**

The Contractor agrees to maintain all books, records, accounts and reports pertinent to this Contract for a period of not less than three (3) years after the date of termination or expiration of this Contract, except in the event of litigation or settlement of claims arising from the performance of this Contract, in which case the Contractor agrees to maintain same until the County, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of such litigation, appeals, claims or exceptions related thereto. The Contractor's and subcontractors' accounting systems shall conform to generally accepted accounting principles.

The Contractor shall maintain all financial information, data and records used to prepare and support the Contractor's Proposal and Best and Final Offer for this Contract and all records pertaining to the performance of the Work under this Contract, including portions of the Work performed under Change Orders and contracts and agreements with subcontractors for said period.

### **B5.12.02**

The Contractor shall ensure each of its subcontractors, suppliers and vendors maintains and retains for said period all records pertaining to the performance by the subcontractors of their portions of the Work under this Contract.

## **B5.13 Audit Access**

### **B5.13.01**

The County, the FTA, the Comptroller General of the United States, and their authorized representatives and designees shall have access to all records maintained and retained by the Contractor and its subcontractors pursuant to Section B5.12 of this Contract for the purposes of inspection, cost/price analysis, Buy America pre-award and post-delivery audits, audit or other reasonable purposes related to this Contract. The County, the FTA, the Comptroller General of the United States, and their authorized representatives and designees shall have access to all records and be able to copy such records during the Contractor's normal business hours. The Contractor shall provide proper facilities for such access, inspection and copying.

### **B5.13.02**

In addition to audits conducted after the date of initial acceptance of Contract Work, audits may be conducted before award of Contract, such as Buy America pre-award, cost/price per Sections A6.07 and A6.08, during or after the Contract period for purposes of evaluating a claim by or payments to the Contractor and for any other reason deemed appropriate and necessary by the County. Audits will be conducted by auditors selected and paid for by the County. Audits conducted under this Section B5.13 shall be in accordance with applicable standards such as Generally Accepted Auditing Standards (GAAS), the County and FTA guidelines. The Contractor shall fully cooperate with the County or its auditor(s) during audits and inspections, and provide all requested documentation.

### **B5.13.03**

If an audit is commenced more than sixty (60) days after the date of final acceptance of Contract Work, the County will give reasonable notice to the Contractor of the date on which the audit will begin.

## SECTION B6 - PROGRESS AND COMPLETION

### B6.01 Contract Time

#### B6.01.01

Time shall be strictly of the essence of the Contract. The Contractor shall promptly begin the Work under the Contract. All portions of the Contract shall be begun and prosecuted so that the buses shall be delivered and ready for full use as set forth in the Contractor's Proposal or Best and Final Offer (BAFO), as applicable.

### B6.02 Delivery Schedule

#### B6.02.01

The delivery schedule stated by the Contractor as part of its Proposal or BAFO, as applicable, shall remain in effect unless modified in writing by the Contractor and by the County. Beginning sixty (60) days after Notice to Proceed and every month thereafter until all buses are Delivered, the Contractor will send to the County a current production and delivery schedule showing buses at major milestones during production, and deliveries per week. The schedule shall include subcontractor and supplier activities, if necessary, and shall reflect a detailed breakdown of Work activities that represents the Contractor's plan for completing and delivering the buses within the required Contract time. The schedule shall show the interdependence of planned Work activities and shall provide a logical sequence of the Work to be accomplished.

Failure of the Contractor to update and submit the production and delivery schedule on a monthly basis as required shall entitle the County to withhold ten percent (10%) of all payments owed to the Contractor until an accurate and updated schedule is submitted to the County.

Duration shall be in days, and weekends and holidays over the duration of the Contract should be accounted for. The critical path shall be shown on the production and delivery schedule. Float time shall not be for the exclusive use or benefit of either the Contractor or The County.

Thirty (30) days shall be used for submittal review by the County unless otherwise specified.

#### B6.02.02 Changes in Delivery Schedule

If the Contractor foresees that delays will occur in delivering buses, it shall immediately notify the County of the delay in writing. The Contractor may, at that time or subsequently, submit a proposed, revised schedule of delivery for consideration by the County. If, in its sole judgment and discretion, the County determines a new schedule to be justified by delays which were beyond the reasonable control of the Contractor and could not have been anticipated or avoided by the Contractor's efforts or precautions, it will issue a Change Order accepting the new schedule as of the date of the Change Order or such other extended date as may be set forth in the Change Order. Changes to the delivery schedule as a result of certain delays beyond the control of the Contractor will be made pursuant to Section B6.13.

### B6.03 Damages for Delay

#### B6.03.01

Buses shall be Delivered according to the delivery schedule stated by the Contractor. The County and Contractor acknowledge that Contractor's failure to Deliver any bus within the time specified in the Contract Documents, unless a written extension of time has been granted by the County, will result in damage to the County.

Because of the difficulty in computing the actual material loss and disadvantage to the County caused by delay, it is determined in advance and agreed by the parties hereto that the Contractor will pay the County the amount of \$100 per day of delay per bus delayed, limited to a maximum of five percent (5%) of the value of the buses on order, as damages representing a reasonable forecast of the actual damages which the County will suffer by the failure of the Contractor to deliver buses within the stipulated time.

The County further reserves the right to claim such damages as they occur during the Contract as charges against the Contract. If the Contractor refuses or fails to pay the charges within thirty (30) days of receipt of a written demand from the County which sets forth the basis for charge, the County may deduct costs associated with damages from any payments then due, or to become due, to the Contractor.

Nothing in this section will affect the County's right to terminate the Contract if delivery cannot be remedied to the County's satisfaction.

#### B6.03.02

The Contractor agrees to pay the County \$100 per day for each day that the maintenance or parts or operating manuals are delivered late beyond the time periods set forth in Section C8.01 and C8.03.

### B6.04 Damages for Excess Weight

**B6.04.01**

Buses shall be manufactured having weight not in excess of the value stated on Form EA3.01 submitted with the Proposal or BAFO as applicable. For each pound that a bus is overweight, damage will be sustained by the County. Because of the difficulty in computing the actual material loss and disadvantage to the County and to the public it serves, it is determined in advance and agreed by the parties hereto that the Contractor will pay the County the amount of \$1.00 per pound of overweight per axle up to 500 pounds (227 kg) total per bus; for buses that have 500 pounds (227 kg) or more of total overweight, the County shall have the option of assessing liquidated damages at \$1.00 per pound as above, or rejecting the bus. Overweight will be determined by comparing the per axle Wet Weight submitted by the Contractor in the technical proposal (Form EA3.01) portion of its Proposal or BAFO, as applicable with the actual average per axle delivered weight of the bus. Actual Wet Weight will include the weight of post-delivery retrofits performed or authorized by the Contractor to insure the bus meets the requirements of the Contract Documents.

If the Contractor refuses or fails to pay the liquidated damages within thirty (30) days of receipt of a written demand from the County, the County may withhold said amounts from any payments then due, or to become due, to the Contractor.

**B6.05 Inspection of Completed Buses****B6.05.01**

The County's Inspector shall have the authority to make the initial determination as to the quality or acceptability of Work under the requirements of the Contract Documents. The Inspector's determinations shall be subject to review by the County's Contract Officer upon written objection by the Contractor.

**B6.05.02**

The Contractor shall conduct a complete and comprehensive visual inspection, mechanical inspection and road test of the first production bus to check and verify the quality of workmanship and check for mechanical and other malfunctions in all systems throughout each bus. A written report of these checks and/or inspections shall be supplied to the County's Inspector. Thereafter, each complete bus shall be inspected by the Inspector at the Contractor's facility prior to Delivery. This inspection shall include but not be limited to a visual and mechanical inspection utilizing an appropriate checklist system developed by the County to verify the assembly of the bus consistent with the requirements of the Contract.

The Contractor shall submit procedures for the final inspection checks to the Inspector for approval at least thirty (30) days prior to the inspection of the first production bus.

**B6.05.03**

The Inspector, upon successful completion of each such inspection and test, will provide the Contractor with a signed notice of approval for delivery. The notice will identify each bus by VIN.

**B6.05.04**

Neither the inspection of the bus at the factory, the approval for delivery, nor any act of the Inspector will constitute acceptance of the bus by the County. Acceptance of buses shall be based only upon inspection and tests occurring after delivery of the completed bus to the County, as described herein and only after the County provides the Contractor with a written Notice of Acceptance.

**B6.06 Shipment and Delivery of Buses****B6.06.01**

Buses provided under this Contract shall be delivered at the Contractor's expense by a qualified and experienced common or contract carrier who is properly licensed and insured. Bus deliveries will be made to the address given in Attachment 32. The Contractor shall make all arrangements for delivery.

**B6.06.02**

All buses shall have a minimum of 500 driven miles (805 km) before Delivery to The County. This mileage can be accumulated during the drive away trip.

During the drive away trip, the speed and operation en route shall be controlled to conform to the recommendations of the system suppliers and tire supplier so as to prevent damage to any part of the bus. At the time of Delivery, a written report shall be submitted to the County by the Contractor listing all incidents and unusual bus performance as well as the quantity of fuel, oil and coolant added to the bus during the trip. In the event the drive away trip of any bus is interrupted, for any reason, the Contractor shall include in the report a description of the nature of the service or repair, and the cause and restoration, if any, required to continue the trip. Failure to submit this written report will result in the County not accepting delivery of the bus.

The County is not obligated to provide transportation for drive away drivers in the Seattle-King County area.

**B6.06.03**

Buses shall be delivered with a full tank of fuel and cleaned of all road dirt. For any bus not meeting this requirement, the Contractor will be assessed \$300. When buses are Delivered, certificates or releases signed by representatives of the County shall simply acknowledge receipt of the buses, and shall not constitute Acceptance by the County of the condition of the bus, or its conformance with the terms of the Contract. Acceptance by the County shall be understood to occur only subsequent to final inspection by responsible assigned employees of the County and only after the County provides the Contractor with a written Notice of Acceptance.

Receipt of the Manufacturer's Statement of Origin for a bus is a condition precedent to acknowledgment of receipt of that bus by the County.

As each bus is Delivered, a list of the serial numbers of all major components on the bus, including tires, shall be supplied by the Contractor to the County. The Contractor will supply, and the County will approve, the list of components.

**B6.07 Risk of Loss by Casualty****B6.07.01**

The County will assume the risk of loss by casualty to individual buses by casualty, commencing at the time and date of Delivery of the bus to the County's designated delivery point. The Contractor shall have full responsibility for all such risks of loss prior to such acknowledgment.

**B6.08 Acceptance of Buses****B6.08.01**

As buses are received, the County will perform such inspections and tests as are deemed necessary to determine if each bus is in conformance with Contract requirements both as to configuration and performance parameters. Certain of these procedures may be performed on a sampling basis, and others may be performed only on buses which give indication of problem areas. Representatives of the Contractor may witness acceptance inspections and testing if so requested by the Contractor.

**B6.08.02**

When acceptance tests and inspections for a given bus have been completed, the County will provide the Contractor with a notice, informing it that the County Accepts or does not Accept the bus. The notification will also detail deficiencies found, which may be major and a cause for non-acceptance, or which may be minor and suitable for repair after the bus has been Accepted. A principal criterion for Acceptance is the suitability of the bus for revenue service, excepting items supplied by the County. The County may refuse to Accept buses if it has not been furnished necessary operating and maintenance documentation. All and any Acceptances are subject to warranty, and any and all deficiencies discovered during acceptance testing or subsequent to testing shall be corrected as provided in the Contract Documents within a reasonable time period prescribed by the County after consultation with the Contractor.

Notification of Acceptance or non-acceptance will be in writing and will be sent to the Contractor within seventeen (17) days of Delivery of the bus. Buses will not be placed in revenue service until Accepted by the County.

**B6.09 Suspension of Deliveries by the County****B6.09.01**

The County may at any time direct the Contractor in writing to suspend shipment of buses if ten (10) or more buses on the property of the County have failed to pass acceptance tests or have passed acceptance testing but have subsequently failed and are unfit or unsafe for service. Prior to giving such notice, the County shall advise the Contractor (and the County's Inspector) of the problem and give the Contractor a reasonable period of time as determined by the County to make the buses acceptable. Buses at the Contractor's plant will also be repaired or redesigned to solve the problem. The Contractor may, at its own option and risk, continue to ship buses to the King County area after receipt of a written suspension notice, but the County will not be obligated to receive, store, protect, inspect or Accept any bus shipped after receipt of notice to suspend.

The Contractor shall resume shipments within ten (10) days after receipt of written notice ending the suspension from the County. Suspension of shipments shall expire in thirty (30) days unless renewed by the County.

**B6.10 Termination of Contract****B6.10.01**

The following provisions shall govern termination of the Contract by the County.

**B6.10.02 Termination for Convenience**

The County may terminate this Contract for convenience and without cause, in whole or in part, at any time by written notice to the Contractor specifying the termination date. The Contractor shall immediately take all practical steps to minimize its costs to terminate the Work. The Contractor shall be paid its actual, necessary and verifiable costs to

effect termination directly related to this Contract including contract close-out costs, and a reasonable profit on work performed satisfactorily up to the date of termination. Only those costs specifically allowed by Federal Acquisition Regulations pertaining to termination for convenience may be claimed by the Contractor. The Contractor shall promptly submit to the County its termination claim supported by detailed documentation of each cost item claimed in a form satisfactory to the County. The County reserves the right to review all claims submitted and accept, reject or require additional information. If the Contractor has any materials, equipment or property in its possession belonging to or funded by the County, the Contractor will account for the same, and promptly return it to the County or otherwise dispose of it in the manner the County directs. The Contractor further agrees in the event of such termination to allow a complete audit of the Contractor's records, including costs, markups and revenues for the Work by an auditor selected by the County.

**B6.10.02.01 Non-appropriation**

If expected or actual funding for this Contract is withdrawn, reduced or limited in any way prior to the payment for the last bus Accepted, the County may, upon written notice to the Contractor, terminate this Contract in whole or in part.

If the Contract is terminated as provided in this subsection: (1) the County will be liable only for payment in accordance with the terms of this Contract for Work performed satisfactorily up to the date of termination and materials on order that cannot be canceled; and (2) the Contractor shall be released from any obligation to provide additional buses as are affected by the termination.

**B6.10.03 Termination for Default**

**B6.10.03.01**

If the Contractor does not deliver buses, equipment and materials in accordance with the Contract delivery schedule, or, if the Contractor fails to perform services in the manner called for in the Contract, or if the Contractor fails to comply with any other material provisions of the Contract, the County may terminate this Contract for default if, ten (10) days after the date of the County's written notice to the Contractor, the failure of the performance of the Contractor has not been completely cured or the Contractor has not made reasonable progress, as determined by the County, to cure the failure. Termination shall be effected by serving a notice of termination on the Contractor's representative or agent in the State of Washington or shall be deemed served three (3) days after mailing said notice by registered mail to the Contractor's last known address. Such notice shall set forth the manner in which the Contractor is in default. The Contractor will only be paid the Contract prices for buses, equipment and materials Delivered and Accepted, or services satisfactorily performed in accordance with the manner of performance set forth in the Contract; and any other costs shall be borne by the Contractor. The Contractor shall assume and bear all termination and contract close-out costs, including those of subcontractors, suppliers and Vendors.

In the event of a default termination, the County shall be entitled to withhold from any payments then due or to become due to the Contractor, reasonable amounts for damages suffered by the County as a result of the Contractor's default and to exercise any other rights or remedies available to the County at law.

**B6.10.03.02**

If it is later determined by the County that the Contractor was not in default, the County, after establishing a new delivery schedule, may, in its sole discretion, allow the Contractor to continue Work without increase in the Contract prices, or treat the termination as a termination for convenience.

The Contractor agrees to allow a complete audit of the Contractor's records, costs, markups and revenue for the Work in the event the County deems such necessary to effect termination under this provision. Such audit would be performed by an auditor selected and paid for by the County.

In the event this termination for default is overturned for any reason, then the termination shall become a termination for convenience in accordance with Section B6.10.02, Termination for Convenience.

**B6.10.03.03**

Separate negotiations may be entered into, at the sole discretion of the County, after Contract termination concerning the disposition of materials, supplies and equipment acquired by the Contractor for the requirements of the Contract. The termination of the Contract for default shall in no way relieve the Contractor from any of its covenants, undertakings, duties and obligations under this Contract, nor limit the rights and remedies of the County hereunder in any manner whatsoever.

**B6.10.04 Warranty**

The Contractor shall not be relieved by the termination of the Contract of its warranty responsibility on those buses that have been Accepted by the County.

## **B6.11 Claims**

### **B6.11.01 Determination by Contract Officer**

Questions regarding the meaning and intent of the Contract or claims for cost or time impacts arising from this Contract shall be referred by the Contractor in writing to the County's Contract Officer for decision within twenty (20) days of the date in which the Contractor knows of the question or claim. The Contract Officer will ordinarily respond to the Contractor in writing with a decision, but absent such written response, the question or claim shall be deemed denied upon the tenth (10<sup>th</sup>) working day following receipt by the Contract Officer of the question or claim or supporting documentation. If the Contractor believes that any act or omission by the County caused an increase to the cost of the Work or the time required for the Work, the Contractor shall submit a detailed description of the basis for the claim and complete supporting documentation for cost and time increases to the County within twenty (20) days of the initial notice of claim. Failure by the Contractor to both timely file and document a claim shall constitute a complete waiver of the Contractor's right thereafter to pursue that claim in any forum. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract and in accordance with the direction of the County.

### **B6.11.02 Appeals**

In the event the Contractor disagrees with any determination or decision of the Contract Officer, the Contractor shall, within fifteen (15) days of the date of such determination or decision, appeal the determination or decision in writing to the General Manager. Such written notice of appeal shall include all documents and other information necessary to substantiate the appeal. The General Manager or designee will review the appeal and will transmit a decision in writing to the Contractor within thirty (30) days from the date of receipt of the appeal, or the appeal will be deemed denied on the thirty-first (31<sup>st</sup>) day. The decision of the General Manager shall be final and conclusive on the claim and appeal. Failure of the Contractor to appeal the decision or determination of the Contract Officer within said 15-day period will constitute a waiver of the Contractor's right to thereafter assert any claim resulting from such determination or decision. Appeal to the General Manager shall be a condition precedent to litigation.

### **B6.11.03 Jurisdiction and Venue**

All claims, counterclaims, disputes and other matters in question between the County and the Contractor that are not resolved between the Director and the Contractor, or waived, will be decided in the King County Superior Court in Seattle, Washington, which shall have exclusive jurisdiction and venue over such claims, counterclaims, disputes and other matters. This Contract shall be interpreted and construed in accordance with the laws of the State of Washington.

## **B6.12 Changes in Governmental Regulations**

### **B6.12.01**

In the event local, state or federal laws or regulations that were not announced or enacted at the time of the Proposal or BAFO submittal, as applicable, become effective before Delivery of the buses and such laws or regulations make standards more stringent or compliance verifiably more costly under this Contract, the County shall reimburse the Contractor for its reasonable, necessary and documented expenses, if any, and grant an extension of time for unavoidable delay, if any, caused by compliance with such laws or regulations; provided, that the Contractor notified the County in writing of such laws or regulations and their effect(s) on the bus pricing or delivery schedule promptly after the Contractor first became aware of the laws and regulations and prior to incurring any such expenses. The County's reimbursement obligation shall not extend to any performance otherwise required of the Contractor by the Contract Documents. Such reimbursement shall be paid on a 'per bus' basis at such time and in such manner as the price of the bus is paid. To determine the amount of such reimbursement per bus the Contractor shall comply with provisions for 'Changes' and 'Change Orders' in Section B7.

In order to claim an extension, the Contractor shall follow the notice and documentation procedures described in Section B6.11.

The Contractor shall be deemed to have had notice of any Federal law or regulation announced or enacted at the time of Proposal or BAFO submittal, even though such law or regulation did not take effect or become operative until some date after the Proposal or BAFO submittal.

### **B6.12.02**

The Contractor shall, immediately upon becoming aware of any such imposition or change of requirement, provide the County with full and detailed particulars of the changes required in the buses and of costs involved therein, or shall be deemed to have waived any rights under this section. In the event any governmental requirements are removed, relaxed or changed in any way after the date of Proposal or BAFO submittal so as to make the Contractor's performance less expensive, or less difficult, then the County shall have the option either to require the Contractor to perform pursuant to the more rigorous requirements or to receive a reduction in the price of the buses affected for all savings in direct costs which may be realized by the Contractor by reason of such change and appropriate adjustments in deductions for overhead and profit made so as to reflect actual savings made by the Contractor. The County's Contract Officer shall give the Contractor notice of the County's determination, and anticipated savings.

### **B6.13 Force Majeure**

#### **B6.13.01**

The term 'force majeure' shall include: acts of nature, acts of civil or military authorities, fire, accidents, shutdowns for purpose of emergency repairs, strikes and any other industrial, civil or public disturbances that are not reasonably within the control of a party, causing the inability to perform the requirements of this Contract. If any party is rendered unable, wholly or in part, by a force majeure event, to perform or comply with any obligation or condition of this Contract, then, upon giving notice and reasonably full particulars to the other party, such obligation or condition shall be suspended for the time and to the extent reasonably necessary to allow for performance or compliance and to restore normal operations. During the continuance of the inability to perform or comply, such party shall be temporarily relieved of its obligation to perform or comply and shall suffer no prejudice for failure to perform or comply the same during such period. In the event Contractor ceases to be excused pursuant to this provision, then the County shall be entitled to exercise any remedies otherwise provided for in this Contract, including the termination for default.

#### **B6.13.02**

The granting of any such extensions pursuant to the force majeure provision set forth at Section B6.13.01 shall not be considered a waiver of the requirement of timely completion or deemed to affect the importance of timely completion.

## SECTION B7 - MEASUREMENT AND PAYMENT

### B7.01 Contractor's Invoices and Documentation for Title

#### B7.01.01

All invoices for buses and documentation necessary to secure title, i.e., Manufacturer's Statement of Origin (MSO), shall be furnished at least ten (10) days prior to Delivery of each bus. Billing address is given in Attachment 32.

### B7.02 Payment Procedures

#### B7.02.01

Within thirty (30) days after receipt of an approved invoice, the County will pay the Contractor pursuant to its invoice as adjusted according to additions and deletions explained under 'Retained Percentage' herein and to charges by the County under the Contract. Funds withheld and processed pursuant to these provisions shall not give rise to any rights in the Contractor for additional payments because funds were not received within thirty (30) days after Acceptance of each bus.

Amounts withheld from earlier payments that become releasable according to the Contract Documents will be paid within thirty (30) days after the date the amounts become releasable.

Joint Contractors shall designate one payee, to whom the County shall make all payments required by this Contract. Any payment made to the designated payee shall discharge the County's obligation to make payment to all parties constituting the Joint Contractor.

Progress Payments: the County will pay the Contractor for milestones achieved in the production process. Title to material included in any progress payment request shall pass to the County when payment is made to the Contractor. The County reserves the right to file a security interest (UCC-1 form) on material or equipment purchased by the Contractor during the production process. Said title shall be free of all encumbrances. However, such transfer of title shall not relieve the Contractor of its responsibility for the furnishing, installation, fabrication or inclusion of said materials as a deliverable element of buses procured in accordance with the requirements of this Contract.

The performance milestones and payment limits shall be as follows:

1. Subject to the required percentage withheld under Section B7.09, the County shall make payments for buses at sixty percent (60%) of the unit price(s) for each bus(es) itemized in the Contract when the County's in-plant Inspector has approved shipment of said bus(es) from the Contractor's plant and within thirty (30) Calendar Days of receipt of a proper invoice. The County must have the MSO before this payment can be processed.
2. Subject to the required percentage withheld under Section B7.09, the County shall make payments for buses at forty percent (40%) of the unit price(s) for each bus(es) itemized in the Contract upon Delivery and Acceptance of each bus and within thirty (30) Calendar Days of receipt of a proper invoice. In the event that a bus does not meet all requirements for Acceptance the County may, at its exclusive option 'conditionally accept' the bus and place it into revenue service pending receipt of Contractor furnished materials and/or labor necessary to effectuate corrective action for Acceptance. For any conditionally Accepted bus the payment shall be reduced by an amount to be withheld, and paid upon corrective action by the Contractor, equal to twice the estimated cost for parts and labor for the corrective action.

Milestone payment requests shall be accompanied by a certification, or affidavit, signed by a duly authorized representative of the Contractor certifying that the work covered by the progress payment requested has been completed. The County reserves the rights of inspection and audit to verify said progress as provided in Section B5.13.

### B7.03 Change Orders

#### B7.03.01

The County may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this Contract including, but not limited to, the following: (1) Specifications; (2) method of shipment; and (3) place of delivery.

If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the Work under this Contract, whether or not changed by the order, the County shall make an equitable adjustment in the Contract Price, the delivery schedule, or both, and shall modify the Contract.

The Contractor must submit any proposal for adjustment under this Section B7.03.01 within thirty (30) days from the date of receipt of the written order. Failure to submit a proposal within the thirty-day period shall constitute a waiver of any right to an equitable adjustment in Contract Price or in delivery schedule. The proposal shall fully document in detail the basis for the adjustment and provide complete supporting documentation for any requested adjustment in the Contract Price or delivery schedule. If the County decides that the facts justify it, the County may receive and act upon a proposal for adjustment submitted before final payment under the Contract.

All proposals for adjustment are subject to cost/price analysis conducted by the County per Section B5.13.

If the Contractor's proposal for adjustment includes the cost of property made obsolete or excess by the change, the County shall have the right to prescribe the manner of the disposition of the property.

Failure to agree to any adjustment shall be a dispute under Section B6.11. However, nothing in this Section B7.03.01 shall excuse the Contractor from proceeding with the Contract as changed.

#### **B7.04 Change Order Procedure**

##### **B7.04.01**

Within thirty (30) days after receipt of a Contract change by the County, the Contractor shall submit to the County a detailed price and schedule proposal for the Work to be performed or omitted. The price proposal shall consist of the elements of the estimated costs supported by cost or pricing data along with a certification that, to the best of the Contractor's knowledge and belief, the data are accurate, complete and current at the time the Change Order proposal is submitted. The Contractor (and the manufacturer, if the two are not the same) shall provide detailed component, labor, and other cost data to a the County auditor for all Change Order items. The County shall at any time have the right to a price adjustment to exclude any sum by which the price was increased because the Contractor submitted data that were not accurate, complete and current as certified. This proposal shall be accepted or modified by negotiations between the Contractor and the County. The agreed modification shall be described in detail and executed in writing by both parties. If an agreed modification cannot be reached by negotiation, then the County shall have the right to direct the Work be accomplished on a time and materials basis with a single markup only on the Contractor's actual direct costs of twenty percent (20%) to cover all profit, overhead and any other indirect or consequential impacts, superintendence costs and damages. The payment on any Change Order shall constitute full and final compensation for such change including all impact costs or other damages.

If Work is directed as described above, the time and materials basis shall consist of the following:

**(a) Craft labor costs:** These are the labor costs determined by multiplying the actual additional number of craft hours needed to perform the change in the Work by the hourly costs. Craft hours should cover all direct labor. The hourly costs shall be based on the following:

- (1) Basic wages and benefits: Hourly rates and benefits.
- (2) Worker's insurance: Direct contributions for industrial insurance; medical aid; and supplemental pension.
- (3) Federal insurance: Direct contributions required by the Federal Insurance Compensation Act; Federal Unemployment Tax Act; and the State Unemployment Compensation Act.
- (4) Safety: Cost incurred due to Industrial Safety and Health Act; which shall be a reasonable percentage not to exceed two percent (2% ) of the sum of the amounts calculated in (1), (2), and (3) above.

**(b) Material costs:** This is an itemization of the quantity and cost of materials needed to perform the change in the Work. Material costs shall be developed from actual known costs, supplier quotations or standard industry pricing guides. Material costs shall consider all available discounts. Freight cost, express charges, or special delivery charges, shall be itemized.

##### **B7.04.02**

If an agreed modification cannot be reached by negotiation, the County shall have the right to immediately audit all of the Contractor's records and accounts to establish the actual direct costs of the Work and the Contractor shall fully cooperate to provide access to such records and accounts in whatever form they may exist, including computerized information. The audit would be performed by an auditor selected and paid for by the County. Failure to cooperate in such an audit shall constitute a material breach of this Contract.

#### **B7.05 No Waiver of Warranty**

##### **B7.05.01**

Payments, tests, inspections, or Acceptance by the County shall not constitute a waiver, modification, or exclusion of the warranties applicable to the buses for the periods specified or a waiver of the requirements of the Contract Documents.

## **B7.06 Contractor's Payment Obligations**

### **B7.06.01**

The Contractor shall pay any and all accounts for labor including to the extent applicable, worker's compensation premiums, state unemployment, and federal social security payments and all other wage and salary deductions required by law, for services and material used by the Contractor and its subcontractors during the fulfillment of the Contract as and when such accounts become due and payable.

### **B7.06.02**

The Contractor shall indemnify, defend and hold the County harmless from any liability or expense, including legal expenses (including attorneys' fees, experts' fees and costs, arising out of claims of subcontractors, materialmen or others on accounts for labor, services and material used by the Contractor during the fulfillment of the Contract.

## **B7.07 Charges to Contractor**

### **B7.07.01**

Charges which are the obligation of the Contractor under the terms of the Contract shall be paid by the Contractor to the County on demand and may be deducted by the County from any money due or to become due to the Contractor under the Contract, and may be recovered by the County from the Contractor or its surety.

## **B7.08 Payment Certificates**

### **B7.08.01**

Upon the completion of the Work, the Contractor and all of its subcontractors shall, as to work performed in the State of Washington, submit affidavits of wages paid to the Department of Labor and Industries on such forms required by the Department. Payment of the retained percentage will not be made until certifications are received from the Department of Labor and Industries that the prevailing wage requirements of State law have been satisfied by the Contractor and its subcontractors.

## **B7.09 Retained Percentage**

### **B7.09.01**

A retained percentage in a sum equal to two percent (2%) of the unit price for each bus will be held and applied by the County. Payments or release of eighty percent (80%) of the retained percentage will be made by the County to the Contractor in ordinary course of business upon the expiration of forty-five (45) days following acceptance of the last bus delivered pursuant to an order of buses under this Contract, subject to the following conditions: (1) the Contractor shall have furnished to the County: (a) certificates from the Washington State Department of Labor and Industries and the Employment Security Department showing all payments due said departments for portions of the Work, if any, performed in Washington State have been made; (b) a certificate from the State of Washington Department of Revenue showing all taxes due or to become due with respect to the Contract have been paid or duly provided for; and (c) "Affidavits of Wages Paid" approved by the Washington State Department of Labor and Industries for portions of the Work, if any, performed in Washington State by the Contractor and any of its subcontractors; (2) no claims or notices of lien have been filed; and (3) the County has no claims under this Contract. The remaining twenty percent (20%) of the retained percentage will be paid or released in two (2) equal annual installments provided the Contractor is satisfactorily complying with all warranty, spare parts and other post-Contract close-out obligations.

## **B7.10 Investment of Retained Percentage**

### **B7.10.01**

Monies reserved by the County as a retained percentage from payments due the Contractor will at the option of the Contractor be: (a) retained in a fund by the County; or (b) deposited by the County in an interest-bearing escrow account in a bank, mutual savings bank, or savings and loan association.

The Contractor shall notify the County in writing of its election to have the monies placed in an interest-bearing account, otherwise the monies will be retained by the County without interest accruing to the Contractor. Such written notification shall precede the first invoice by sixty (60) days.

The Contractor is responsible for setting up the afore-mentioned interest-bearing escrow account in a bank located in Seattle, Washington. The escrow agreement shall be subject to prior approval by the County. See Form E5.

## **B7.11 Washington State Sales Tax**

### **B7.11.01**

The Contractor shall add the appropriate Washington State sales tax amount to each invoice and the Contractor will make payment to the Washington State Department of Revenue.

## **B7.12 Not Used**

## **B7.13 Acceptance of Contract Work**

### **B7.13.01**

Concurrent with the initial payment or release of eighty percent (80%) of the retained percentage under Section B7.09, the County shall provide written notice of Acceptance of the buses required to be manufactured and delivered pursuant to an order of buses under this Contract. Such notice of Acceptance shall not revise or extinguish any obligations and liabilities of the Contractor related to warranties, spare parts and other post-delivery provisions of this Contract. All such obligations and liabilities shall continue as provided in this Contract and by law.

Subsequent payments or releases of the remaining portions of the retained percentage under Section B7.09 shall not revise or extinguish any obligations and liabilities of the Contractor related to warranties, spare parts and other post-delivery provisions of this Contract. All such obligations and liabilities shall continue as provided in this Contract and by law.

## SECTION B8 - QUALITY ASSURANCE

### B8.01 Overall Program

#### B8.01.01

The provisions of this section describe, in general terms, the elements deemed necessary by the County to ensure that each bus shall be built in conformance with the Contract Documents. The County's Contract Officer must be satisfied that an adequate quality assurance program exists and is functioning.

The Contractor shall have a functioning overall transit bus quality assurance program containing elements including:

1. Fully complete, 'producible' and 'inspectable' engineering documentation, including design drawings;
2. Written and detailed in-house materials procurement and testing specifications;
3. Written and detailed procedures for transmission of Contractor's quality requirements and minimum standards to subcontractors and suppliers and contractual and other means to assure subcontractor compliance with these quality requirements;
4. Adequate and detailed testing and inspection procedures to assure product conformity with engineering design requirements; and
5. Total control over the manufacturing process to assure buses meet the design, Contract, Specifications and inspection requirements of the Contract.

### B8.02 Quality Assurance Documentation

#### B8.02.01 Design and Production

Adequate documentation shall be maintained by the Contractor to provide evidence of quality and accountability. These records shall include the methods used to determine and the results of the following activities:

1. Production inspections by station or specific location;
2. Incoming material inspections and sampling methods used;
3. Tests on materials, manufacturing techniques and critical tools;
4. Certification of manufacturing processes and specialized personnel skills; and
5. Complete tracking on discrepant materials (including disposition).

The Contractor shall provide documentation to the County when requested.

#### B8.02.02 General Quality Program

The Contractor shall have complete written procedures defining the quality assurance system. These procedures shall be specific to bus design and manufacturing. The procedures shall encompass all design and production phases including, but not limited to: control of suppliers; receiving inspection; production and process control; functional test; discrepancy control; measuring and test equipment calibration and certification; drawing control; quality assurance records; shipping inspection; and any other quality provisions necessary to meet the requirements of the Contract.

Management responsibility and staff assignments for the quality assurance system shall be shown on an organizational chart that shall be provided to the County. The Contractor shall insure that staff assigned to quality assurance tasks are technically competent, experienced with the role and delegated sufficient authority to effect necessary changes in the manufacturing process. The responsibility for the quality assurance system shall be so placed that schedules and costs will not compromise quality.

The Contractor shall provide copies of the quality assurance program and organizational charts to the County when requested.

#### B8.02.03

The County's Inspector shall be afforded full access to all fabrication, manufacturing and assembly areas related to the Work whether located at the Contractor's facilities or at its subcontractors' or suppliers' facilities. The Contractor shall provide the Inspector with any information, test results or analysis requested in connection with inspection of the Work and administration of the Contract.

### B8.03 External Materials

#### B8.03.01 Control of Subcontractors

The Contractor shall have in-place methods to be used for the selection and control of subcontractors. These methods shall identify the means for:

1. Selection of qualified materials and/or component sources;
2. Evaluation and assessment of subcontractor's quality assurance system;
3. Transmission of all design and quality requirements to procurement sources;
4. Monitoring of subcontractor quality performance; and
5. Verification of procured articles against purchase order and quality requirements.

#### **B8.03.02 Receiving Inspection**

The Contractor's receiving inspection shall provide for the inspection of all incoming materials. Inspection shall be by a valid statistical sampling plan or one hundred percent (100%) inspection. These plans and results of the plans shall be recorded as required by Section B8.02.01. The Contractor shall preserve all material certifications and test reports used as the basis for receiving and acceptance of materials. The Contractor shall implement a material identification system to ensure that wrong materials are not used in the manufacture of the buses.

### **B8.04 Enforced Procedures**

#### **B8.04.01**

The Contractor's quality assurance system shall provide enforcement procedures for the proper inspection of products to assure completion of manufacturing prior to shipment. All shipments shall be packed and marked as required to preclude damage during shipment to destination.

### **B8.05 Inspection and Testing**

#### **B8.05.01**

The burden of proof that the buses comply with the Contract requirements shall be on the Contractor. The Contractor shall be responsible for inspecting and testing of the component parts of the Work, including its suppliers', subsuppliers' and subcontractors' Work. The Contractor shall provide all inspection and testing required to insure the completed bus meets all of the requirements of the Contract Documents. The Contractor shall provide inspection and testing reports in the format and at the times requested by the County's Inspector.

The Inspector shall be entitled to be present at all locations where Contractor or its subcontractors are engaged in the performance of the Work, at any and all times, to review and inspect all aspects of the performance of the Work and to perform or witness tests.

Inspection or non-inspection, or witnessing or non-witnessing, by the Inspector shall not be construed as Acceptance of any part of the Work or an assumption of risks or liability by the County nor as relieving Contractor of its responsibilities for compliance with the Contract.

In connection with the specific inspections or tests required by the Inspector pursuant to this Contract, any labor or materials necessary for the safe and efficient performance of such inspections or tests shall be provided at no additional cost to the County.

#### **B8.05.02**

Work rejected by the Inspector shall be corrected by the Contractor at the Contractor's expense subject to claim by the Contractor in accordance with Section B6.11. The Contractor shall proceed with the correction to insure completion of the Work in accordance with the delivery schedule.

If the Inspector requests to witness certain inspections or tests, Contractor shall advise Inspector of said inspection or test sufficiently in advance (but in any event no later than three (3) Working Days prior to the date thereof) to enable the Inspector to attend.

#### **B8.05.03**

In cases where compliance with Contract requirements for materials to be incorporated in the Work requires laboratory examination or special testing, the Contractor shall provide a written report to the Inspector on the results of such examination or testing if requested. Such test analysis and examinations shall be made before the time at which it is desired to incorporate the material into the Work.

In cases where compliance of materials or equipment to requirements in the Contract Documents are not determinable through inspection and tests, the Contractor shall, at the direction of the Inspector provide properly authenticated documents, certificates or other satisfactory proof of compliance. Such documents, certifications and evidence shall include performance characteristics, materials of construction and the physical and chemical characteristics of materials. All costs associated with such certification shall be paid by the Contractor.

#### **B8.05.04**

Materials and equipment incorporated in the bus shall be stored in accordance with the supplier's or manufacturer's recommendation, so as to ensure the preservation of their quality and fitness for the Work. Stored equipment and materials shall be located so as to facilitate inspection by the County's Inspector. The Contractor shall be responsible for damages that occur in connection with the care and protection of stored materials and equipment. Manufactured articles, material and equipment shall be transported, stored, applied, installed, connected, erected, adjusted, tested, operated and maintained as recommended by the supplier or manufacturer, unless the Contractor determines that alternate procedures are required to improve the quality, reliability or appearance of the bus.

## SECTION C1 - VEHICLE OVERALL REQUIREMENTS

### C1.00 General

#### C1.00.01

This Contract is based on a general performance type specification pursuant to which the Contractor shall be responsible for designing, fabricating, assembling, testing and finishing transit-type buses, which are in all respects in compliance with the requirements of the Contract Documents. Included within these requirements are specified components, equipment and systems usually accompanied by the phrase "or approved equal." Such components, equipment and systems, or deviations and substitute items specifically approved by the County, shall be provided as part of the completed buses under this Contract. The County's specification of such components, equipment and systems or the approval of such items, however, shall not relieve the Contractor of any obligation under the Contract Documents since the County expects and is relying on the Contractor, in designing and testing the bus, to verify the suitability and safety of materials, components, equipment, systems and items before incorporating them into the design, fabrication or assembly of the bus provided by Contractor.

#### C1.00.02

Without limiting the general provisions or other requirements of these specifications, all work included herein shall conform to or exceed the applicable requirements of the following documents. Reference to other sections or specific provisions of the Contract, including these technical specifications, is only for the convenience of the Contractor. Failure of the County to accurately or completely reference one requirement to other related requirements shall not relieve the Contractor of its obligation to fully understand and correlate all of the Contract's requirements.

#### C1.00.03

Reference to standard specifications, manuals or codes of any technical society, organization, or association, or to the codes, laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, or laws or regulations in effect at the time of submittal of proposals except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual, or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of the Contractor, agents, or employees from those set forth in the Contract Documents.

#### C1.00.04

Whenever in the Contract Documents the terms "as ordered," "as directed," "as allowed," "as reviewed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review, or judgment of the County as to the work, it is intended that such requirement, direction review, or judgment will be solely to evaluate the work for compliance with the Contract Documents, unless there is a specific statement indicating otherwise. "Approval" by the County of any component, part, equipment or system as required herein shall not constitute any waiver or modification of Contract Documents unless such requirement is revised by change order.

#### C1.00.05

The terms "coach," "vehicles" and "buses" are used interchangeably.

#### C1.00.06

Contractor shall fully cooperate at its own cost in providing test data and technical analyses, and in conducting additional tests and analyses, as the County may require, to confirm the County's reasonable satisfaction that the bus will meet the requirements of the Contract Documents.

The County agrees it will act reasonably in regard to any additional tests and analyses that may arise and it will cooperate fully with the Contractor to minimize any costs related to testing that the Contractor may absorb.

#### C1.00.07

To the maximum extent practicable, the materials, parts components and equipment utilized in the bus, including spare and warranty parts, shall be readily available from domestic U.S. commercial and manufacturing sources. The Contractor shall fully cooperate in the substitution of domestic parts in place of foreign manufactured or supplied parts at the request of the County.

### C1.01 General Configuration Guidelines

#### C1.01.01

This specification covers 3 axle heavy-duty transit-type buses equipped for use by both disabled and non-disabled passengers. The bus shall have two passenger doorways on the right side of the vehicle: one ahead of the first axle (front door) and one between the articulation and the third axle (rear door).

#### C1.01.02

Buses shall be equipped and arranged so that two passengers in wheelchairs can be accommodated. When such passengers are carried, three regular seats per wheelchair may be folded out of the way to provide a securement area.

**C1.01.03**

A single diesel-fueled engine shall propel coaches with either a combined automatic transmission/electric motor hybrid drive unit, or an automatic transmission, driving the third axle.

**C1.02 Dimensions**

**C1.02.01 Length**

Overall length of nominal 60-foot buses, exclusive of the bicycle rack, shall be 59.5 feet to 61.5 feet (18.1 m to 18.75 m).

**C1.02.02 Width**

Overall width of buses, excluding mirrors, lights, and fenders, shall be a nominal 102 inches (259 cm).

**C1.02.03 Height**

Overall height of buses without roof-mounted energy storage shall be 115 to 125 inches (292 to 317 cm) and 140 inches (356 cm) with roof-mounted energy storage. Height measurements, including the heights specified below, are with the air suspension system operating and fully adjusted, with the bus on proper tires correctly inflated, and with roof vents closed.

**C1.02.04 Not Used**

**C1.02.05 Floor Height**

The floor height shall not exceed 16.5 inches (419 mm) at either doorway, without kneeling. Inclines, if necessary to accommodate localized variations in floor height, shall not exceed 4 degrees with respect to the horizontal plane. A maximum of two steps is allowed to accommodate a raised aisle floor in the rear of the bus.

**C1.02.06 General Aisle Width**

The minimum clear aisle width between pairs of transverse seats with all attached hardware shall be at least 22 inches (558mm) (reference section C3.05.02).

**C1.02.07 Front Area Aisle Width**

The aisle width between the front wheelhouses shall be at least 35.5 inches (902 mm), and the entire area between the front wheelhouses shall be available for passengers and mobility aid devices.

It is a requirement to allow adequate clearance for maneuvering a mobility aid device to and from the securement locations.

**C1.02.08 Headroom**

The minimum clear headroom along the bus centerline shall be at least 77 inches (196 cm). Headroom may reduce to 72 inches (183 cm) over seating areas along the bus and at the rear. Preferred headroom is 78.7 inches (200 cm) throughout.

### **C1.03 Clearances**

#### **C1.03.01 Ground Clearance**

Buses shall have as a minimum the ground clearance specified in Attachment 7. It shall be measured at the midpoint of the wheelbase, which shall consist of the area 12 inches (305 mm) fore and aft of the actual midpoint. All other parts of the bus between the axles shall be no lower than the plane created by the tangent point of the tires on a single axle and the ground and nearest edge of the midpoint area defined above. No part of the bus, other than wheels or tires, shall touch a flat road surface in a stopped condition with the tire(s) and/or air system suspension at any one wheel or dual wheel fully deflated. Any part of the bus that is lower than the wheel rims must have the approval of the County.

#### **C1.03.02 Approach and Departure Angles**

It shall be a design objective to attain the maximum angle of approach and angle of departure in order that buses may safely negotiate vertical curves in the service area of the County. Buses shall have a minimum angle of approach of 9 degrees and a minimum angle of departure of 9 degrees.

Each coach shall have the approach and departure angles measured. This shall be accomplished by using a full coach-width wedge, designed to measure the angle by being placed under the front or rear of the coach and slid up to the tire-road contact point. The wedge shall be constructed by the Contractor and approved by the County. The angles are referenced in Attachment 7.

#### **C1.03.03 Turning Radius**

Buses shall have a turning radius such that all parts of the bus body remain within the outer space envelope (point A) indicated in Attachment 8. This shall occur both in left hand and right hand turns. All coaches will be tested to verify these conditions.

### **C1.04 Weight and Axle Loading**

#### **C1.04.01**

It shall be a design goal to construct each bus as light in weight as possible without degradation of safety, appearance, comfort, traction or performance. Liquidated damages for overweight are explained in Section B6.04.

#### **C1.04.02**

Buses at a capacity load shall not exceed the tire factor limits specified in the motor vehicle laws of the State of Washington (RCW 46.44.042). A copy is included as Attachment 9.

#### **C1.04.03**

The Contractor's GAWRs and GVWR for the bus shall, as a design goal, exceed the actual total weight and axle weights of the bus with 150% of a seated load.

### **C1.05 Performance**

#### **C1.05.01**

Buses shall operate safely and reliably in revenue service at the minimum performance standards listed on Table C1-1. All buses delivered must meet such performance standards as long as the propulsion components are adjusted within the parameters specified in the maintenance manuals.

Acceleration times begin when the accelerator pedal is depressed; lag time between depression of the accelerator pedal and movement of the bus should be minimized. The County tests bus acceleration with a LABECO Track Test Fifth Wheel and a 625 Performance Monitor.

#### **C1.05.02 Not Used**

#### **C1.05.03**

The Contractor shall design the bus and propulsion components so as to operate safely and reliably in revenue service conditions at the specified minimum performance levels set forth above. The Contractor shall provide capability in the bus' performance beyond the specified minimums in recognition that buses may be operated, from time to time, for extended periods above or below maximum and minimum speed limits.

#### **C1.05.04**

A bus meeting the performance requirements in Table C1-1 will be able to achieve a higher top speed on an extended downgrade. All systems and components on the bus shall not be adversely affected by these higher speeds. The Contractor may propose a speed-limiting system to control top speed on downgrades.

### **C1.06 Duty Cycles**

#### **C1.06.01**

Coaches shall be designed to be compatible to the terrain and environment found in the County's service area. Also, coaches shall be capable of running continuously with capacity load in the environmental conditions found in the County's service area. These conditions include high humidity, rain, snow, and temperature extremes.

Coaches shall be capable of continuous operation at freeway speeds with a capacity load and an ambient temperature of 95° F without overheating or degradation of any operating component. They shall operate in stop and go downtown traffic with no adverse effects. They shall also be able to safely and efficiently negotiate the hilly conditions found in the Seattle-King County area. Grades of up to 19 percent can be found in the County's service area.

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Attachment 10 shows typical routes the coach shall take in normal revenue service. These include freeway and arterial travel. Coaches shall be capable of operating continuously on either of these routes with a capacity load making all stops with an ambient temperature of 95° F without overheating or degradation of any operating component.

### **C1.07 Ride Quality**

#### **C1.07.01**

Each bus, at any load condition between empty and GVWR, shall produce a comfortable, stable ride quality on a variety of road surfaces of moderate to good condition, when driven at legal speeds. On poor quality road surfaces, the ride quality shall not contain excessive instability or bottoming when the bus is driven at prudent speeds for the road surface. The bus shall provide a safe and stable ride at freeway speeds and shall maintain this condition even when changing lanes.

#### **C1.07.02**

The Contractor shall submit evidence, which may include technical analysis and comparisons or subjective tests, establishing that the design used produces a ride quality comparable to the best state of the art for heavy-duty buses. Ride quality shall conform to these guidelines with the bus loading ranging from empty to a capacity load.

### **C1.08 Appearance**

#### **C1.08.01**

Each bus shall be designed to be and remain attractive in appearance, both on the exterior and the interior, during the entire service life of the bus. All materials, fabrics, colors, textures, painting schemes, and all equipment and components relating to the interior decor of the bus shall be coordinated. Detailing shall be kept simple; add-on devices and trim should be minimized and where practical integrated into the basic design.

#### **C1.08.02**

The interior layout shall be designed to convey a sense of spaciousness, pleasant surroundings, comfort, convenience and modern design, with a minimum of protrusions. There shall be no sharp corners, edges or gaps that could cut or trap a passengers hands and/or fingers. The design shall avoid horizontal ledges and other 'dust catchers' and water traps.

### **C1.09 Passenger, Operator and Maintenance Personnel Safety**

#### **C1.09.01**

All design factors shall take into consideration the safety of the passengers, operators and maintenance personnel. Items requiring safety consideration in design include, but are not limited to:

- Elimination of sharp corners and edges
- Locations for handrails and stanchions
- Impact yielding handrails on seats
- No obstructions in aisles
- Implementation of Federal safety standards
- Intensity and distribution of interior lighting
- Elimination of interior driver area windshield glare
- Exterior lighting at doorways
- Steps
- Elimination of pinch hazards on interior and exterior assemblies

Implementation of ADA requirements  
 Body construction  
 Side impact barriers  
 Padding on seat back tops  
 Non-skid step nosings  
 Braking  
 Acceleration  
 Floor hatches

**TABLE C1-1**

**LOADING: 60 FT BUS – 89 + 1 PASSENGERS**

<b>CONDITION</b>	<b>MINIMUM PERFORMANCE</b>
<u>LEVEL ROAD</u>	
Top Speed	65 mph (104 km/h)
<u>ACCELERATE</u>	
0-20 mph (0-32 km/h)	09 Seconds
0-45 mph (0-72 km/h)	36 Seconds
<u>ACCELERATE ON GRADES</u>	
0-20 mph (0-32 km/h) on 5% grade	14 Seconds
0-10 mph (0-16 km/h) on 9% grade	09 Seconds
<u>MAINTAIN SPEED ON GRADE</u>	43 mph (69 km/h) on 3.5%

**C1.10 Emergency Exits**

**C1.10.01**

Buses shall be provided with adequate exits for quick passenger escape during emergency conditions, which comply with applicable codes and requirements and the best industry practice.

**C1.10.02**

An air pressure relief valve shall be provided near each door to allow passengers to manually open the door in an emergency, per sections C3.03 and C3.04.

**C1.10.03**

Most large passenger windows on the sides of the bus shall open outward to provide an emergency escape path, per section C3.11. Depending on FMVSS, windows in the rear, raised floor section should not be emergency exit windows. The driver's side window is also an emergency exit.

**C1.10.04**

Exits shall be provided to allow passenger escape in a rollover situation, including the use of roof exits.

**C1.11 Windshield Reflections**

**C1.11.01**

Buses shall be designed so that the driver will see no hazardous or annoying windshield reflections. The interior lighting design shall be coordinated with the design of the driver's station to minimize reflections off the windshield and other parts of the bus.

Buses will be used in suburban areas on narrow roads without street lighting, and the driver's environment must be adequate for such use at night and in unfavorable weather.

**C1.11.02**

The Contractor shall provide information on how this requirement is to be met at the design review, and shall demonstrate the result on the prototype bus, for the approval of the County.

**C1.12 Service Life****C1.12.01**

It is required that buses be designed and constructed to assure a minimum service life of at least 12 years or 500,000 miles (805,000 km), whichever comes later. The Contractor must submit evidence that the design is adequate to meet this.

**C1.13 Failures****C1.13.01**

Each bus shall be designed to minimize the potential for failure of components while the bus is in service.

The following specific examples are design goals for mean mileage between failures by failure class by bus, provided that all specified preventative maintenance procedures are followed.

**C1.13.02 Physical Safety**

Physical safety is defined as a failure that could lead directly to passenger or driver injury and represents a severe crash situation. Mean mileage between incidents shall be greater than 1,000,000 miles (1,609,300 km).

**C1.13.03 Road Call**

Road call is defined as a failure resulting in an interruption of revenue service. Service is discontinued until the coach is replaced or repaired at the point of failure. Mean mileage between incidents shall be greater than 20,000 miles (32,186 km).

**C1.13.04 Coach Change**

Coach change is defined as a failure that requires removal of the coach from service during its assignments. The coach is operable to a rendezvous point with a replacement coach. Mean mileage between incidents shall be greater than 16,000 miles (25,749 km).

**C1.13.05 Bad Order (Trouble Call)**

Bad order (trouble call) is defined as a failure that does not require the removal of the coach from service during its assignments but does degrade operation. The failure shall be reported by Operations and/or Maintenance. Mean mileage between incidents shall be greater than 10,000 miles (16,093 km).

**C1.14 Maintainability****C1.14.01**

Prime consideration shall be given to the routine problems of maintaining the buses. All systems or components serviced as part of periodic maintenance or whose failure may result in a C1.13.02 or C1.13.03 class failure shall be readily accessible for service and inspection.

**C1.14.02**

To the extent practicable, removal or physical movement of components unrelated to the specific maintenance or repair tasks involved shall be avoidable. These areas shall include but not be limited to the bus propulsion system and its accessories and components, fueling, storage tanks, batteries, electrical controls, multiplex components, electrical fuse and breaker panels, lighting fixtures, door actuators, fluid and air filters, heaters, test connections, air compressor and air system components. It shall not be necessary to disassemble portions of the bus structure and equipment such as seats and flooring under seats in order to gain access to these areas.

**C1.14.03**

Each bus shall be designed to facilitate the disassembly, re-assembly, servicing or maintenance thereof by use of tools and items that are normally available as commercial standard items. The engine compartment shall be designed, and equipment placed, to give maximum room possible for maintenance accessibility. Any special tools must have the approval of the County.

**C1.14.04**

The body and structure of all buses shall be designed for ease of maintenance and repair. Individual panels or other equipment, which may be damaged in normal service, shall be easily repairable or replaceable. Ease of repair shall be related to the vulnerability of the item to damage while in revenue service.

**C1.14.05**

All electronic devices on the bus down to the component level shall be repairable and maintainable by the County. No potted electronic components or sub-assemblies are allowed without the specific approval of the County.

### **C1.15 Electronic Noise Control**

#### **C1.15.01**

Electrical and electronic sub-systems and components on all buses shall not emit electromagnetic radiation that will interfere with on-board sub-systems, components or equipment, telephone service, radio or TV reception or violate regulations of the Federal Communications Commission.

#### **C1.15.02**

Electrical and electronic sub-systems on the coaches shall not be affected by external sources of RFI/EMI. This includes, but is not limited to, radio and TV transmission, portable electronic devices including computers in the vicinity of or onboard the buses, ac or dc power lines and RFI/EMI emissions from other vehicles.

#### **C1.15.03**

Electronic components that are subject to RFI/EMI shall have shielded power and data cabling. Deviations from this requirement shall require County approval. On-board equipment can include but is not limited to automatic passenger counters, two-way radio, electronic engine and transmission controls, automatic vehicle locating equipment and destination signs and associated wiring.

If one coach and/or component is susceptible to RFI/EMI, it will be assumed that all coaches suffer the same defect. Corrections will be made on a fleet basis unless the County grants relief.

#### **C1.15.04**

Upon request of the County, the Contractor shall submit test data or other evidence that all of the above requirements will be met.

### **C1.16 Noise Levels**

#### **C1.16.01 Interior Noise**

The combination of inner and outer panels and any material used between them shall provide sufficient sound insulation so that a sound source with a level of 80 dBA measured at the outside skin of the bus shall have a sound level of 65 dBA or less at any point inside the bus. These conditions shall prevail with all openings, including doors and windows, closed and with the engine and accessories switched off.

The bus-generated noise level experienced by a passenger at any seat location in the bus shall not exceed 83 dBA and the operator shall not experience a noise level of more than 75 dBA under the following test conditions. The bus shall be empty except for test personnel, not to exceed 4 persons, and the test equipment. All openings shall be closed and all accessories shall be operating during the test. The bus shall accelerate at full throttle from a standstill to 35 mph on level commercial asphalt or concrete pavement in an area free of large reflecting surfaces within 50 feet of the bus path. During the test, the ambient noise level in the test area shall be a least 10 dBA lower than the bus under test. Instrumentation and other general requirements shall conform to SAE Standard J366. If the noise contains an audible discrete frequency as defined in Section B1.01.01, a penalty of 5 dBA shall be added to the sound level measured.

#### **C1.16.02 Exterior Noise**

Airborne noise generated by the bus and measured from either side shall not exceed 83 dBA under full power acceleration when operated at or below 35 mph at curb weight and just prior to transmission up shift. The maximum noise level generated by the bus pulling away from a stop at full power shall not exceed 83 dBA. The bus-generated noise at curb idle shall not exceed 65 dBA. If the noise contains an audible discrete frequency as defined in Section B1.01.01, a penalty of 5 dBA shall be added to the sound level measured. All noise readings shall be taken 50 feet from and perpendicular to, the centerline of the bus with all accessories operating. Instrumentation, test sites, and other general requirements shall be in accordance with SAE Standard J366. The pull away test shall begin with the front bumper even with the microphone. The curb idle test shall be conducted with the rear bumper even with the microphone.

## SECTION C2 - VEHICLE STRUCTURE

### C2.01 Body Structure

#### C2.01.01

Integral design bus structure shall be used. Other types of structure may be used with the approval of the County prior to bidding, after submission of evidence that the bus structure proposed is suitable and proven for heavy-duty transit service over the required lifetime.

Alternatives to the detailed requirements of this subsection may be proposed by the Contractor for approval by the County.

#### C2.01.02

The exterior of each bus shall be of clean and simple shape. The skin shall be of smooth panels, securely fastened to structural members and in a way that permits easy replacement or repair, provides the necessary strength and rigidity for the design requirements of this specification, and protects the basic structure from minor damage. Of primary concern are ease of maintenance, durability, and consistency of appearance.

Reinforced fiberglass and plastic materials shall be excluded from the basic body skin and/or structure, except for non-structural access doors, panels and caps.

Exceptions to this requirement may be proposed by the Contractor for approval by the County.

#### C2.01.03

Water deflecting roof gutters shall be provided above the doors and the driver's side window. The roof gutter over the driver's side window shall extend to the front of the bus. When the bus is accelerated, decelerated, coasting or stopped, water from the gutters shall not spill onto the outside mirrors, driver's window, and windshield or passenger doors.

#### C2.01.04

Air flow characteristics around the moving vehicle shall not cause water, road dirt or tire thrown water to accumulate on the exterior mirrors, driver's side window or front door glass. Water from tires, particularly in turns, shall not be deposited on exterior mirrors.

### C2.02 Interconnection Structure

#### C2.02.01

Buses shall be equipped with an interconnecting structure (hinge) which permanently joins the lead unit and trailing unit sections, allows relative motion between the sections about the pitch and yaw axes, and allows a small amount of relative roll between the sections.

A rotating turntable connection shall be provided between the lead unit and trailing unit to serve as a floor and allow passenger access between the sections of the bus under all operating conditions. The turntable design shall provide for all horizontal and vertical turns that the bus is capable of making without introducing discontinuities between the turntable and adjacent vehicle floors. The turntable shall also accommodate, without damage, a reasonable amount of relative roll between the lead and trailing units. The structures and finishes in the interconnecting section shall be designed to prevent passenger injury under all conditions. The turntable floor cover plate shall be supported so there will be no honing of the floor plate making it sharp at the outer edge. The gap between the floor and the turntable shall be minimized in order to prevent a tripping hazard. It shall be designed for ease of access for inspection and repairs of all devices that are part of it or devices that pass through the turntable area. Under floor turntable components shall be easily accessible; floor plates must be easily lifted and secured in the open position by one person for inspection and repairs; turntable seats shall be quickly and easily removable by one person.

The under floor turntable area shall be completely enclosed by the bellows and bulkheads on the lead and trailing units to prevent drafts into the passenger compartment. The area between the turntable floor and the bellows shall be closed to prevent collection of trash in the bottom of the bellows. Closeouts shall be attached with removable fasteners.

An anti-jackknife joint shall be provided. This joint, by sensing vehicle speed, relative angle between the lead and trailing sections, throttle and braking actions and any other necessary inputs, will control the degree of stiffness in the joint to insure that the bus does not jackknife or operate in a dangerous or unsafe condition. The County shall approve the anti-jackknife joint.

The interconnecting structure shall be designed to prevent separation of the lead and trailing units as a result of a road accident with a commercial or private vehicle.

#### **C2.02.02**

Provide easy access to overhead lines (electric, air, hydraulic, refrigerant) passing through the joint. Hydraulic fittings to be 'Parker' or approved equal. Lines are to be secured, separated, and labeled at the lead and trailing unit bulkheads. Separation shall be maintained on the flexible portion of all lines. All electrical terminations and hose fittings shall be easily visible and easily tightened or removed without removing any other component. Lines, routing, securement and labeling to be approved by the County.

In order to prevent damage to the structure and electrical, air, hydraulic and refrigerant lines when the vertical or horizontal bending capabilities of the hinge are exceeded, the bus shall be provided with appropriate warning devices, brake interlocks and positive mechanical stops. These devices shall operate when the maximum bend angle is being approached in either plane. A means shall be provided so the driver can override the control or recover from the situation. The bus shall be equipped with a reverse speed governor which shall apply the brake and accelerator interlocks when bus speed in reverse gear exceeds 1.5 mph (2.4 km/h) but the bus shall have sufficient power in reverse to back out of wheel locator depressions at a floor hoist. The proposed configuration of these devices and the reverse speed requirements shall be submitted for approval of the County.

### **C2.03 Bellows**

#### **C2.03.01**

Replacement fabric type bellows from 'Hubner' or approved equal with draft-free, no-sag bottom closure and water drains shall be provided between the lead and trailing sections to seal the bus interior and keep it free of water, dirt, and drafts. Bellows hardware shall be corrosion resistant and the under floor area of the bellows shall be easy to clean when necessary. The passageway between the lead unit and trailing unit shall have an inside cross section that is as nearly equal as possible to the inside cross section of the bus bodies, with no tripping hazards created by the turn table cross section or close outs. The bellows shall be durable and its supporting structure and stiffeners shall support the bellows material in a neat, sag-free manner. The Contractor shall supply information on the actual service life achieved by the type of bellows being proposed. Sample of bellows and attaching hardware may be requested for evaluation at the County's option. Bellows to be approved by the County.

### **C2.04 Sub floor**

#### **C2.04.01**

Sub floor material shall be of 3/4-inch (19mm) 7 ply plywood, treated for exterior use, and with no voids. The material shall be wet and dry rot resistant and impervious to insects. All raw edges, wood-to-wood surfaces, and wood-to-metal surfaces shall be coated and totally waterproofed using an approved material prior to installation. The sub floor shall be finished and filled as necessary with a waterproof filler after installation in the manner prescribed by the manufacturer of the floor covering so that no sub floor irregularities and/or seams are visible after installation of the finish flooring. All sub-flooring seams and/or joints will be totally supported by structural framing.

#### **C2.04.02**

The sub floor shall support a capacity load continually with the bus in service without perceptible flexing and it shall be free from squeaks. At GVWR, the floor shall have an elastic deflection of no more than 0.25 inches (6.3 mm) from the unloaded condition. The County shall approve sub-flooring material and attaching methods.

## **C2.05 Floor Covering**

### **C2.05.01**

All aisles, steps, floor areas where people walk and floors in securement locations shall have slip-resistant surfaces. Colors and make of the flooring are specified in Attachment 11. After assembly of the bus, any temporary protective coating on the flooring shall be washed off in the manner prescribed by the flooring manufacturer.

Floor coverings shall be attached continuously to the sub-flooring without voids or trapped debris, using methods and adhesives recommended by the floor-covering manufacturer. The floor shall be neat in appearance, free of tripping hazards and easy to clean by dry methods and wet wash with cleaning solutions. Bus floors shall be undamaged for the life of the bus by routine cleaning with wet wash methods. It is expected that the floor covering (excluding step treads) will last the life of the bus. The County shall approve materials, adhesion methods and trim of the floor covering.

### **C2.05.02**

The outer edge of each entryway shall be marked with 'RCA', or approved equal, 3/16-inch step edge with integral adhesive strip, running the full width of the edge, color in Attachment 11.

A transverse standee line shall be provided at the aft end of the front door entrance area. Color in Attachment 11.

Steps in the aisle shall meet the dimensional requirements of Section C2.10, be the width of the aisle, be plainly marked and illuminated, be covered with 'RCA' or approved equal step tread with 3/16 inch step nosings with integral abrasive strip or approved equal, color in Attachment 11. Step design to be approved.

### **C2.05.03**

The floor and front entrance area shall be covered with 'RCA' or approved equal 3/16 inch ribbed flooring, installed between the wheelhouses and running longitudinally from the rear seat to the front dash, interrupted only for the steps in the aisle and the joint. Provide 'RCA' or approved equal 1/8 inch smooth rubber flooring under the seats. Provide in each tie down location, a wheelchair symbol water-jet cut into the flooring. Symbol design and color are given in Attachment 11." If a smooth flooring material is required on the turntable, supply 2.7mm 'Altro' or approved equal flooring. Color in Attachment 11.

### **C2.05.04**

The wearing area of the driver's station platform shall be covered with a 14-gauge aluminum plate covered with approved non-skid material. Color is given in Attachment 11. The plate shall be attached with screws, and a thin layer of non-hardening caulk shall be used under the plate to prevent water damage or flexing.

## **C2.06 Moldings**

### **C2.06.01**

Interior trim molding around the base of the driver's platform, dash, rear seat riser, wheel housings and any raised seating areas shall be of anodized aluminum, stainless steel or other approved material. The edge of the driver's platform and any raised seating area shall have a right angle anodized aluminum or stainless steel molding. Color is given in Attachment 11. Any trim moldings shall be attached with stainless steel screws and sealed to the floor and vertical surface so as to exclude water and dirt. It shall provide a neat, finished appearance. Anodizing shall be free from scratches and quality control defects.

### **C2.06.02**

Any air ducts located at floor level shall be of stainless steel of adequate strength to resist damage by passenger's feet.

## **C2.07 Interior Paneling and Carpeting**

### **C2.07.01**

The interior panels may be integral with the basic structure of the vehicle or may be decorative. Panels shall have sufficient strength to resist vandalism and to avoid resonant vibrations under operating conditions. The surface of lower sidewall panels and of ceiling panels shall be easily cleanable and resistant to scratches and marking. The interior panels shall be applied in sections and secured properly with a neat finish. All metal attaching hardware shall be stainless steel.

Ceiling panels shall be supported to prevent buckling, drumming or flexing. Panels shall be installed so they will not discolor from contact with structural pieces behind them for the life of the bus. Trim strips at joints of ceiling panels shall be of vinyl clad metal.

Lower sidewall panels shall be easy to remove for maintenance and it is strongly preferred that they be removable without the dismantling or removal of any side window framing or trim. Replacement panels shall fit easily through the doorway of a finished bus.

Provide carpeting in the rear above the couch seat.

Colors and patterns shall be per Attachment 11. Sidewall and ceiling panel thickness shall be a minimum of 0.100 inch (2.5mm). All interior panels, panel size and installation to be approved by the County.

## **C2.08 Wheel housings**

### **C2.08.01**

Second and third axle wheel housings shall be constructed of minimum 14 Gage (.0747 inch, 1.8974 mm) stainless steel. Front axle wheel housings may be fiberglass. Wheel housings shall be reinforced to resist damage from stones, broken tire chains or tire fragments and to prevent any entry of such items into the passenger compartment. The design shall have no exterior ledges that will trap water and/or dirt.

Wheel housings shall provide clearance to permit the bus to be driven to a repair facility with one or more air suspension bellows deflated. There shall be a minimum of 4 inches (102 mm) of clearance, or 3.5 inches with pre-bid approval, between a fully inflated tire and the wheel housing on all sides to afford adequate hand clearance for tire chain application to the driving wheels. Drive axle wheelhouses shall have no fasteners, brackets or gaps that will trap a broken tire chain.

All surfaces facing the bus interior shall have a smooth, clean profile and shall be finished with the material and color specified in Attachment 11. The County shall approve design of the wheel housings.

## **C2.09 Entryways**

### **C2.09.01**

The front platform area including the aisle floor ahead of the wheelhouses shall provide a passageway wide enough to meet the objectives under C2.09.02, past the driver's station and fare collection equipment and into the bus proper. The design shall accommodate passengers in wheelchairs as well as on foot (reference section C1.02.07).

### **C2.09.02**

The vertical clearance between the top of the front door opening and the floor shall be a minimum of 68 inches (173 cm).

The front doorway shall have a minimum clear opening of 30 inches (762 mm); the second doorway shall have a minimum clear opening of 26 inches (660 mm). Clear opening is measured between door panels or handrails, whichever is less.

### **C2.09.03**

The floor area just inside the doors shall be slightly sloped to prevent water from collecting. Sealing at the door bottom shall preclude water entry. Floor edge nosing per Section C2.05.02 shall be supplied.

## **C2.10 Steps**

### **C2.10.01**

Risers shall be vertical and they shall be 7.5 to 10 inches (109 to 254 mm) equal within a variation of 0.5 inch (13 mm). Usable step tread depth between the nosing and the riser shall not be less than 11 inches (279 mm).

## **C2.11 Not Used**

## **C2.12 Thermal and Sound Insulation**

### **C2.12.01**

The floor, walls, ceiling and propulsion compartment of all buses shall be adequately insulated to:

- Control body surface temperatures
- Assist in providing the required interior temperature environment
- Obtain the required noise control.

Insulation in the engine compartment must withstand grease, oil, dirt and steam cleaning for the life of the bus, or it shall be located on the passenger side of the engine compartment, and fully protected against vandalism.

### **C2.12.02**

Roof insulation shall be at least 1 inch (25.4 mm) in thickness. In addition, it is preferred that the underside of the roof skin be coated with an approved undercoating material to reduce condensation in cold, damp weather, and noise. Sidewall insulation shall be at least 0.75 inch (19 mm) in thickness. Material shall be selected and installed so insulating properties will not be impaired during the life of the bus. Alternate configurations may be proposed for approval by the County.

## **C2.13 Strength Requirements**

### **C2.13.01**

Each bus, at capacity load under dynamic and static conditions, shall not exhibit deformation or deflection that will damage panels or structural members or impair operation of doors, windows, or other mechanical elements. The Contractor will be requested to provide a written certification or copies of actual test results or both for all requirements of this section.

Static conditions include the case of a bus at rest with any one wheel or combination of wheels mounted on a 6-inch (15 cm) curb.

Dynamic conditions include operation on a variety of road surfaces at prudent speeds up to the maximum for each type of bus and road irregularities such as chuckholes and railroad level crossings.

The structure of each bus, at the maximum practical passenger load, shall withstand without permanent deformation or damage, impact and inertial loads due to uneven roadways traversed at prudent speeds or, occasional aberrations at normal speeds.

### **C2.13.02**

The bus body and roof structure shall withstand a static load equal to 150 percent of the curb weight evenly distributed on the roof with no more than a 6 inch (152 mm) reduction in any interior dimension. Windows shall remain in place and shall not open under such a load, but shall be easily 'open able' when used as emergency exits.

### **C2.13.03**

The bus shall withstand a 25 mph (40 km/h) impact by a 4,000 pound (1814 kg), post-1973, American automobile at any point, excluding doorways and bellows, along either side of the bus or front end with no more than 3 inches (76 mm) of permanent structural deformation at seated passenger hip height. This impact shall not result in sharp edges or protrusions in the bus interior.

**C2.13.04**

Exterior panels below the window line and their supporting structural members shall withstand a static load of 2,000 pounds (907 kg) applied perpendicular to the bus anywhere below the floor line by a pad no larger than 5 inches (127 mm) square. This load shall not result in deformation that prevents installation of new exterior panels to restore the original appearance of the bus. Components located behind these panels cannot be damaged by this test method.

**C2.14 Resonance****C2.14.01**

It shall be a design objective to provide buses where all vibrational frequencies of the body, panels and structure, including vertical, lateral and body torsional modes, are sufficiently outside the bandwidth of all primary and major harmonic operating frequencies of all rotating and reciprocating equipment, including the engine, so as to preclude resonant vibrations.

**C2.15 Fatigue Life****C2.15.01**

The basic bus structure shall be designed so that fatigue damage will not occur throughout the service life of the vehicle.

**C2.16 Exclusion of Water****C2.16.01**

Each bus shall be tested to assure that the underside, wheel houses, floor, exterior body, windows, passenger doors, lamps, access doors and other openings do not admit water into the interior of the bus or into any compartments covered by exterior doors during operation.

Any equipment compartment located inside the coach shall be sealed from water entry.

**C2.16.02**

During production, preferably before interior components and insulation are installed, each bus must be tested in accordance with a water test proposed by the Contractor and approved by the County. Approval must be given on duration of test, rate of water flow, amount and placement of nozzles, and nozzle pressure/pattern. Buses that fail any part of this test shall be repaired and 100 percent re-tested until they pass.

Use of sealers, externally applied to already attached components to meet the water test requirement, is prohibited. All exterior hardware must be installed. No temporary sealing methods can be used.

After delivery, the County will water test all buses in a bus base wash rack. Leakage during this test will be repaired by the Contractor, who will also make appropriate corrections in the assembly line and factory water test.

**C2.17 Resistance to Corrosion****C2.17.01**

All exterior materials, finishes, surface treatments, and any other bus surfaces subject to the conditions below shall either be of non-corroding material or fully protected by the application of corrosion preventatives. Buses will be subjected to tire-thrown rocks, road salt, calcium chloride, puddles of water, saltwater air, commercial floor, ceiling and wall cleaning solutions, window washer solutions, human wastes, and extended periods of damp and rainy weather. Buses will normally be stored outdoors.

**C2.17.02**

The underside of each bus shall be coated with a non-flammable material, 'Ashland Petroleum Co.' Tectyl, 'Liquid Plastics Limited' Isoclad, 'Dolchem' 775I Hydro Armor, 'PPG' Corashield (white) or approved equal, to inhibit corrosion. The corrosion inhibitor shall be of a light color (preferably white) to aid in under coach inspection and maintenance. Special attention will be given to applying the inhibitor on all horizontal frame members, wheel housings and other dirt/water catchers. All bellows, valves, air system components, brake system components and electrical connectors shall be covered when applying the undercoating to facilitate easy replacement of parts when required. Application of the under coach corrosion inhibitor shall be approved by the County.

The battery compartment and adjacent area shall be protected against corrosion from battery fluid. Specific information is in section C2.23.

**C2.17.03**

All unpainted exterior and interior hardware shall be non-magnetic stainless steel or steel coated with ASTM-B-633-85 Fe.Zn SC 3 (Type 2 - supplementary gold chromate treatment iridescent yellow). The County reserves

the right to request sample testing to determine conformity using methods referenced in ASTM-A-165, A-219 and/or B-117. Other methods of corrosion protection may be used. Alternate hardware coating methods must demonstrate the same corrosion protection life results using the Salt Spray (Fog) Testing ASTM-B-117 and be approved by the County. Exterior or interior component hardware that will see removal and replacement to normally service the component must be non-magnetic stainless steel or other non-rusting material.

#### **C2.17.04**

Completed unassembled frame structures, sub-assemblies or component parts shall not be stored or assembled in locations that allow moisture to rust the interior or exterior of the materials. No rusted or corroded metal may be used in the bus. After assembly, the interior of all sidewall tubing up to the roof and under floor frame (structure) tubing shall be coated with 'Waxyol Inc.' 120-4, 'Ashland Petroleum Co.' Tectyl corrosion preventative, or approved equal, applied in accordance with the manufacturer's recommendations and with the manufacturer's approved application devices. Frame tubing shall have drain holes with an approved anti-plugging method installed to eliminate any water trapping or build-up. Any Waxoyl application hole not utilized as a water drain shall be closed and sealed using plastic plugs. The use of 'CoraTube' material is strictly prohibited. The Contractor shall be responsible for providing an approved method and equipment to check for proper application.

Any bus body or chassis assembly carried on an ocean-going vessel must be carried below deck on a Ro-Ro ship. Shipping methods and corrosion protection to be approved by the County.

#### **C2.17.05**

All unexposed metal body parts shall be primed or painted prior to assembly. Joints between dissimilar metals shall be treated or protected so as to prevent electrolytic corrosion for the service life of the vehicle (reference section C7.01). All bright metal exterior components such as (but not limited to) lamp sockets, brackets, mirror assemblies, rivets and clamps shall not rust.

### **C2.18 Exterior Finish**

#### **C2.18.01**

Bus exteriors shall be painted to the general design shown in Attachment 12. Minor variations to this color scheme may be required in order to accommodate the specific styling of the Contractor's buses. Colors and material are given in Attachment 11.

After execution of the Contract, the Contractor shall supply to the County detailed drawings of the front, rear, both sides, and roof of the bus that will be supplied. Within 90 days of receipt of the drawings, the County will return these drawings to the Contractor with details of the color scheme included.

#### **C2.18.02**

The exterior of the bus shall be finished with 'E.I. DuPont' Imron 5000, 'PPG' Delta 2800, 'PPG' Durethane, or approved equal polyurethane enamel. The finish coat shall be free of runs, sags, dirt and/or silicon contamination, orange peel and areas of no gloss. Finish coat thickness and application method shall be as specified by the finish coat manufacturer. All primers and fillers applied before the finish coat shall be approved as to material, thickness and application by the manufacturer of the final finish coat. Surface preparation of the substrate shall be similarly approved. ReflectORIZED tape will be applied as shown in Attachment 12. The Contractor is required to submit procedures for the installation of any reflective tape. The Contractor shall supply copies of all required approvals to the County before production. All exterior paint, primer, fillers, etc. shall be lead-free.

There shall be no bare or exposed metal surfaces showing on the exterior of the bus, exclusive of ornamentation, accessories and bumpers.

#### **C2.18.03**

The County will approve location of manufacturer's name or insignia on the exterior of the bus.

#### **C2.18.04**

Any small decals installed on the bus body, e.g. 'Jacking Point', 'Electrical Main Switch', 'Air Tank Drain', shall be black or white letters (depending on the paint color) on clear.

### **C2.19 Interior Finish**

#### **C2.19.01**

Bus interior ceiling and vertical surfaces not melamine, vinyl or bright metal, including certain areas of the driver's station, shall be painted with 'E.I. DuPont' Imron 5000, 'PPG' Delta 2800, 'PPG' Durethane, or approved equal polyurethane enamel. Inside finish and primer coats shall be applied per the specifications of the finish coat manufacturer. Colors and material are given in Attachment 11. The County shall approve the degree of driver station paint 'flatness'.

All interior paint, primer, fillers, etc. shall be lead-free.

**C2.19.02**

The County will approve location of manufacturer's name or insignia on the interior of the bus.

**C2.20 General Painting Preparation**

**C2.20.01**

All metallic and non-metallic surfaces shall be thoroughly cleaned, by methods in accordance with the paint manufacturer's recommendations, immediately before the first coat of paint is applied. All metal-to-metal joints shall be properly primed. Wood-to-metal surfaces shall be coated with anti-squeak compound. All paint and surface preparation methods shall be approved by the County.

**C2.21 Fleet Numbers**

**C2.21.01**

Buses shall have fleet numbers applied in sequence with factory VIN numbers. Factory VIN numbers shall be in one sequential group per delivery group. The County will inform the Contractor of the fleet number sequence within 90 days of contract execution. The Contractor will submit a complete list of fleet and VIN numbers for approval by the County before the start of production.

**C2.21.02**

The fleet numbers shall appear:

On the four corners and the center of the rear of the bus. The numbers shall be of reflective vinyl, Helvetica type, five inches (127 mm) high (color in Attachment 12).

In large characters longitudinally on the roof for legibility by police aircraft. See Attachment 12.

On the interior of the bus above the right side of the windshield in yellow vinyl, and above the rear window in black vinyl with 2 inch (51 mm) Helvetica Medium numbers.

On the outside of a side window near the front and rear on each side of the bus. These numbers shall be 5-inch (127mm) reflective vinyl characters (color in Attachment 12).

The County shall approve fleet number style and locations.

**C2.22 Builder's Plate**

**C2.22.01**

A metal builder's plate shall be installed on the inside of the front of the bus, listing the manufacturer's name, bus or chassis model, VIN number, date of manufacture and any other required information. The plate shall be installed with permanent metal fasteners. Alternatively, a non-removable foil tag mounted to an aluminum plate pop riveted to the bus may be supplied. The County shall approve location.

## **C2.23 Battery Compartment**

### **C2.23.01**

Each bus shall be equipped with a battery compartment and preferably a swing-out battery tray, accessible from outside only and hinged to swing open counter-clockwise on the curbside or clockwise on the street side. It is preferred that the battery compartment be on the curb (right) side of the bus. It is preferred that the compartment also slide out, in order to provide working room beside the engine. The stowed batteries are parallel to the longitudinal centerline of the bus. The compartment shall be as far from exhaust heat, engine heat and other generated heat as is practical and still be conveniently located for inspection, maintenance and battery replacement. The design of the compartment shall prevent the entry of dirt and water. In addition a metal 24 volt caution tag, approximately 12 inches long by 4 inches tall (305mm by 102mm) shall be provided on the inside of the battery compartment access door. This tag shall be held in place by a means other than glue. The tag shall have red Helvetica lettering on a white background. Provide a diagram of the battery interconnect wiring on the battery access door. The County shall approve the battery compartment and all components.

### **C2.23.02**

The frame and tray shall be constructed to provide ease of movement without deformation of members or mounting hardware. The compartment, tray, and hardware shall be of acid-proof stainless steel. The compartment shall vent battery fumes and will have drainage for washing batteries and compartment. Provision shall be made to securely latch the battery tray in the retracted position and, in addition, a detent or a spring activated positive type lock shall be provided in the extended position. There shall be no lip on the edge of the tray where the batteries are slid into and out of the tray. The tray shall easily accommodate any four group 31 batteries from major manufacturers. A swing-out tray shall have a zerk fitting to lubricate the tray pivot.

## **C2.24 Electronic Equipment Compartment**

### **C2.24.01**

Each bus shall be equipped with a fully sealed compartment located on the left front wheelhouse to provide a mounting location for a radio transceiver, data package, security camera controller, APC equipment, and other electronic equipment. The compartment shall contain four slide out shelves capable of height adjustment. Shelves shall securely latch in the stowed position. Provide an easily removable locking bar to retain the slide-out shelves in the stowed position.

### **C2.24.02**

The compartment shall be equipped with a power supply per section C6.03.02.05, and shall be a minimum 40 inches high by 21 inches wide by 27 inches deep. The compartment shall be sealed against the entry of water, and equipped with a door, retained with approved fasteners. The County shall approve the box design, shelves, and power supplies.

## **C2.25 Towing and Lifting**

### **C2.25.01**

Provision shall be made for lifting and towing the bus from the front with both types of wreckers used by the County. Buses will be towed in the forward direction with the front of the bus lifted. All bus bodies, including articulation joints, shall be sufficiently strong to prevent permanent deformation or damage while being lifted or towed.

Alternate provisions for towing and lifting may be proposed for approval by the County. The County must approve all provisions for towing and lifting.

### **C2.25.02**

The County has two types of tow trucks: four equipped with the Super Duty Underlift (SDU) system, and one equipped with the truck bar system.

Depending on how the bus is configured, the following lift and tow methods will be used.

#### **1. SDU Wrecker towing provisions**

The SDU wrecker uses two 2-inch pins mounted on the underlift to lift and support the bus while being towed. In addition, two safety chains from the wrecker must be attached to the bus.

Two pin receivers shall be installed on the chassis behind the front bumper. These receivers shall be fabricated from 3 inch by 3 inch by ¼ inch square tube material and be mounted vertically at equal distances from the centerline of the vehicle with a center-to-center distance of 28 inches to 35 inches. A plate will be welded to the bottom of each receiver with a 2-¼ inch hole to accept a 2-inch pin mounted on the underlift. The receivers shall be designed to support the front of the bus when lifted and towed with an appropriate safety margin.

The contractor will also provide two safety chain attachment points under the front of the bus each having a 1-½ inch hole. The safety chain attachments shall be designed to withstand the forces generated to the safety chains in an emergency break away situation with an appropriate safety margin.

2. Truck Bar Wrecker towing provisions

The Truck Bar wrecker uses a combination of two lift chains and two fixtures mounted to the tow bar to lift and support the bus while being towed. In addition, two safety chains from the wrecker must be attached to the bus.

Two connection points for lift chains shall be provided under the front of the bus. The connection points shall be designed to support the front of the bus when lifted and towed with an appropriate safety margin. In addition, a method of supporting the front of the bus to the tow bar shall be provided. Working in combination with the lift chains, the connections on the bus for the tow bar must be able to withstand the pulling and pushing force to the front of the bus while being towed. One of the following options shall be provided for the tow bar;

Two tow eyes, minimum 1 ½ inch inside diameter, (not hooks), mounted vertically, above the front bumper. The tow eyes shall be mounted at equal distances from the centerline of the vehicle with a center-to-center distance of 19 3/8 in, 25 ¾ in or 31 ¾ in and accept the tow fixtures currently used on the County's truck bar.

Alternatively, the Contractor may provide protection for the front bumper to ride against the truck bar without damage.

The contractor will also provide two safety chain attachment points under the front of the bus each having a 1-½ inch hole. The safety chain attachments shall be designed to withstand the forces generated to the safety chains in an emergency break away situation with an appropriate safety margin.

3. All tow receivers, connection points, eyes, and safety chain attachment points shall be fastened securely to the frame and shall be located so they will be inconspicuous but accessible for attachment. Use of towing and lifting points on the bus shall not damage bumpers, access doors, flaps, etc.

The Contractor shall supply documentation of lifting and towing procedures for each type of County tow truck.

The Contractor shall supply any fixtures not currently owned by the County that are required for towing as described above with the County's wreckers. These fixtures shall be provided for each wrecker.

Contractors are strongly encouraged to view demonstrations of both the county's tow equipment and towing procedures. Demonstrations may be arranged on request. Proposers with questions regarding tow equipment/procedures or who would like to schedule demonstrations should contact the person listed in Section A1.06.

**C2.25.03**

Hoisting and jacking points shall be provided on each bus for use with a pit hoist, post lift using one post per axle, platform hoist or a portable hoist under each wheel or axle. Dimensions for the County's platform and axle hoists are given in Attachment 13.

With a tire or dual tire set completely flat and the bus on a hard level surface it shall be possible to safely jack up the bus with either a common 10 in (254 mm) high hand jack or a 10-ton floor jack.

If it is not possible to slide a floor jack under the jacking point with airbags deflated at any wheel end location, provide suitable jacking points on the outside of the body at each wheel opening.

With the bus at normal ride height, there shall be clearance to slide a 9.5-inch (241 mm) high portable hydraulic jack under a jacking point at each wheel.

These locations shall be sufficiently strong to withstand the jacking force required to lift that portion of the bus without damage to any vehicle components. The bus shall be capable of being lifted at any one or combination of three points without permanent deformation.

**C2.25.04**

Towing points under the bus and hoisting and jacking points shall be marked with riveted, permanently attached metal tags of a contrasting color. A riveted, permanently attached metal diagram showing size and location of

hoisting and jacking points shall be provided. The County shall approve the design and location of the tags and diagram.

**C2.25.05**

Provide sufficient bumper and frame strength to allow another bus or a maintenance push/tow vehicle to push the bus from either end without body or bumper damage.

## SECTION C3 - FURNISHINGS

### C3.01 Door Panel Configuration

#### C3.01.01

The front door shall be of the slide-glide two section, inward opening type, and the rear door shall be of the slide glide or outward-opening type. Dimensions of doors shall provide the openings set forth in section C2.10. The County shall approve maximum outward projection of door panels in any position. Alternative configurations may be proposed by the Contractor for approval by the County. The County shall approve door panels, handrails, glass and their design.

#### C3.01.02

Door panels shall be of adequate strength to perform their function without buckling or shaking. Doors may be made from aluminum sheet and extrusions, assembled with threaded fasteners. Fastening system to be non-corroding per C2.17.03. The intent is a repairable door. Window glazing, retained by a rubber channel, preferably with an integral locking strip for easy replacement, shall be provided which covers at least 80 percent of the area of each door panel, with two piece glazing required (reference section C3.11.03).

#### C3.01.03

Sensitive edges are not to be supplied on the front door panels.

#### C3.01.04

Durable rubber weather stripping 2 to 3 inches (51-76 mm) per panel shall be provided on the mating edge of each door panel. The rubber mating edge of the forward panel of each door shall overlap the outside of the rear panel when closed.

Additional approved weather stripping shall be provided around all door panels and the doorway openings, as necessary, to preclude the entry of water, dirt, drafts or objectionable noises.

### C3.02 Door Actuators and Linkages

#### C3.02.01

A single door engine as made by 'Vapor Division', or approved equal shall power each pair of door panels. The time to fully open or close shall be adjustable between 2 and 4 seconds. Doors shall remain in the closed position without rattling during bus operation. Actuators shall be designed to prevent doors from slamming open or closed under any combination of door control, front door air release, and door panel position. Exhaust air from actuators and controls shall be vented outside the bus or with County approval, vented quietly inside the bus. Alternative configurations may be proposed by the Contractor for approval by the County. The County shall approve door actuators, linkages, electronic control devices, enclosures and their designs. Proximity switches are strongly preferred to micro switches.

#### C3.02.02

The actuator assembly shall be concealed from view and shall be located for easy servicing access. Access panels to the actuator assembly shall be hinged at the top with metallic 'piano' hinge material. Hinges shall preferably be secured with nut and bolt type fasteners.

Each actuator access panel will be equipped with 2 adjustable quarter turn spring latches, or other approved latches, easily operated by hand and requiring no tools. Each access panel shall be held open by means of an over-center spring, gas cylinder or approved prop. Access panels shall have a minimum travel of 130 degrees when opened and shall not interfere with other internal components. Access panels shall be open able with the door panels open or closed.

#### C3.02.03

Door actuator linkages shall be designed to preclude lubricant from becoming visible or from getting on surfaces that passengers may touch, throughout the service life of the bus. Any shafts and/or linkages exposed shall be enclosed with a metal shield, painted to match the area color. Operation of doors shall produce no pinch or trap hazard to passengers.

### C3.03 Door Controls

#### C3.03.01

Front door controls may be air operated and remain functional with the master control switch in any position. Rear door controls shall, and front door controls may, be electrically operated and remain functional with the master control switch in any position except off. Continuous electrical drain for any door control position shall be

minimized. Alternative configurations may be proposed by the Contractor for approval by the County. The County shall approve door controls and their locations.

#### **C3.03.02**

Provide two push buttons, one to control the front, and one to control the rear door. Push once to open, push again to close. Buttons light up when the associated door is open. Buttons to be ergonomically located. Buttons and location to be approved.

#### **C3.03.03**

A means shall be provided so the driver, when the bus is parked, can open and close the front door from outside by an external concealed control. If this control is electric, there shall be no battery drain with the switch in either position, and the master switch off.

#### **C3.03.04**

An approved valve shall be located in the driver's station that will isolate the front door engine from the bus air system and release the front doors for manual opening.

### **C3.04 Rear Door Safety Devices**

#### **C3.04.01 General**

The County shall approve the design, components and the operation of the rear door sensitive edges and the interlock systems.

#### **C3.04.02 Sensitive Edges**

Sensitive edge sensors shall be provided in the meeting edges of the rubber weather stripping of the rear door. The design of the sensor shall be coordinated with the design of the door and the rubber so the following criteria are met:

The door edge system shall be designed to release the door-closing force and to reopen it sufficiently to immediately and fully release a person or object that is caught in the closing doors. It shall have rubber edges and/or seals (used to activate the automatic opening cycle on doors or alert driver to obstruction) with a maximum rubber durometer reading of 60 and an optimal reading of 55 [+/- 5], Shore A scale. If the door edges are used as a pressure-sensing device, sealed ends shall be vulcanized rubber. No silicon shall be used for this purpose.

Doors shall reopen when closing on a wood block 1.5 inches thick (381 mm) by 2.0 inches wide (208 mm) and placed perpendicular with the 1.5-inch thickness between the rubber edges and the 2-inch width contacting the rubber edges. The door shall reopen when the wood block is placed at all positions along the vertical edges, except within 2 inches from the edge at the top and within 2 inches from the edge at the bottom. The system shall be designed to react to this obstruction within no more than 1 second commencing from the time the sensor edges come in contact with the rod. The system will react with a total minimum pressure difference of 80 mm of water, measured with a manometer attached to sensor edge activation switching mechanism (if used).

The system shall be designed and equipped to signal the driver if the doors completely close on any part of a person's body or any object. This signal shall be audible to the driver and shall sound when the edges close on a square block of wood .75 inches (191 mm) perpendicular to the plane of the door, except within 2 inches from the edge at the top and within 2 inches from the edge at the bottom.

The complete sensitive edge system shall be supplied by 'Vapor Division' or approved equal.

#### **C3.04.03 Not Used**

#### **C3.04.04 Interlocks**

The rear door interlock system shall be enabled when the master switch is in any position except off. The rear door shall be interlocked to prevent the bus from moving unless the door is fully closed.

A brake interlock shall be provided and the brakes on at least one axle will be applied when, or before, the rear door begins to open. Activation of the rear door interlock system shall activate the brake stop lamps. The brake interlock system shall incorporate a speed sensor to prevent engagement of the interlock over 3 mph (4.8 km/h). This speed sensor system shall fail to a condition of brake interlock operation at any speed.

An accelerator interlock shall also be provided to prevent the engine from speeding above idle when the rear door interlock is actuated and the rear door is open. The accelerator pedal shall be released and free when the interlock is activated. The brakes cannot be released nor the accelerator applied while the doors are open except as listed under Interlock Override System.

No more than 35 pounds (15.9 kg) of force shall be required to remove a 1.5 x 2 inch (38 x 51 mm) wood block (2 in edge vertical) after the rear door closes on the block and the sensitive edge or safety device on the rear door is inoperative. This requirement also applies to the front door.

Locked doors shall require a force of more than 100 pounds (45.4 kg) to open manually. When locked doors are manually forced to open, damage shall be limited to the bending of minor door linkage with no resulting damage to the doors, engines, and complex mechanism.

#### **C3.04.05 Not Used**

#### **C3.04.06 Emergency Release Mechanism**

A release means shall be provided inside the front and rear door actuator boxes to allow passengers to manually open the doors in an emergency, using a force of no more than 15 pounds (11.4 kg) with the coach resting on level road. The door interlock system shall apply the brakes to stop the bus when the rear door release is actuated, or alternatively when the rear door is moved from the closed position. The releases shall be in an easily accessible location with a frangible plastic cover, and they shall be properly labeled.

### **C3.05 Passenger Seating Layout**

#### **C3.05.01**

Passenger seating shall be provided generally as shown in Attachment 14, with the exact layout subject to precise bus size, floor layout, location and size of wheelhouses, location of doors, etc. The minimum number of wheelchair tie down positions per bus shall be as given in section C1.01. It shall be a design goal to provide the maximum number of seats possible within the seat spacing and comfort limitations specified. No rear-facing seats including wheelchairs shall be allowed. Aisle facing seats shall be provided between the third axle wheelhouse and the rear couch seat; otherwise forward-facing seats are preferred. Not more than three aisle-facing seats may be installed together without an additional divider barrier being installed.

#### **C3.05.02**

Transverse seats shall be cantilever-mounted to the inside wall of the bus. Raised seats shall be provided with a foot platform. The height of the non-compressed seat cushion above the floor or raised platform shall be approximately 17 inches (432 mm).

#### **C3.05.03**

Transverse spacing shall be 30 7/8 to 32 inches (784 to 813 mm) center to center or a minimum of 29 inches (737 mm) hip-to-knee. 'Hip-to-knee' is defined as the horizontal distance measurement taken in a straight line from the lowest open point on a non-compressed vertical seat back cushion to any fixed panel, seat or other object located forward of the seat. All seats in every bus must meet these requirements. Each passenger seat will be 18 inches (457 mm) wide.

#### **C3.05.04 Priority Seating Signs**

Priority seating signs will be supplied and installed by the County.

### **C3.05.05**

Rear couch seats shall adequately fill the space or, approved closeouts shall be used. These closeouts will be sloped so as to eliminate pockets and trash-catching areas.

### **C3.05.06**

The detailed seating layouts shall be submitted to the County with both the Technical Proposal and as part of the Best and Final Offer submitted by the Contractor. In addition, the seating layout will be considered at the design review but final approval will not be given until the prototype review.

## **C3.06 Seat Construction**

### **C3.06.01**

Passenger seats shall be 'American Seating Company' Model KC548 or approved equal, 36-inch (915 mm) version with spring and board bottom cushion construction (except folding seats). All seat back and bottom cushion boards shall be of marine grade plywood. All seats shall be of a coordinated design including transverse seats, aisle facing seats, seats across the rear of the bus, and folding seats. Seat back cushions and seat bottom cushions throughout the bus shall be interchangeable to the maximum extent possible.

### **C3.06.02**

Seat cushions and backs shall be upholstered with vinyl, colors in Attachment 11. Seat foam shall be 'Chestnut Ridge' CR SAFGUARD or approved equal. Welting, if used, shall be of the same type and weight vinyl used on the seat. Certain transverse seats, per section C3.09, shall have provision for attachment of a seat-to-ceiling stanchion on the aisle side. Longitudinal and transverse seat cushion and rear couch seat attachment methods shall be approved by the County. Plastic seat back color in Attachment 11. Plastic parts of the seat shall be treated with PK-20 anti-graffiti coating as supplied by 'Specialty Coatings and Chemicals, Inc.' or approved equal. Color of cantilever seat frames is in Attachment 11.

### **C3.06.03 Tie-down Area Seating**

Provide one of the following arrangements:

1. A three-passenger aisle-facing folding seat, with a transverse barrier at the aft end (color in Attachment 11) shall be provided behind each front wheelhouse where passengers in mobility aid devices can be accommodated and to provide regular seating when no passengers using mobility aids are aboard. The transverse barrier shall be wide enough to allow both wheels of a standard size adult wheelchair to rest against the barrier in the same plane. Provide a longitudinal grab rail on the top of the three-passenger seat back, for the use of persons in the tie-down area.
2. A two-passenger aisle-facing folding seat plus a two-passenger forward-facing seat shall be provided behind each front wheelhouse where passengers in mobility aid devices can be accommodated, and to provide regular seating when no passengers using mobility aid devices are aboard. Provide a longitudinal grab rail on the top of the aisle-facing seats for the use of persons in the tie down area.

Folding seats shall be comfortable, easy and safe to stow and deploy, and designed for minimum thickness in the folded position. They shall lock into the deployed position with an easy to use release, and shall detent or lock into the stowed position with an easy to use release. Provide large, easy to grasp seat release latch handles, red in color. The bottom cushion of folding seats shall be tilted up on the forward edge, with the angle approved by the County. Exposed portions of the stowed seat shall be faced with the material specified in Attachment 11. Seat bottoms shall be retained with screws. Back and bottom cushions shall be removable from the seat frame.

An 18-gauge metal wheelchair tie down instruction plate shall be supplied in each tie down location. This plate and its placement will require the approval of the County.

### **C3.06.04**

Longitudinal seats shall have individual back and bottom cushions. They shall have armrests on both fore and aft sides. With the approval of the County, specific armrests can be eliminated if that side is placed against a barrier or panel. A barrier with both sides finished per Attachment 11 shall be attached to the armrest. Seat backs shall be attached to, or braced from, coach sidewall to preclude deformation due to long term flexing.

### **C3.07 Seat Handrail**

#### **C3.07.01**

Transverse seats shall have a passenger assist handgrip, which shall be upswept on the aisle end to provide a vertical handhold for standing passengers. The handgrip shall be cast aluminum coated with an energy-absorbing material, color per Attachment 11. The handgrip shall be securely mounted on the seat frame.

### **C3.08 Wheelchair Securement Devices**

#### **C3.08.01 Design Load**

Securement systems and their attachments shall restrain a force in the forward longitudinal direction of up to 2,000 pounds (907 kg) per securement leg or clamping mechanism and a minimum of 4,000 pounds (1,814 kg) for each mobility aid.

#### **C3.08.02 Location and Size**

The securement system shall be placed as near to the accessible entrance as practicable and shall have a clear floor area of 30 inches by 48 inches (762 mm by 1219 mm) minimum. Such space shall adjoin, and may overlap, an access path. Not more than 6 inches (152 mm) of the required clear floor space may be accommodated for footrests under another seat provided there is minimum of 9 inches (229 mm) from the floor to the lowest part of the seat overhanging the space. Securement areas shall have fold-down seats to accommodate other passengers when a wheelchair or mobility aid is not occupying the area, provided the seats, when folded up, do not obstruct the clear floor space required.

#### **C3.08.03 Mobility Aids Accommodated**

The securement system shall secure common wheelchairs and mobility aids and shall either be automatic or easily attached by a person familiar with the system and mobility aid and having average dexterity.

#### **C3.08.04 Orientation**

Both securement devices or systems shall secure the wheelchair or mobility aid facing toward the front of the vehicle.

#### **C3.08.05 Movement**

When the wheelchair or mobility aid is secured in accordance with manufacturer's instructions, the securement system shall limit the movement of an occupied wheelchair or mobility aid to no more than 2 inches (51 mm) in any direction under normal vehicle operating conditions.

#### **C3.08.06 Stowage**

When not being used for securement, or when the securement area can be used by standees, the securement system shall not interfere with passenger movement, shall not present any hazardous condition, shall be reasonably protected from vandalism, and shall be readily accessed when needed for use.

#### **C3.08.07 Seat Belt and Shoulder Harness**

For each wheelchair or mobility aid securement device provided, a passenger seat belt and shoulder harness, complying with all applicable provisions of 49 CFR part 571, shall also be provided for use by wheelchair or mobility aid users. Such seat belts and shoulder harnesses shall not be used in lieu of a device that secures the wheelchair or mobility aid itself.

#### **C3.08.08**

The mobility and securement system shall consist of materials supplied by 'American Seating Co.' or approved equal. Passengers in mobility aids shall be restrained with separate retractable lap and shoulder belts, black in color. The shoulder belt shall be secured to a bus wall or separate structural member if a window precludes wall attachment. The occupant restraint shall provide properly positioned belts across both lap and shoulder regardless of whether a person is sitting in a wheelchair with armrests, a scooter or other mobility aid.

The mobility aid shall be secured with a four point system. The two rear belts, retractable, red in color and permanently mounted, shall have a belt loop and a buckle on the outer end. One shall be located near the intersection of the wall and floor, and the other near the aisle end of the barrier and the floor. One front belt shall be permanently mounted near the intersection of the wall and floor at the front of the tie down area. This red belt shall have a belt loop and a buckle at the outer end and be equipped with a hand-operated retractor. The other front belt is identical to the belt above except that it is a loose belt, able to be temporarily attached to a non-obtrusive floor attachment location. A compartment or a sturdy pouch shall be supplied in an approved location to store this belt when not in use. Provide two clips or temporary attachment points on the bottom of each folding seat so the driver can temporarily attach the wall side belts while prepping the area.

The securement system shall be easy to access and utilize by the bus driver, so as not to require the driver to kneel on the floor or create awkward body movements, exposing the driver to possible strain or back injury. Restraint belts, when not in use, shall retract, fold or stow so as to give a neat appearance, present no tripping or catching hazard, and cause no interference with the use of the folding seats.

The County shall approve the securement system.

### **C3.09 Stanchions and Handrails**

#### **C3.09.01**

Each bus shall be equipped with stanchions and handrails to allow passengers to safely enter and exit and move about the interior of the bus.

#### **C3.09.02**

Interior handrails and stanchions shall permit sufficient turning and maneuvering space for wheelchairs and other mobility aids to reach a securement location from the ramp.

#### **C3.09.03**

Handrails and stanchions shall be provided in the entrance to the vehicle in a configuration which allows persons with disabilities to grasp such assists from outside the vehicle while starting to board, and to continue using such assists throughout the boarding and fare collection process.

A horizontal passenger assist shall be located across the front dash of the vehicle and shall prevent passengers from sustaining injuries on the fare collection device or windshield in the event of a sudden deceleration. Without restricting the vestibule space, the assist shall provide support for a boarding passenger from the front door through the boarding procedure. Passengers shall be able to lean against the assist for security while paying fares.

#### **C3.09.04**

Overhead handrails shall be provided which shall be continuous except for a gap at the rear doorway and the joint.

Handrails shall be between 71 and 73 inches (180-185 cm) above the floor or raised foot platforms and 33 inches (84 cm) apart equally spaced from the bus centerline. In the event any portion of the floor is sloped or ramped, the horizontal handrails shall be sloped in coordination to preserve the 71-73 inch (180-185 cm) dimension. The curbside handrail shall be angled toward the bus sidewall just aft of the front doorway, if necessary, to provide clearance for deboarding passengers. All stand-offs or brackets shall be painted to compliment the coach interior. Horizontal handrails shall be separate from any vertical stanchion.

Provide flexible drop strap loops every three feet (91 cm) along the ceiling handrail. Drop strap material, size, and attachment method to be approved.

#### **C3.09.05**

Handrails and stanchions shall be sufficient to permit safe boarding, onboard circulation, seating and standing assistance, and alighting by persons with disabilities.

#### **C3.09.06**

Vertical stanchions immediately behind the driver shall be 'dog-legged' so that the floor attachment does not impede or interfere with wheelchair footrests. The driver seat platform, to the maximum extent practicable, shall not extend into the aisle or vestibule beyond the wheel housing.

**C3.09.07**

The minimum interior height along the path from the ramp to the securement location shall be 68 inches (173 cm).

**C3.09.08**

Vertical stanchions shall be provided at the inner aft corner of the front doorway, and at the second doorway; these shall be an integral part of the modesty panel at the aft side of the rear doorway (reference section C3.10). A vertical floor to ceiling stanchion shall be provided at the inner front corner of the rear doorway.

Vertical seat to ceiling stanchions shall be provided at alternate transverse seats. Groups of aisle-facing seats shall have a vertical stanchion at every other seating position with a minimum of two stanchions. Additional vertical stanchions may be required in the front of the coach because of extended spacing of seats forming the wheelchair securement areas. The aft stanchions at the aisle facing seats over the rear axle wheelhouses shall be reinforced in an approved manner to prevent deformation by passengers.

Provide vertical stanchions fore and aft of the joint.

**C3.09.09**

Grab rails, stanchions and handrails shall have a cross-sectional diameter between 1.25 inches (32 mm) and 1.5 inches (38 mm) or shall provide an equivalent grasping surface, and have eased edges with corner radii of not less than 0.125 inch (3 mm). All items that could be used as a handrail shall be placed to provide a minimum 1.5 inches (38 mm) knuckle clearance from the nearest adjacent surface. Handrail or stanchion attachment points in doorways shall not trap drawstrings on clothing, backpacks or other items carried by passengers.

Grab rails, stanchions and handrails shall be stainless steel or stainless clad pipe type 304 ASTM 554. Finish shall be as given in Attachment 11. Fittings and connectors shall have no sharp corners. Welding of stanchions and/or brackets is prohibited. All bends shall be made cold with no heat applied. Vertical stanchions shall not be more than 0.25 inch (6.25 mm) out of plumb; horizontal handrails shall not be more than 0.25 inch (6.35 mm) out of parallel with the bus floor and sidewall. Stanchion 'Ts' shall have an extra fastener to prevent movement.

Stanchions that connect between the ceiling or structures attached to it and the floor or structures (such as seats) attached to it (except for aisle-facing seats) shall have one end mounted in rubber to allow for minor flexing of the bus structure without placing undue stress on the stanchions or their hardware. Provide 80 percent penetrations of the stanchions into the cups.

**C3.09.10**

The complete details of the stanchions and handrails, including detailed layout drawings and details on all hardware, supports, clamps, etc. shall be submitted to the County prior to the design review. Final approval will be given at prototype review.

**C3.10 Divider Panels****C3.10.01 Not Used****C3.10.02**

A two-piece divider panel shall be provided at the aft side of the rear doorway. The lower section beginning 0.5 inch (13 mm) from the floor and stopping at a height of 34 inches (864 mm) above the floor and the second section starting 34 inches (152 mm) and stopping at a height of 60 inches (152 cm) above the floor. There shall be no gaps between the panel and the sidewall that will allow a hand, foot or other body part to be caught in the panel assembly or pinched by passenger door operation. If an integral vertical stanchion is used as the securing point on the aisle (inboard) side, the second panel section shall have knuckle clearance for the entire vertical height distance of the second panel.

**C3.10.03**

Lower divider panels shall be of 0.25-inch (6.4 mm) thick plastic laminate, with horizontal handrails along the top. Color and pattern for the lower section is specified in Attachment 11. The upper section shall be laminated safety glass at least 0.1875 inches (4.76 mm) thick fully enclosed and secured in a metal frame. Divider panels shall be adequately supported to prevent permanent or undue deformation in use and to prevent rattle and shake when the bus is in operation.

**C3.10.04**

Provide, on the right front wheelhouse, a flat area enclosed with stanchion tubing and containing an equipment box.

### **C3.10.05**

A one-piece divider panel shall be placed at the front of the street and curbsides of the trailing unit immediately behind the turntable. It shall be approximately 34 inches (86 cm) high by 34 inches (86 cm) wide, flush to the floor and sidewall or bellows. It shall be similar to the panel in C3.10.03.

## **C3.11 Windshield, Driver, Side, Door and Rear Window**

### **C3.11.01 General**

Openings shall be provided in the body structure to accommodate a front windshield, side passenger windows and a driver's window. It is preferred that the Contractor supplies a rear window. It is preferred that all side passenger window openings be identical. Side window openings shall be designed to provide good visibility to seated and standing passengers. All windows shall be fully supported by metal sub-structure. Windows shall not be supported in any manner by fiberglass material. Tint shall be applied in the inter-layer compound.

Openings for windows set in rubber channels shall match the contour of the glass. The gap between the glass and the opening shall not exceed the gap allowed by the channel manufacturer. The plane of the glass shall match the plane of the opening, or 'fence'  $\pm 1/8^{\text{th}}$  inch.

Openings for windows with metal sash shall not exceed the gap allowed by the sash manufacturer. No shims are allowed between the window opening and sash.

Any non-compliant opening will be replaced with a compliant opening before the bus is approved for shipment.

Alternatives to the detailed requirements of this subsection may be proposed by the Contractor for approval by the County. The County shall approve the design for all glazing, including arrangement and hardware.

### **C3.11.02 Windshield**

The windshield of all buses shall be of laminated safety plate or float glass meeting the requirements of American Standard 1 (AS1), and shall be a nominal 0.25 inches (6.3 mm) thick. It shall be designed to optimize visibility for the driver during all driving and loading conditions, and it shall be designed to minimize reflections from the interior of the bus during night operations. It is required that the windshield be of two or more piece construction. The windshield shall have an integral shade band at the top, and the color of the glass shall be as given in Attachment 11.

### **C3.11.03 Side Passenger and Optional Rear Windows**

All side and rear windows shall be of laminated safety glass which meets the requirement of American Standard 2 (AS2) and shall be a nominal 0.25 inches (6.3 mm) thick. Tint for side and rear passenger windows is given in Attachment 11. If used, the rear window shall be approximately 1,560 square inches (10,062 cm<sup>2</sup>) in area. All side and rear windows shall be made of flat glass.

If the side destination and route signs (reference section C3.17.03 and C3.17.04) are located behind the upper part of a side window, there shall be a separate window in front of the sign(s), with tint as given in Attachment 11.

### **C3.11.04 Driver's Window and Door Glazing**

The driver's windows and door glazing shall be of laminated safety glass that meets the requirement of AS2 and shall be a nominal thickness of 0.25 inches (6.3 mm) thick. Tint for the driver's windows and door glazing is given in Attachment 11. The driver's window and door glazing shall be made of flat glass.

The driver's window shall be easily adjusted with a one hand operation, and it shall be of two half sections sliding horizontally. The front sliding section shall be provided with handles both inside and outside, and the outside handle shall be located approximately in the vertical center of the sash. The rear section shall have an inside latch. Handles shall have rounded corners. Machined and finished drain holes shall be provided to drain water to the exterior of the bus from the lower channels. There shall be no hand or finger pinch hazard when either half of the window is opened. The driver's window shall be hinged at the top and usable as an emergency exit.

### **C3.11.05 Window Hardware**

All window sash shall be 'Excel', 'Storm-Tite Rapid Replacement', or approved equal, finished as given in Attachment 11. All window hardware including screws retaining the window frame to the bus body shall be non-corroding.

### **C3.11.06 Emergency Exit Instruction Plates**

Each emergency exit window location shall be labeled with a metal instruction plate that is riveted in place. Design and placement of these plates to be approved by the County.

### **C3.11.07 Window Liners**

Supply easily replaceable anti-graffiti window liners to all side windows in the trailing section of the bus. Liners to be supplied by the window manufacturer.

## **C3.12 Not Used**

### **C3.13 Windshield Wipers and Washer**

#### **C3.13.01**

Electrically powered windshield wipers shall be provided to clean each side of the windshield. The County is particularly interested in cleaning as much of the right side of the curbside windshield as possible. The wipers shall have two speeds plus an intermittent control position. Failure of the intermittent wiper function shall not disable the wiper system. The control shall have a park position causing blades to be parked at or near the longitudinal centerline of the bus in the vertical position or in another position if approved by the County. The windshield wiping system shall be 'Bosch', 'Sprague' or approved equal. It is preferred that motor(s) be rebuildable. Each wiper blade shall be replaceable within three minutes. The County must approve maintenance accessibility of the wiper motor(s) and any electronic control system.

#### **C3.13.02**

An electrically powered windshield washer shall be provided to spray cleaning solution onto the left and right sides of the windshield. The solution shall be sprayed on the windshield by a pump, from a translucent, corrosion resistant reservoir located in the dash compartment and filled from outside the bus without opening any major panels. The reservoir cap shall be attached by a cable to the filler neck. The reservoir shall hold not less than 1 gallon (3.8 liters). The spray shall be applied by wet arm nozzles with a minimum of four streams per arm. Washer fluid shall hit the windshield over the entire length of the wiper blade. The County must approve maintenance accessibility of the pump and reservoir.

### **C3.14 Main Interior Lighting**

#### **C3.14.01**

Ample glare free light shall be provided for reading by seated and standing passengers, for safe entry, exit and circulation within the bus, and as an aid in producing a pleasant, attractive interior appearance at all times of the day and night. The lighting system shall be of a coordinated design approved by the County.

#### **C3.14.02**

The system shall provide an average illumination of no more than 5 to 10 foot candles at the reading plane of a seated passenger, 33 inches (840 mm) above the floor at a 45-degree angle. The aisle floor shall be lit to allow safe passenger movement within the coach.

#### **C3.14.03**

Lower levels, or lamps that are on only when the front door is open, may be used in the front of the bus (reference section C1.11). Lamps may be divided into two groups if necessary, controlled by "ON" and "PARTIAL" on the light switch. Lamps shall be single pin and have a 10,000-hour life expectancy. Colored sleeves may be used to reduce light levels.

#### **C3.14.04**

Lighting shall be 'Transmatic' L20 or approved equal. Lighting equipment shall be complete including fixtures, lamps, controls, power supplies and accessories. Fixtures shall be designed, constructed and installed to be tamper resistant, to facilitate cleaning and maintenance, to preclude rattling or visible vibration and to prevent the entrance of water, dust, dirt and insects. Fluorescent fixtures using 6 foot (183 cm) long or other approved length warm white lamps behind polycarbonate lenses shall be provided running the length of the bus interrupted only as necessary for the doors and joint. Fixture interiors shall be white enamel finish. Lamp lenses shall be securely retained with approved fasteners. Tamper-resistant fasteners to be used in the rear section of the bus only.

Provide lighting in the turntable area. Forward facing lamps, if provided, to be off whenever both doors are closed.

#### **C3.14.05**

The power supply shall be a dual or single lamp inverter ballast operating at 20,000 Hz or above, producing no perceptible noise for passengers or the driver nor any noise annoying to dogs. Lamps and ballasts must be compatible with each other. Ballasts subject to frequent cycling shall be of the pre-warming type. Ballasts shall be 'Transmatic' or approved equal and easily replaceable without removing the fixture.

### **C3.15 Entryway and Curb Lamps**

#### **C3.15.01**

Any doorway immediately adjacent to the driver shall have, when the door is open, at least 2 foot-candles of illumination measured on the entryway.

#### **C3.15.02**

Other doorways shall have, at all times, at least 2 foot-candles of illumination measured on the entryway.

#### **C3.15.03**

The vehicle doorways, including doorways in which ramps are installed, shall have outside lamp(s) which, when the door is open, provide at least 1 foot-candle of illumination on the street surface for a distance of 3 feet (914 mm) perpendicular to all points on the bottom step tread outer edge. Such lamp(s) shall be located below window level and shielded to protect the eyes of entering and exiting passengers.

#### **C3.15.04**

Entryway and outside lamps shall be illuminated when the master switch is in NIGHT or CL&ID position, except front entryway and front and rear outside lamps are illuminated only when the associated door is open.

### **C3.16 Exterior Lighting Equipment and Back-up Alarm**

#### **C3.16.01**

Turn signals, stop lamps, marker lamps, flashers, backup lamps and backup signals shall conform to all Federal and State of Washington requirements. Exterior lamps shall be selected and positioned in a coordinated manner that will lend a pleasant appearance and clean lines to the exterior of the bus. All coach incandescent and LED lighting shall be a nominal 12 Vdc. Special consideration shall be given to using latest state of the art type marker and stop lamps where possible. The County shall approve all exterior lamps and their placement.

All lamp bulbs or LED lamps shall be easily replaceable by one person in less than 5 minutes. The inside of lamp lenses shall be easily cleanable. All lamp assemblies shall be sealed to prevent the entry of water and dirt. Exterior lamps shall not admit water into the bus body for the lifetime of the bus. All lamps shall have enough slack wiring length to allow easy removal and servicing. All lamp components shall have quick disconnects to allow easy replacement. All lamp sockets, bodies and other metal parts/hardware shall not corrode and/or rust for a period not less than 2 years.

### **C3.16.02 Head Lamps**

Each bus shall be provided with two or four approved heavy duty headlamps operating from a nominal 12 Vdc and providing low and high beam operation controlled by a sealed, foot-operated switch convenient to the operator's left foot. The lamps shall be replaceable in 5 minutes or less. Headlamps shall be aimed before coach delivery. Headlamp bezels shall be retained with machine screws and rivnuts or their equivalent.

### **C3.16.03 Brake and Tail Lamps**

Two combination brake and tail lamps meeting the requirements of SAE J1398 and J2040 and with a diameter of 7 inches (178 mm) each shall be provided on each side of the bus mounted vertically. The lamps shall be located to provide adequate space for advertising panels, (reference section C3.27). Lamps shall not be mounted on a rear compartment door and shall be visible with the door open. Lamps to be 'Dialight' LED or approved equal.

### **C3.16.04 Back-up Lamps & Alarm**

'Dialight' LED or approved equal backup lamps, one at each side of the rear of the bus above the bumper, shall be provided. An audible backup signal, 'Floyd Bell, Inc.', 'Ecco', or approved equal, shall be provided.

### **C3.16.05 Turn Signals & Emergency Flashers**

Turn signals shall be placed on the front of the bus, on the rear of the bus, and on each side directly above all axles. Height shall be approximately 48 inches (122 cm) above the ground. Turn signal lamps shall be amber in color and meet the requirements of SAE J1395. Provide two lamps above each wheel opening at approximately the 11 o'clock and 1 o'clock positions. Side turn signal lamps to be 'Dialight' LED no. 18001AB809 or approved equal. All side turn lamps to be visible in the rear view mirrors by a seated driver.

Front turn signals to be 'Dialight' LED or approved equal. Rear turn signals shall have a diameter of 7 inches (178 mm). Lamps to be 'Dialight' LED or approved equal, mounted between the combination brake and tail lamps on each side. These signals shall be controlled by two sealed type foot-operated switches, 'Cole Hersee' No. 7792 or approved equal, one for left turns and one for right turns, convenient to the driver's left foot, per Attachment 15. Supply a short harness from the switches to a waterproof connector located near the base of the steering column. The turn signal switch mounting plate and switches will be removed as a unit for servicing.

Directional signals shall be equipped for flashing of all lamps for emergency use, controlled by an easily reached switch on the side console. This control will operate the directional signals with the master switch in any position. Special power requirements when directional signals are used as emergency flashers can be referenced in section C6.03.07. The emergency flasher shall provide an audible click to the driver.

### **C3.16.06 Strobe Lamp**

On hybrid buses only, provide a 'Whelen' or approved equal model 201000AE strobe lamp plus a model CS240D power supply on the engine door. Provide a switch to operate this lamp on the operator's side console.

### **C3.16.07 Marker Lamps**

Buses shall be equipped with clearance, side marker and identification lamps as specified in SAE J2042.

The identification lamps shall be individual units and mounted in the center of the front and rear roof crown panels. The front lamps shall be 'Dialight' amber LED marker lights and the rear lamps shall be 'Dialight' red LED marker lamps or approved equal.

Corner roof marker lamps shall be provided at each corner of the bus with 'Dialight' amber LED marker lamps in the front and red LED marker lamps or approved equal at the rear.

Additional 'Dialight' amber LED marker lamps or approved equal shall be provided at the roof edge on each side of the bus at the midpoint.

### **C3.16.08 License Plate Lamp**

Provide an LED rear license plate lamp. The bulb shall be shielded from direct view of the following driver, and the lamp is to be shock resistant to withstand repeated closing of the engine door.

### **C3.16.09 'Third' Brake Lamp**

Provide the manufacturer's standard LED third brake lamp(s), positioned so as not to interfere with the rear route number sign, access doors, ad frame or other component. Location to be approved.

### **C3.16.10 Engine Compartment Hazard Lamps**

If the rear directional signal lamps are obstructed or hidden when the engine compartment door is in the open position, a second set of LED lamps shall be located so as to be visible with the door open. These lamps shall be activated by the 4-way flasher control switch and be amber in color. The lamps shall be located to be visible for the same distance as the normal rear directional lamps. These lamps shall be mounted to resist shock in a protected location and shall not pose a head bump hazard for those working in or around the engine compartment opening.

### **C3.16.11 Towing Connector**

An electrical receptacle shall be provided behind the front bumper of each bus, adjacent to the air connector described elsewhere in this section, to receive power for illuminating the tail lamps, stop lamps and directional signals from a towing vehicle. The receptacle shall be a 7-way receptacle assembly, 'Cole-Hersee' No. 12063 or approved interchangeable equal. The pins shall be coated with corrosion resistant paste. The termination end of the receptacle shall be strain relieved and sealed against water entry. The County shall provide pin-wiring configuration within 90 days of contract execution. Location, installation and pin wiring arrangement to be approved by the County.

## **C3.17 Destination Signs**

### **C3.17.01 General**

Provide an automatic, electronic destination sign system on each bus. When a reading is selected at the driver's station, it shall be automatically displayed on the front and curbside of the bus, and the route number shall be automatically displayed on the rear and street side. The sign system shall be a 'Luminator' Horizon or approved equal LED display system. The County shall approve the design and placement of the sign system and sign boxes. Readability of the signs will be approved at the prototype review.

### **C3.17.02 Front Sign**

The front destination sign shall be in a 16 by 160 matrix configuration, with a display dimension of 8.01 inches (20.3 cm) high by 64.6 inches (164 cm) wide. The front sign will be located as close to the sign box glass as possible and the installation shall be designed to minimize glare and maximize readability. The Contractor and the sign manufacturer shall jointly engineer the installation of the sign into the bus as an integral component. Evidence of this design effort shall be made available to the County.

### **C3.17.03 Side Sign**

The side destination sign shall be an 8x96 matrix with display dimensions of 2.8 inches (7.1 cm) high by 36.3 inches (92.2 cm) wide and be sufficiently compact so as to fit neatly in the side window. It shall be located on the right (curb) side of the bus in the top of the second window behind the front door. Exact location to be determined at prototype review.

### **C3.17.04 Rear Sign and Street Side Sign**

Provide 16x48 matrix signs in the rear of the bus and in the top of the front street side window behind the driver's barrier. If the top of the front street side window (behind the driver's barrier) is unavailable for sign placement, then place the sign in the top of the next window back.

### **C3.17.05 Not Used**

### **C3.17.06 Sign Control**

Signs shall be controlled from the driver's station. This control / display unit shall be used to view and update display messages. It shall be recess mounted on the front sign box door. The control shall utilize a conductive rubber pad keyboard with tactile feel and be designed to withstand the bus environment.

The control shall contain a two line by 20-character display. This system shall inform the driver on the status of the sign system. It shall contain an audio annunciator that beeps to alert the operator to view the display for a message, or beeps indicating that a key is depressed.

The control shall allow two destination messages to be pre-selected. The driver shall be able to quickly change the pre-selected message without re-entering the message code. Additionally, the control unit shall be able to access diagnostic functions and display corresponding results relative to sign maintenance.

Up to four digit route numbers shall be selectable by the driver and shall be independent from the destination sign message. Leading zeros shall not be displayed. The system shall have the additional ability to sequentially display multi-line destination messages, but with the route number portion remaining stable in a constant 'on' mode at all times.

Sign readings shall also be controllable without driver intervention via AVL information.

#### **C3.17.07 Sign Features**

No blank messages shall be shown during a message sequence unless specifically programmed. Sequential messages shall be displayed in a manner and at a rate that makes it easy to read and comprehend the complete reading. Readings shall be stored in electronic memory on plug-in circuit boards. The message displays shall not be adversely affected by continued exposure to sunlight or other environmental conditions normally associated with bus operation. The system shall incorporate an auto-blanking feature that will cause the entire display area to be blank (black) within 30 seconds after the vehicle master power switch is turned off.

#### **C3.17.08 Sign Electronics**

Each sign system shall have a system processor board, mounted in the front destination sign, capable of controlling up to 10 components. The system shall be capable of operating additional information displays or signs, such as interior information signs, as a future expansion possibility.

The system shall be designed so that the destination signs can display independent messages or the same message, as chosen by the message programmer during creation of the message listing.

There shall be the capability of storing up to 10,000 message lines with a capability of increasing this amount to 12,000 message lines. The sign memory shall be programmed with listing codes supplied by the County prior to delivery. There shall be no public relations messages programmed into the system.

#### **C3.17.09 Sign Programming**

The system shall be programmable on the coach with the use of a PCMCIA Flash Memory Card. The PCMCIA receptacle on the coach shall be readily accessible and incorporate a visual method to indicate progress and successful completion of the memory transfer process. Memory transfer shall commence immediately upon inserting the PCMCIA card into an energized signage system.

A programming software package shall be provided to generate message lists for the destination sign system. The software shall operate using an IBM or compatible personal computer with a Pentium® processor and hard drive. The software shall allow the PCMCIA card to be programmed directly from the PC through the appropriate PCMCIA card adapter. The software shall be designed for ease of deleting or adding messages to a destination sign list.

The software will provide capability for custom message writing, writing by selection of pre-programmed standard and/or variable fonts, by the creation of custom fonts or, the creation of graphic displays placed anywhere within the display area. The software shall provide a means of adjusting the length of time the messages are displayed from one-tenth second to twenty-five seconds duration. The blanking time between messages shall also be adjustable from one-tenth second to twenty-five seconds duration. Each line or blanking time shall be capable of having a different retention time.

The system shall also be programmable via wireless download through an on-board systems router.

#### **C3.17.10 Component Quality**

Electronic circuit boards shall be of a quality to facilitate repeated repair cycles and maintain a 10-year minimum life. All I.C. sockets shall be machined pin, plated with a noble metal, preferably gold. All connectors, including I.C. sockets and board edge connectors shall be plated with a noble metal, preferably gold. Boards shall be mounted to reduce vibrational stress. The system shall operate at a nominal input voltage of 24 volts DC (+/- 6 volts DC). The sign system shall be internally protected against voltage transients and/or R.F. interference. Sufficient transient interference suppression will be included so the system will withstand transient pulses of 600 volts for 10 microseconds and 100 volts for 10 milliseconds. Sign interface cabling shall be shielded throughout the coach.

#### **C3.17.11 Visibility**

The signs shall be visible and legible to a 5 foot 3 inch (160 cm) tall person standing as described below.

Front and rear signs: 3 feet (914 mm) from the front (rear) of the bus and 1 foot (305 mm) from the side.  
Side sign: directly in front of the sign and 1 foot (305 mm) away from the side of the bus.

These are minimum requirements; the signs shall also be visible at greater distances.

Characters on signs shall have a width-to-height ratio between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10, with a minimum character height (using an upper case 'X') of 1 inch (25 mm) for signs on the boarding side and a minimum character height of 2 inches (51 mm) for front 'head signs', with 'wide' spacing (generally, the space between letters shall be 1/16 the height of upper case letters), and shall contrast with the background, either dark-on-light or light-on-dark.

#### **C3.17.12 Not Used**

### **C3.18 Sign Lighting and Boxes**

#### **C3.18.01**

The LED intensity automatically adjusts to the ambient light. Special attention will be given to using and mounting LEDs that will not fail due to vibrational stress when the coach is used in normal revenue service.

#### **C3.18.02**

Sign mechanisms and boxes shall be constructed of materials designed to minimize static build-up and subsequent dirt accumulation. The front and rear destination sign cavities shall be sealed to prohibit the entry of dirt, dust, water and insects during normal revenue service or when coach interior is cleaned with a 'cyclone' type cleaner.

Sign boxes shall not vibrate or rattle and shall be sealed to exclude dirt, dust, water and insects. Each sign shall be housed in a protective cover that is removable with the sign.

A means shall be provided on the side sign to prevent accumulation of dirt on the inside of the bus window or on the outside of the sign box window. Heated front sign glass shall be supplied. Signs shall be visible at all times with no fogging of any glass.

#### **C3.18.03**

Sign boxes shall have access doors to allow replacement of sign mechanisms and to allow servicing and cleaning. The front sign compartment access door shall have quarter turn adjustable spring latches with handles. The front sign compartment access door shall have a metallic piano hinge running the entire width of the access door; if bottom hinged, provide appropriate retaining straps. No components shall need to be removed to allow full opening of the sign door. The sign is removed and installed through this door unless the County agrees to other methods.

The rear and street side sign compartment access doors shall have quarter turn adjustable spring latches. These latches shall have slotted heads requiring the use of a screwdriver to open the access door. The rear and street side sign compartment access doors shall be hinged at the bottom by metallic piano hinge running the entire width of the access door.

#### **C3.18.04**

Front and rear exterior sign glass (defined as the glass attached to the coach body) shall be masked to keep sign wiring and other compartment items hidden from view. Sign visibility shall not be affected with masking installed. Material used shall be black. Installation, visibility and type of material used will require approval of the County.

**C3.19 Not Used**

**C3.20 Dash Sign Holders**

**C3.20.01**

Holders shall be provided on the right front dash and in the bottom of the first side window on the right side to hold cardboard or plastic express or special route signs 20 inches (508 mm) wide by approximately 8 inches (204 mm) high. Front and side holders to be of clear Lexan or equivalent material. All corners shall be rounded to eliminate possible passenger injury. Units shall be attached with riv-nuts and machine screws. Supply mounting reinforcements as appropriate. The County at the design review shall approve the sign holder design, location and mounting.

**C3.21 Exterior/Interior Access Panels**

**C3.21.01**

All equipment requiring access from outside of the bus body shall be provided with metal-hinged access doors, hinged at the top or side and operable with one hand if possible. Panels shall be designed not to rattle, to remain and be secured in both the closed and full open position, and to be quickly and easily opened and closed during servicing and maintenance. All access doors and the surrounding panel material shall be reinforced as necessary to prevent distortion of body panels. Large panels shall open and close easily. If needed, special grab handles shall be used to enhance ease of use. If an access door is large or heavy, making it inconvenient to open easily, it shall be provided with an approved gas cylinder assist mechanism. Mounting brackets for the gas cylinder must be welded, bolted, or riveted to the door and body. Gas cylinders shall not be equipped with any mechanical locking mechanism in the open position. It is preferred that all under floor skirt panels be open able, even if no equipment is immediately behind them. It is preferred that all doors open 180 degrees, or as close to that as practicable.

Panels shall be held securely in the closed position by gas cylinders, positive quarter turn adjustable latches or, if small, by spring loaded hinges or other approved latching methods. A nominal 5/16 inch (7.9 mm) square-end tool shall open all exterior access panel locks except the access door for the battery main switch. All fasteners that retain access panels shall be captive in the cover. Panels shall close against rubber stops (bumpers). Hinges, springs and latches shall be of non-corroding material (reference section C2.17.03). A rubber hinge is required on an exterior electrical panel door beneath the driver's side window; otherwise they are not allowed. Metal hinges are to be attached with the following fasteners, in descending order of preference: bolts and nuts; bucked rivets; monobolts; pop rivets. The County strongly prefers metal hinges on all other access doors. Latches shall be adjustable.

All exterior compartments, other than the battery compartment, must be completely sealed; cable, harness, wire or piping entry is by watertight fittings. Duckbill drains are supplied. Compartment openings have a continuous bulb seal with formed corners. The outside access door makes continuous contact with this seal. Electrical or other components that should not be wet are preferably mounted on the sides, back, or top of the compartment.

Access panels shall not interfere, and/or suffer any damage when the coach is towed or lifted. Panels may be built to 'quick disconnect' from the coach under towing and/or lifting circumstances. The County will approve methods used to obtain this result.

It is preferred that high-value components not be located near the doors in the compartments around the bottom of the bus where they will be vulnerable to minor collision damage.

**C3.21.02**

Access panels shall include, but not be limited to:

Engine Access	Engine Air Cleaner Intake	Engine Oil Dipstick and Filler
Radiator	Battery	Engine Fuel Filler
Electrical Panel	Engine Coolant Check and Filler	HVAC
Transmission Access	Exhaust after treatment	Hybrid Drive Batteries
Drive Shaft Access		

**C3.21.03**

Access panels shall be provided on the interior of the bus as required for servicing and maintenance. If hinged, they shall be hinged at the top or side and designed to remain and be secured in both the closed and full open position.

Provide an access hatch to allow a mechanic to remove the drive shaft from inside the bus.

Floor or rear couch seat area access panels for the engine or other components shall be easily fastened and unfastened and shall be finished to match the surrounding area. Floor openings shall have a metal angle on the inside of the opening that seals the plywood edges. The access panel shall have a "T" molding which is recessed into the floor rubber as necessary to preclude a tripping hazard. Fasteners shall be captive in the panel. The panel shall be supported by bus structure on all four sides. Floor hatches shall be sealed to prevent noise and fumes from entering the passenger area. Engine access panels shall not be hidden behind additional sound proofing panels.

#### **C3.21.04**

Access panels shall be designed to allow plenty of clearance for use of hands and all appropriate maintenance tools. Panels shall have positive stops to prevent hinge damage when opening. Use of adhesive backed foam tape as a door sealing method is prohibited. The County shall approve access panels, floor hatches, locks and all associated hardware.

### **C3.22 Bumpers**

#### **C3.22.01**

Bumpers shall be installed front and rear to cushion, distribute and transmit collision shock to the bus structure. Bumper heights shall be selected considering S.A.E. standards to protect against automobile damage, and considering the optional bumper height provisions of FMVSS 215. Bumper design and placement to be approved by the County.

#### **C3.22.02**

The front bumper shall be a 'Romeo-Rim' HELP semi-pneumatic, energy absorbing bumper of the wrap-around type, or approved equal. The bumper shall not have separate end caps. It shall be at least 8 inches (203 mm) high, and shall project at least 4 inches (102 mm) ahead of the foremost part of the bus. The bumper shall provide immediate, automatic resetting after impact without any adjustments or manual operations. 'Talfourd Jones' TACTAL or approved equal black anti-skid material shall be applied across the total horizontal surface of the bumper.

The bumper shall protect the bus from damage as a result of 6.5 mph (10.5 km/h) impacts at any point by the striker defined in FMVSS 215 loaded to 4000 lb. (1820 kg) parallel to the longitudinal centerline of the bus and 5.5 mph (8.8 km/h) impacts into the corners at a 30 degree angle to the longitudinal centerline of the bus. The bumper shall provide 5 mph (8 km/h) fixed barrier impact capability, without passenger load, with no damage to the bus. Color is given in Attachment 11.

#### **C3.22.03**

The rear bumper shall be a 'Romeo-Rim' HELP semi-pneumatic energy absorbing bumper or approved equal. Rear bumper performance with the conditions given in section C3.22.02 shall be 4 mph (6.4 km/h), 4 mph (6.4 km/h) and 2 mph (3.2 km/h) respectively. Color is given in Attachment 11.

The bumper shall have integral anti-ride capability; adjacent body panels shall be designed to protect the bus while discouraging persons from standing on or hitching rides on the bumper.

#### **C3.22.04**

It is preferred that there be suitable bus structure between the rear bumper and the aft end of the rear axle wheel opening to protect these areas of the bus.

### **C3.23 Exterior Fittings**

#### **C3.23.01 License Plate Holders**

Provide four 1/4-20 riv-nuts and four hex head cap screws with nylon washers front and rear for attaching U.S. standard size license plates. The attached license plates shall be generally flush with the outer surfaces of the bus to avoid being caught by the brushes of the bus washer. License plates shall be held securely to preclude rattling or scratching of adjacent surfaces.

#### **C3.23.02 Radio Antennas**

All buses shall be equipped with the following antennas. Placement of the antennas shall not interfere with numbers painted on the roof. Unpainted antennas are mounted with riv-nuts and machine screws, with installation to be approved by the County. If the bus does not have a metal roof, suitable ground planes, to be approved by the County, shall be installed. Antennas shall be mounted in the center of their ground planes.

##### **C3.23.02.01**

The first antenna is a UHF low profile antenna, quarter wavelength, unity gain, 50-ohm impedance, terminated with a UHF connector, and factory tuned for an operating frequency between 452.8 and 458.075 MHz. It shall be a 'Sinclair Radio Laboratories' Excaliber Model 321A or approved equal and shall be uniformly located 6 to 7 feet (183 to 212 cm) from the forward edge of the roof of the bus. The ground plane for this antenna is minimum 47 x 36 inches.

##### **C3.23.02.02**

The second antenna shall be a Vehicle Locator antenna (AVL), tuned to 49.830 MHz, Model ASP-569 WBK as manufactured by 'R.A. Miller Industries, Inc.' or approved equal, and mounted a minimum of 48 inches (122 cm) behind the UHF antenna. The ground plane for this antenna is 53 x 48 inches. Mount the antenna to the ground plane (or metal roof) without a gasket.

##### **C3.23.02.03**

Provide a 'Mobile Mark, Inc.' model RM3-2400 or approved equal antenna with 12 feet of lead-in cable. This antenna shall be mounted near the front edge of the roof.

##### **C3.23.02.04**

Antenna lead-in cables, unless otherwise noted, shall be RG-58/AU 'Belden' type 8219 or approved equal coaxial cable connecting each antenna with the electronic equipment compartment. Provide 3 feet (914 mm) of excess cable at each end. The antenna cables shall be routed through continuous 0.75-inch (19 mm) rigid thin wall metallic conduit or nylon tubing installed to allow easy replacement of the wire and prevent rubbing and chafing. No connectors shall be installed; ship loose.

##### **C3.23.02.05**

Access covers, painted to match the adjacent ceiling panels, shall be supplied on the interior ceiling allowing access to the antennas. Mounting of these covers will be with riv-nut and machine screws. A metal backing plate shall be used.

##### **C3.23.02.06**

Provide an 'Amtech' model AT5704 or approved equal transit signal priority tag in the upper front curb-side corner of the front of the bus. See Attachment 24 for detailed installation instructions.

#### **C3.23.03 Reflectors**

Two red reflectors shall be provided on the rear of each bus.

At least three reflectors shall be provided on each side of all buses with the forward reflectors amber and the rear one red.

Care shall be taken in selection and placement of the reflectors to both provide appropriate warning to other vehicles and complement the overall exterior appearance of the bus. Mounting shall be with machine screws and riv-nuts. Peel-and-stick reflectors are acceptable.

#### **C3.23.04 Exterior Steps and Handholds**

If the top of the windshield cannot be reached from the ground by service personnel who are 60 inches (152 cm) in height, the bus shall be equipped with approved steps and handholds to facilitate hand cleaning of the

windshield. These devices shall preclude slipping and damage by the user to the bus exterior (reference section C3.22.02)

**C3.23.05 Horn**

Dual electric heavy-duty horns shall be provided and mounted to prevent entry of water and dirt into horn trumpets. The horns shall sound high and low notes and provide a sound that is effective as a warning without being unduly annoying. The horn shall be clearly audible over 75-dBA traffic noises at a distance of 300 feet (91 m).

**C3.23.06 Static Ground**

A method of grounding static electricity shall be provided on each bus and will be approved at the design review.

**C3.23.07 Splash Aprons**

A splash apron consisting of three separate panels shall be provided across the entire bus at the rear of the driven wheels and separate splash aprons shall be provided behind all other wheels.

**C3.23.08 Fenders and Rub Rails**

Any rubber fenders must be approved. Fenders to be attached with ¼-20 aluminum threaded fasteners. The wheel opening on the outside of the bus shall be neatly finished with no visible weld points. Metal rub rails are allowed only if they are necessary to cover a panel joint and if no rubber is in contact with the bus skin.

**C3.23.09 Bicycle Rack**

Provide a 'Sportworks' or approved equal three bicycle rack mounted to a bracket mounted through the front bumper. See Attachment 22. The rack (but not necessarily the bracket) shall be physically interchangeable with the 'Sportworks' racks previously purchased by the County. If the stowed bike rack obscures the front turn lamp(s), in the opinion of the County, provide front turn lamp(s) on the bike rack.

**C3.23.10 General**

All exterior riv-nuts shall be non-magnetic stainless steel and waterproof. Machine or cap screws shall be non-magnetic stainless steel.

**C3.23.11 Roof Safety Features**

If any roof-mounted equipment is provided (e.g. HVAC, or batteries), anti-skid walking surface, safety strap attachment points, and permanent no-step markings as necessary, shall be provided. The County to approve all features.

**C3.24 Passenger Signal**

**C3.24.01 General**

The main function of the chime signal systems is to enable any mobile passenger to inform the driver and the other passengers that the bus is requested to stop at the next bus stop (system A) and to alert the driver that a mobility aid passenger wishes to disembark (system B). These systems shall alert the driver, both visually and audibly, and separately from each other. The Contractor may propose integrated or separate system(s) that accomplish this. The County shall approve the design, position, materials and operation of both systems.

**C3.24.02 System A**

The purpose of this system is to request stops and to alert the driver that a fully mobile passenger wishes to disembark. One solid-state electronic chime signal shall be provided. A separate light signal shall be provided on the driver's instrument panel and shall illuminate when the system is activated. Two lighted display signs, one single-sided at the rear of the driver's barrier, and one single-sided opposite the rear door, shall be mounted near the center line on the ceiling.

System A signals shall be actuated by wire-centered clear plastic cords running horizontally for the full length of each side of the bus except at door openings. These cords shall be located along the imaginary line separating the upper bin windows from the lower sections of the side windows, and shall not interfere with opening of the side destination sign and route number sign for inspection. If the cord is not usable in the rear door area, a button to actuate the signal shall be placed on a nearby stanchion. Vertical drop cords shall be located at every side window pillar. These cords shall be secured to the horizontal chime cord with tiller clamps so they will not slide or travel. They shall be anchored at the opposite (bottom) end by means of an eyelet attached to the bus sidewall, and secured with a tiller clamp. Use dual half-shell 'Atwood Corp.' tiller clamps, p.n. 8043-3 or approved equal with Torx screws at each chime cord crimp location. Cords shall not interfere with any window operation.

When system A is actuated by a passenger, chime shall sound, the passenger display signs shall be illuminated and the driver's dash mounted lamp shall illuminate. The chime shall be disabled while the displays are on.

When any door is opened, the displays shall be on with the chime disabled. After all doors close, the system shall be reset.

### **C3.24.03 System B**

This system shall allow a mobility aid user to request a stop and alert the driver that he/she wishes to disembark. One solid-state electronic chime signal shall be provided. This chime shall produce a different sound than the system A chime. A separate light signal shall be provided on the driver's instrument panel and shall illuminate when the system is activated. Activation of this system shall illuminate the two lighted display signs referenced in section C3.04.02 (system A).

Controls for system B shall be mounted no higher than 48 inches (1219 mm) and no lower than 15 inches (381 mm) above the floor, shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lb. (22.2 N). Provide a touch tape on the bottom of the folding seat in each tie down location. This touch tape shall be located where it will not be accidentally activated by movement of the secured mobility aid device. The touch tape shall have an electrical disconnect plug to facilitate removal of the flip-up seat for maintenance. Plug to be accessible to maintenance and not visible to passengers.

When any tie down area stop request signal is activated, the system B chime shall sound and the driver's dash mounted lamp shall illuminate. The chime shall be disabled while the display is on. When any door is opened, the display shall be on with the chime disabled. After all doors close, the system shall be reset.

## **C3.25 Camera Surveillance System Provisions**

### **C3.25.01**

Provide all wiring and mounting locations for a five-camera surveillance system for the later provision of and installation of cameras, recorder, microphone, etc. by the County

Wiring provisions and camera locations to be approved by the County.

## **C3.26 Public Address System Provisions**

### **C3.26.01**

Public address system provisions shall be provided on each bus for facilitating radio system and driver-originated announcements to passengers. The PA system uses the County supplied and installed radio transceiver or other equipment as an amplifier. Contractor-supplied components shall not contribute distortion or low voltage noise interference and shall produce a clean, clear sound. The County at the design review shall approve the equipment and the locations of the components.

### **C3.26.02**

The microphone shall be a 'Shure' model 515 BSLG27F with a model A13HDB mounting flange, or approved equal. The microphone shall be mounted on a heavy-duty flexible gooseneck located on the same plane as the instrument panel on the left side of the driver (street side). Moving the gooseneck shall not introduce mechanical or other noise into the PA system. The gooseneck to coach mounting point shall be reinforced with a tapping plate. Riv-nuts and machine screws shall be used. The location where the microphone cable passes through the body shall have full chafe protection. The gooseneck assembly may require additional clamping to insure a rattle free condition when stowed. The mounting location and the length of the gooseneck shall allow all drivers referenced in C4.01 to speak into the microphone from their normal driving position.

The microphone cable shall terminate on the right side of the instrument panel at the farebox area with a minimum of 3 feet (914 mm) of extra microphone cable. Each cable end shall be terminated with a 'Switchcraft' A4M or interchangeable approved equal connector.

### **C3.26.03**

At least 6 interior loudspeakers shall be provided, semi flush mounted, on alternate sides of the bus passenger compartment, installed with proper phasing. Total impedance seen at the input connecting end shall be 8 ohms. Mounting shall be accomplished with riv-nuts, machine screws and utilize a metal backing plate. One exterior speaker, of weatherproof design, shall be provided near the front door. Speakers shall be installed so as to facilitate testing and replacement when necessary.

The speaker cable shall terminate at the instrument panel area on the right side (curb side) with a minimum of 3 feet (914 mm) of extra speaker cable. An end connector shall be supplied so the County can later connect a lead from the radio control head in order to make announcements directly from the radio control center to bus riders through the public address system.

There shall be a speaker control switch mounted within easy reach of the driver. This switch shall include 'INSIDE--BOTH' speaker selections.

### **C3.27 Advertising Provisions**

#### **C3.27.01**

Interior advertising racks designed for advertising media 11 in (280 mm) high shall be provided running the length of the bus on both sides over the windows interrupted only as necessary for the doors and joint. Grooves top and bottom shall accommodate media up to 0.090 inches (2.3 mm) thick. These racks may be combined with the interior lighting system (reference section C3.14).

#### **C3.27.02**

Provide 'National Guard Products, Inc.' or approved equal model 103 exterior advertising frames. Frames shall be open back type, of black powder coated extruded aluminum. Provide bottom loading and extended cutaway on the side extrusions unless the bottom of the frame is within 24 inches of the ground. In that case, provide end load frames. Sign frames shall have nylon stand-offs 0.25 inches (6 mm) thick placed behind all exterior signs. Use coated steel rivnuts, 'Aimco' no. 481-ALS4-1032-130 or approved equal and non-magnetic stainless steel screws to attach frames to bus. The County recognizes that it may be necessary to arrange the frames to fit the design of the Contractor's bus. The sizes and arrangement shall be approved by the County.

#### **C3.27.03**

The largest ad frames that will fit the bus, from the sizes listed below, will be mounted centered on the left and right sides of the front and rear sections of the bus and on the rear engine door of the bus. Necessary small maintenance access doors must be accessible.

Frame Size	Ad Size
31 x 144.5 in.	30 x 144in.
25 x 88.5	24 x 88
25 x 65.5	24 x 65
22 x 72.5	21 x 72
19 x 60.5	18 x 60

### **C3.28 Automatic Passenger Counter Provisions**

#### **C3.28.01**

Fifteen percent (15%) of buses will have an infrared Automatic Passenger Counter (APC) system supplied and installed by the County, with the exception of the items described below, after the coaches are delivered to the County.

#### **C3.28.02**

Provide mounting space above each doorway for one or two sensors, depending on doorway width, and space to mount the APC analyzer.

### **C3.29 Safety Equipment**

#### **C3.29.01 Fire Extinguisher**

Furnish a dry chemical fire extinguisher, 'Amerex Corp.' model 500T or approved equal on each bus. The extinguisher shall be painted red and permanently marked 'KING COUNTY METRO'. The extinguisher shall be mounted for easy access from the driver's station. Provide an approved mount and mounting location for the extinguisher. If the extinguisher is located in a compartment, provide an approved 'Fire Extinguisher Inside' decal. The fire extinguisher shall have a manufacturer's inspection tag marked 'NEW' with the date installed, plus space for subsequent inspection entries.

#### **C3.29.02 Reflector Triangles**

Buses shall be equipped with a safety triangle reflector kit with a durable protective container, 'Grote Manufacturing Company' #71422 or approved equal.

This item shall be mounted neatly in the driver's area.

#### **C3.29.03 Wheel Chock Holders**

Two wheel chock holders, constructed of stainless steel or aluminum, shall be supplied. Holders shall be installed with suitable fasteners in an approved manner. The County will provide dimensional data on wheel chocks within 90 days of contract execution.

#### **C3.29.04**

The County at the prototype review shall approve location and mounting of the safety equipment items.

## SECTION C4 - DRIVER'S STATION AND CONTROLS

### C4.01 Design Factors

#### C4.01.01

The design of the driver's station shall have as its primary objective the provision of an environment for the driver that will aid him or her to operate the bus safely and efficiently for long periods of time without injury and with minimum fatigue. Human factors design principles shall be used in the layout and proportioning of the driver's station and its components with attention given to safety, "comfort and fatigue," body support; the size, shape and location of switches, levers, pedals and gauges; and all other factors that affect the design objective.

#### C4.01.02

The driver's station shall accommodate drivers who are of various heights and body proportions by the use of human factors design in locating and proportioning the devices in the station and by the use of adjustable components such as the driver's seat and the steering column. It is required that the station accommodates persons within the range of the 5<sup>th</sup> percentile female to the 95<sup>th</sup> percentile male. Reference Attachment 16 for dimensions between driver's seat and steering column assembly. The dimensions given in this figure are the required minimums.

#### C4.01.03

The Contractor shall, as a joint effort with the County, determine the location of all equipment with respect to proper lighting, ease of operation, accessibility and passenger flow. Factors to be considered include, but are not limited to, the provision of mountings for and determining the location of the firebox, radio speaker, radio control head and any other equipment supplied by the County. Complete details of the driver's station design shall be presented at the design review and at the prototype review for approval by the County.

### C4.02 Driver's Seat

#### C4.02.01

The driver's seat shall be adjustable to provide comfort for drivers within the range of sizes given in the previous subsection. It shall have a full 9 inches (229 mm) of adjustment in the fore and aft direction without contacting any coach part, the seat back and seat cushion shall be adjustable, and the seat height shall be adjustable. The seat shall be installed in the same location in all buses. All adjustments shall be easily made without the possibility of crushing or pinching the driver's hand or fingers. A dynamic load damper shall be provided on the seat to augment the springing and padding in the cushions. Under no operational condition will the seat 'bottom out'. The air connection to the seat shall have a quick disconnect provision. Bus connector to be brass Industrial design push-to-connect socket, 1/4-inch coupler size; seat connector to be Industrial design plug. The seat shall be equipped with a quick disconnect feature; the cap screws retaining the seat base to the driver platform shall be threaded into tapping plates or weld nuts under the platform. The driver's seat shall be a 'USSC Group, Inc.' Q91 or approved equal with the following features: air suspension system; wide back with 20° recline; air lumbar support; mechanically adjustable side bolsters; fabric inserts with vinyl boxing upholstery; molded long life foam; ABS protective back shell; 9.45" fore/aft slides; air slide release mechanism; 4 way adjustable headrest; 4" slanted steel riser with internal tethers; riser dust cover; 3 point ELR shoulder/lap belt system.

#### C4.02.02

The entire face of the driver's seat and back cushions shall be fabric and no welt cord shall be used. Color and type of fabric is specified in Attachment 11. Seat cushions shall be of long lasting foam. Particular attention shall be given to providing a seat which is comfortable in warm, humid weather and which gives full consideration to long periods of occupancy.

#### C4.02.03

The seat shall be supplied with inertia locked retractable and adjustable lap and shoulder belt assemblies. The shoulder portion of the belt shall attach to the seat. The shoulder belt shall be separate from the lap belt. The belt systems shall extend from left to right and shall accommodate all drivers in all positions of the seat.

## **C4.03 Barrier**

### **C4.03.01**

An approved full height barrier shall be provided around the driver's station, similar to the one shown in Attachment 17. The barrier shall extend from the left side coach wall to the stanchion at the right rear of the driver's station and then wrap around the side of the driver's seat. This panel shall in no way interfere with the safe normal operation of the bus or restrict movement of the driver's seat.

### **C4.03.02**

Provide a laminated safety glass window, tint per Attachment 11, on the barrier, approximately 10 x 16 inches (254 x 406 mm) on the curbside. Provide vertical stanchions at the intersection of the back and curb side panels and at the forward edge of the curbside panel. Stanchions to have minimum 16 inches (406 mm) usable length, 3 inches (76 mm) knuckle clearance and finish per Attachment 11.

### **C4.03.03**

The remainder of the barrier shall be aluminum, fiberglass or other approved material of color and finish per Attachment 11. The barrier assembly shall be rigid, shall not shake or rattle in service, and shall withstand forces from passengers using it as a handhold. Any screws and/or bolts protruding through the barrier shall have rounded heads to eliminate passenger injury. Provide industrial grade carpeting for sound deadening on the inside of the barrier. Provide a cutout in the side of the barrier to mount a timetable holder supplied and installed by the County. Cutout size to be supplied by the County.

### **C4.03.04**

Provide space on the backside of the wheelhouse equipment compartment to attach a 12.5 x 14.5 inch (318 x 368 mm) poster holder frame, which will be supplied and installed by the County.

## **C4.04 Controls and Switches**

### **C4.04.01**

All controls shall be within the hand reach envelope described in SAE Recommended Practice J. Switches and other electrical controls located on the driver's side console shall be water resistant. Approval of location of all side console and instrument panel controls and switches will be at prototype review.

### **C4.04.02 Accelerator and Brake Pedal**

Accelerator and brake pedals shall be designed for ankle motion without fatigue. When the driver's foot is placed on the non-depressed accelerator or brake pedal, the ankle shall be at a neutral angle (the angle assumed when standing). This angle shall be approximately 45 degrees from true horizontal. Both accelerator and brake pedal surfaces shall be on the same plane. Both assemblies shall be equipped with heel rests. Foot surfaces shall be faced with wear-resistant, non-skid replaceable material. The accelerator shall be 'Williams' or approved equal, electronically operated. The brake control valve shall be 'Bendix' or approved equal. The County shall approve pedal angles, placement and design.

### **C4.04.03 Hill Holder**

Shall be a separate switch control and operate per section C5.09.

### **C4.04.04 Parking & Emergency Brake Controls**

The parking and emergency brake control shall be located to the left of the driver for easy ergonomic actuation by a seated driver. The preferred location is on a floor-mounted pedestal or on a projection on the side of the side console. Control location to be approved at prototype review. Reference Section C5.08.01.

### **C4.04.05 Steering Wheel and Horn Button**

Reference sections C6.10 and C3.23.

### **C4.04.06 Transmission or Directional Control**

Reference section C5.04.

### **C4.04.07 Door Controls and Door Pressure Release**

Reference section C3.03.

### **C4.04.08 Headlamp High Beams**

Reference section C3.16 and Attachment 15.

### **C4.04.09 Directional Signals**

Reference section C3.16 and Attachment 15.

**C4.04.10 Emergency Flashers**

An extended arm toggle switch will be located in an easily accessible location on the side console. Reference section C3.16.

**C4.04.11 Windshield Wiper and Washer Controls**

Reference section C3.13.

**C4.04.12 Not Used**

**C4.04.13 Heating, Ventilating and Demister Controls**

Supply separate controls for driver's heater and demister, and for main coach HVAC. Main coach HVAC control to be a 2-position switch labeled OFF/AUTO. Reference section C6.04.02.

**C4.04.14 Master Electrical Control (Master Switch)**

The master control shall activate and disable certain subsystems. It shall have four positions, affecting bus subsystems according to the table below, and it shall be located on the primary panel. It shall be sized to accommodate maximum loads with an additional 150% operating margin (load factor). No heavy electrical loads shall be run through the master switch.

When the master switch is switched from 'off' to 'day run' or 'night run', flash the indicator lights momentarily to signal that the bus is being asked to 'wake up'.

<b>Position</b>	<b>Engine</b>	<b>Interior Lamps</b>	<b>Head Lamps</b>	<b>Other Exterior Lamps</b>	<b>Indicators, Alarms etc.</b>	<b>Rear Door Interlock</b>
OFF	Stop	Off	Off	Off	Off	Off
DAY RUN	Run	On	On (at reduced voltage)	Off	On	On
NIGHT RUN	Run	On	On	On	On	On
ID LPS	Stop	½ On	Off	On	Off	On

Other controls detailed below and elsewhere may affect these conditions. The brake lights, horn and emergency flashers shall be enabled in all positions of the master control.

**C4.04.15 Engine Start**

Shall be interlocked (reference section C5.03) and shall be located on the primary instrument panel.

**C4.04.16 Emergency Alarm**

Mounted on the turn signal switch platform (reference section C4.14.05).

**C4.04.17 Ramp Controls**

Located on the primary instrument panel, these controls shall function per section C6.08.

**C4.04.18 Not Used**

**C4.04.19 Public Address System Controls**

Reference section C3.26.

**C4.04.20 Strobe Lamp**

Provide a switch per section C3.16.06.

**C4.04.21 Fast Idle Control**

The fast idle device shall be actuated by a distinctive unprotected control located on the primary or secondary instrument panel. Activation of the fast idle control shall set the rear brake interlock. Reference section C5.03.

**C4.04.22 Engine Diagnostic Switch (es)**

Do not supply.

**C4.04.23 General Interior Lighting**

Located on the primary or secondary instrument panel. Shall be a three-position switch, providing ON, PARTIAL, and OFF positions.

**C4.04.24 Driver's Area Lamp Switch**

Shall provide ON and OFF positions plus a rheostatic control, located on the primary or secondary instrument panel. Reference section C4.08.

**C4.04.25 Fare Equipment Area Lamp Switch**

Shall provide NORMAL and ON positions, located on the primary or secondary instrument panel. Reference section C4.08.

**C4.04.26 Exterior Lamp Test**

Shall turn on all exterior lamps for 60 seconds when both turn signal foot switches are pressed simultaneously.

**C4.04.27 Indicator Test**

Supply a button or spring loaded switch, located on the primary instrument panel, to test operation of indicator lamps. Switch shall be rated to handle load requirements. If many wire terminations are required, an approved terminal strip board shall be used. The County shall approve type of switch and installation.

**C4.04.28 Instrument Panel Dimmer Switch**

Control shall be located on the primary or secondary instrument panel. This control shall operate all illumination lamps on both primary and secondary panels (reference also section C4.05). Control shall have linear operation with smooth dimming. The fully bright setting shall be at the counter-clockwise end of travel. The control shall have a label clearly indicating the proper direction to accomplish dimming.

**C4.04.29 Auxiliary Dash Mounted Fan Switches**

Switches shall provide OFF, LOW and HIGH positions and shall be located on the secondary instrument panel. Reference section C4.16.

**C4.04.30 Remote Mirror Control**

Install heavy duty, labeled controls on the secondary panel for the exterior mirrors. Reference Section C4.11.03.

**C4.04.31 Kneeling Control**

Provide a control on the right side of the primary instrument panel to kneel the right front corner (or right side) of the bus.

**C4.04.32 Interlocks**

Provide a labeled toggle switch (or switches) in the front sign or other overhead compartment to override the rear door interlock (C3.04.04), the ramp front door interlock (C6.08.02.01), and the hinge interlock (C2.02.01). Activation of the interlock override(s) shall be indicated by a buzzer or electronic audio device. Location to be approved.

**C4.05 Instruments****C4.05.01**

The following gauges shall be included on the instrument panel. All gauges shall be illuminated and operate on 12 Vdc.

**C4.05.01.01 Speedometer**

A dash mounted speedometer and odometer shall be provided. The needle and numbers shall be easily visible to the operator under all lighting conditions. It shall be a fully transistorized unit. Speedometer signal shall be from the hybrid drive unit or transmission. Unit to be approved by the County.

**C4.05.01.02 Air Pressure Gauges**

Supply mechanical gauges as follows: one needle per axle brake system plus one needle for auxiliary air. Maximum 2 needles per gauge.

**C4.05.01.03 Not Used****C4.05.01.04 Engine Temperature Gauge**

A dash mounted electric sensing temperature gauge shall be used. The sender unit shall be impervious to engine vibration.

**C4.05.01.05 Not Used****C4.06 Indicators****C4.06.01**

The following visual indicators shall be provided, augmented as shown below with audible warnings. Indicators may be located on the instrument panel or other approved location. The audible alarm buzzer shall be noticeable to the driver, but not at a sound level or pitch that is objectionable. Audible alarms shall be electronic.

<b>Condition</b>	<b>Telltale Alarm</b>	<b>Lamp</b>	<b>Color</b>
Rear door open	None	'EXIT DOOR'	Red
Air brake application (not retarder)	None	'STOP LAMP'	Red
Headlight high beam	None	Symbol	Blue
Low air pressure	Buzzer	'LOW AIR'	Red
Low oil pressure	Buzzer	'LOW OIL'	Red
High engine temp.	Buzzer	'ENG HOT'	Red
High hybrid drive or transmission temp.	Buzzer	'TRN HOT'	Red
Turn indicator, R	None	Symbol	Green
Turn indicator, L	None	Symbol	Green
Emergency flashers	None	Symbol	Green
Parking brake on	None	'PARK BRAKE'	Red
Generator not charging	Buzzer	'DISCHARGE'	Red
Passenger stop	Chime 1	'PASS STOP'	Yellow
Mobility aid user stop	Chime 2	(International Wheelchair Symbol)	Yellow
Engine fire alarm	Buzzer	'ENGINE FIRE'	Red
Low fuel	None	'LOW FUEL'	Red
Rear door interlock off	Buzzer	'WARNING INTERLOCK DEACTIVATED'	Red
Ramp enabled	None	'RAMP'	Red
Excessive ramp angle	None	'RAMP ANGLE'	Red
ABS working	None	'ANTI-LOCK'	Red
ATC working	None	'TRACTION CONTROL'	Red
Rear door sensitive edge	Buzzer	'DOOR ALARM'	Red
Joint dampening failure	Alarm		Red
Joint dampening on	None		Green
Low joint oil pressure	Alarm		Red
Maximum hinge angle	Alarm		Red
Joint self test	None		Red
Hybrid drive status as necessary			

**C4.06.02**

The instrument panel indicators shall be easily seen in bright and/or direct sunlight. If needed, an instrument panel sun shield will be supplied. The County shall approve design and placement.

**C4.07 Stowage of Personal Items****C4.07.01**

A coat hook and tieback loop shall be provided for the driver. The coat hook shall be attached with riv-nuts and machine screws. The County shall approve placement and material used.

**C4.07.02**

An Operator Container Receptacle shall be supplied on the side console panel. This unit shall be fabricated metal and placed so as not to interfere with coach operation but positioned so the driver can access a cup and/or beverage container, placed in the receptacle. It shall be located so spills will not puddle nor affect any instrumentation. Drawing is in Attachment 26. Color is given in Attachment 11.

**C4.07.03**

Provide, on the front side of the driver's barrier, a shelf for storage of the driver's personal items. The shelf shall be mounted approximately 20 inches (508 mm) above the floor and be the width of the barrier by approximately 11 inches (279 mm) deep. It shall have a front lip approximately 3 inches (76 mm) high. Color is given in Attachment 11. This shelf may be integrated with the fire extinguisher holder (C3.29.01).

**C4.08 Convenience Lamps****C4.08.01**

The following separate lamps shall be supplied, controlled by switches as described below and in section C4.04. Location of lamps and their installation to be approved by the County.

**C4.08.01.01 Fare Equipment Area Lamp**

An adjustable ceiling-mounted spotlight, in addition to any lamps in the fare equipment, shall be placed over the farebox to illuminate the fare equipment area when the front door is open and the master switch is not OFF. Special provisions will be taken to assure no heat build-up if this lamp is operated for long periods of time. A separate override switch shall enable the driver to illuminate it at any time.

**C4.08.01.02 Driver's Area Lamp**

Supply a lamp to provide general illumination of the driver's station, suitable for reading and recovery of items on the floor. This lamp shall be enabled in all master switch positions except OFF.

**C4.09 Sun Shades****C4.09.01**

Sunshades shall be provided for the driver on the windshield and driver's window. Shades shall operate on guides to keep them close and parallel to the window. The roller shall allow easy deployment when pulled downward, remaining where placed until released by operation of a separate release cord.

The front shade shall cover the entire width of the left windshield half. The side shade when pulled all the way down shall have a solid section on the top and a mesh section on the bottom. The requirements are to block direct sun, but still allow visibility through the side window and to the left side mirror. This shade shall cover the entire width and height of the side window. The edges of the side window shade shall be secured to the side rods to keep the shade from blowing out of the open side window.

Shade design and materials to be approved by the County.

**C4.10 Driver Platform****C4.10.01**

The driver seat platform edges shall be neatly finished with no sharp edges or corners. The platform shall not extend into the aisle or front entrance area vestibule beyond the line of the wheel housing. The platform shall not interfere or impede wheelchairs or other mobility aids. The surface of the driver platform shall be finished as referenced in section C2.05.04. Provide steps to reach the driver platform in a low floor bus. The driver's platform steps will have a non-skid coating and yellow edge. The County shall approve the driver platform.

## **C4.11 Exterior Mirrors**

### **C4.11.01**

Buses shall be equipped with two exterior rear vision mirrors, one at each side, firmly attached to the bus in a manner which precludes vibration at normal speeds and located so as to reflect to the driver an adequate view of the highway to the rear along both sides of the vehicle. Approved non-skid steps, handholds or other methods shall be supplied, if necessary, to allow a 57 in (145 cm) tall driver to safely adjust the right mirror (reference section C3.22.02).

The County shall approve exterior mirrors and their mountings; final approval for location will be at the prototype review.

### **C4.11.02**

The left and right outside mirrors shall be 'B&R' heated remote or approved equal mirrors. Driver's side to be 8 inch square flat mirror, with a heated, manually adjustable 4x6 inch wide angle convex mounted immediately below. Curbside to be a single 8x11 inch flat mirror. Both large mirrors are individually adjustable from the driver's station with separate controls. Provide one loose right side convex mirror per bus. Shipping address will be supplied.

### **C4.11.03**

The right mirror shall be mounted to achieve as much clearance above the ground as possible, subject to the following: the mirror shall be placed so that it is seen through the portion of the windshield that is cleaned by the wipers, and so that it gives a view along the entire side of the bus whether the front door is open or closed.

### **C4.11.04**

Mirror arms shall not be visible in the mirrors. Left and right mirror mounts shall be spring-loaded Break-a-way mirror brackets by 'B&R' or approved equal. The left-right axis of the mirror head shall be perpendicular to the floor of the bus. The fore and aft axis shall be optimized for the range of drivers being accommodated. Mirrors will be designed to fold flat against the bus during bus washing operations. Brackets shall be attached with cap screws and riv-nuts (C3.23.10). Mirror heads and glass shall be easily replaceable. Mirrors to be 24 Vdc. Mirror electrical connector to be concealed on front side of mirror. Harness routing from bus skin to connector to be approved. In the event of an accident, it is preferred that mirror assemblies shall break away without damaging the body attachment points.

### **C4.11.05**

A 5-inch diameter convex crossover mirror shall be mounted in the general area of the outside upper driver's side windshield. This mirror will provide a view of the deployed bike rack and the area immediately in front of the right windshield.

## **C4.12 Interior Mirrors**

### **C4.12.01**

Interior mirrors and mounting hardware shall be finished in colors that match or are compatible with colors in the area in which they are mounted. Interior mirrors shall have a rubber edge. Mirrors shall be mounted in a manner that precludes vibration at idle and normal speeds, and they shall be mounted where they do not interfere with passengers or the opening of access panels.

Mirrors shall be by 'Acme Specialties Co.', 'Rosco', or approved equal. The County shall approve interior mirrors and their mountings; final approval for location will be at the prototype review.

### **C4.12.02**

A fully adjustable rectangular flat mirror, of minimum size 7.5 by 16 inches (190 by 406 mm) shall be provided above and to the right of the driver for observation of passengers.

### **C4.12.03**

A 6-inch (152 mm) minimum diameter mirror shall be provided at the front windshield header, coordinated with a 12-inch (305 mm) minimum diameter convex mirror located to the rear of the second door. In combination they shall provide the driver with a complete view of the rear doorway.

#### **C4.12.04**

A rectangular convex mirror, of minimum size 7 by 10 inches (178 by 254 mm), with adjustable brackets, shall be installed above the front door. This mirror shall provide the driver with a complete view of the front doorway despite the presence of people standing in the front platform area.

#### **C4.12.05**

A six-inch convex mirror shall be mounted in the area of the curbside destination sign to allow the driver to view the area directly behind the front equipment compartment. Location to be determined on the prototype.

### **C4.13 Fare Collection Equipment**

#### **C4.13.01 General**

Each bus shall be equipped with provisions to mount a "GFI" CENTSaBILL electronic farebox, approximately 12.5 in. wide by 12.5 in. deep, and either 41 in. or 36 in. tall. This unit shall be supplied and installed by the County. The floor in the mounting area shall be of sufficient strength to prevent the floor-mounted farebox from weaving or vibrating.

Provide a farebox platform with four weld nuts mounted on a metal plate for the farebox; the box may be rotated slightly to accommodate mobility aid clearance, operator ingress and egress and vault changing.

The farebox shall be located as far forward as practicable and shall not obstruct traffic in the vestibule, especially wheelchairs or mobility aids.

#### **C4.13.02 Electrical**

A 12-volt harness as described below, shall be coiled neatly under the floor at the farebox mounting location. The electrical supply shall be rated at 20 A, and protected by a circuit breaker.

##### **C4.13.02.01 Harness Specification**

The harness shall be a shielded cable, Belden P/N 8720, or approved equal, with 2 conductors of 14AWG wire, plus one 16AWG stranded, tinned copper drain wire.

##### **C4.13.02.02 Harness Termination**

The shield shall terminate at the farebox end only, and shall be maintained to within 2 in. of the cable end. Protect the jacket/shield end with 1 in. of heat-shrink tubing. The cable shall terminate in a four-position plug connector, 'AMP' p/n 207015-1 with socket (female pin) p/n 66598-1 (sockets on a strip) or 66601-1 (singles) or approved interchangeable equal. Pin out is as follows:

Pin 1	Black Wire	(12V Return)
Pin 2	Clear Wire	(+12Vdc)
Pin 3	Bare Wire	(Shield Drain)

The shield at the bus end shall be maintained to within 12 in. of the connection to the 20A circuit breaker, at which point the shield shall be cut back with the cable jacket. The strip-back shall be covered with a 1 in. minimum section of heat-shrink tubing to protect the shield from accidental contact with other conductive surfaces.

##### **C4.13.02.03 Ground Strap Installation**

Provide and install a ground strap and stud for the GFI farebox equipment. The bolt and its attaching hardware shall be stainless steel; installation to be approved by the County. (See Attachment 6.)

#### **C4.13.03 Transfer Cutter**

Provide and install a 'Globe Ticket Co.' or approved equal model 0303 transfer cutter on an extendable mount which is attached to a welded or bolted tapping plate in the dash. Mount and location to be presented at design review and approved at prototype review.

#### **C4.13.04 "Smart Card" System**

Provide space and a stanchion mount near the farebox for a County-supplied and installed On-Board Fare Transaction Processor (OBFTP) and its active cradle. The unit is approximately 9.5 in. by 6 in. by 4 in. and weighs approximately 3 lbs. In addition, provide mounting space for a mounting plate containing a Wireless Data On/Off Loading System (WDOLS) and an Ethernet Hub supplied and installed by the County. The plate is 7.75 in. by 19.5 in. and with components has a maximum height of 3.5 in. Provide space for a County-supplied and installed load dump module (LDM), approximately 2 in. x 2 in. x 2 in. in or near the circuit breaker panel. Attachment 23 shows a block diagram of the system.

Provide dedicated power in the bus circuit breaker panel as follows: 24 Vdc battery with a 5 A breaker; and 24 Vdc switched with a 5 A breaker.

#### **C4.13.04.01 Smart Card Wiring**

Provide and install the following wiring, leaving an extra three-foot coil on each end. The County will supply and install the connectors.

Smart Card power from breakers and ground to load dump module (LDM) – “Belden” 9494 3 core power cable or approved equal.

DDU cradle location to the LDM location – “Belden” 9494 3 core power cable or approved equal.

OBFTP cradle location to the LDM location – “Belden” 9494 3 core power cable or approved equal.

WDOLS location to the LDM location – “Belden” 9409 2 core power cable or approved equal.

WDOLS location to the DDU cradle location – “Commscope” 2004 Ethernet cable or approved equal.

WDOLS location to the OBFTP location - “Commscope” 2004 Ethernet cable or approved equal.

The County will work with the Contractor to establish equipment locations.

### **C4.14 Radio Handset and Control System Provisions**

#### **C4.14.01 General**

Where noted, the Contractor shall be responsible to design mounting provisions for components supplied and installed by the County. The County shall supply and install the radio handset, driver display unit (DDU) plus its active cradle, the Radio Control Unit (RCU), and radio transceiver. The Contractor shall supply and install all other components noted in this section unless otherwise indicated.

The locations and mounting arrangements for components referenced in this section shall be reviewed by the County at the design review and approved at the prototype review.

#### **C4.14.02 Driver's Speaker**

Each bus shall have a recessed speaker in the ceiling panel above the driver. This speaker shall be the same component used for the speakers in the passenger compartment. It shall have 8 ohms of impedance. It shall be painted the same color as the surrounding area. Mounting shall be accomplished with riv-nuts, machine screws and utilize a metal backing plate.

#### **C4.14.03 Handset**

Each bus shall have provision for mounting a radio handset on the left side of the dashboard convenient to the driver. Attachment 18 shows the type of base plate that will be required to accomplish this mounting. It is preferred that the bracket be mounted on a horizontal plane.

#### **C4.14.04 Driver Display Unit**

Each bus shall have provision for mounting a Driver Display Unit (DDU) and its active cradle as close to the right side of the instrument panel as possible. The DDU and its bracket are supported on a ‘RAM Mount Systems’ model 101 or approved equal double-ball adjustable clamp. The RAM mount must be attached to bus structure by means of Contractor-supplied bracket(s) and reinforcing plate(s). Attachment solely to the dashboard or instrument panel sheet metal or FRP is prohibited. The County will select the style and length of the RAM mount clamp depending on the design of the Contractor’s bus and the final location of the DDU. The mounting location and RAM mount clamp will allow all drivers defined in Section C4.01 to easily reach the DDU.

Provide two conduits and fittings by ‘Adaptaflex’ or approved equal to carry harnesses from the DDU active cradle. One conduit goes to the County-supplied and installed Radio Control Unit (RCU) and the other conduit carries a harness to the under dash area, where it will split off to a power supply and Ethernet communications. The Adaptaflex conduit is part no. PAFS16/BL/50M, and the Adaptaflex fittings are part no. AL16/M20/A.

#### **C4.14.05 Emergency Alarm**

Provide a mounting location for a County-supplied and installed ‘Cole-Hersee’ no. 90043-34 momentary switch on the foot turn signal platform.

#### **C4.14.06 Cable Installation**

Provide and install the following wiring, leaving an extra three-foot coil at locations outside the electronic equipment cabinet (EEC), and a five-foot coil for wiring at the EEC end. Label each end of the wire with the 'W' numbers. The County will supply and install the connectors.

- W1 DDU location to the EEC – "Alpha" 2461C or approved equal.
- W2 P.A. speakers to the EEC – "Belden" 8761 2 core or approved equal.
- W3 Handset location to the EEC – "Alpha" 1296C 6 core or approved equal.
- W4 Emergency alarm switch location to the EEC – "Belden" 8761 2 core or approved equal.
- W5 EEC to the Tag Interface Unit location (in sign compartment) – "Carol" E2004S 4 core or approved equal.
- W6 Camera activation switch location to the EEC – "Belden" 8761 2 core or approved equal.
- W7 P.A. microphone to the EEC – "Belden" 8761 2 core or approved equal.
- W8 Driver's speaker to the EEC – "Belden" 8761 2 core or approved equal.

The County will work with the Contractor to determine equipment locations.

#### **C4.15 Registration Certificate Holder**

##### **C4.15.01**

A holder in the operator's area with a clear plastic cover to hold a State of Washington vehicle registration certificate measuring 8 x 5 in (203 x 133 mm) shall be provided. The cover shall be attached with pop rivets. Design and location to be approved by the County.

#### **C4.16 Auxiliary Windshield Demister Fans**

##### **C4.16.01**

There shall be two, two speed 12-volt fans centrally mounted on the front windshield dash panel, located to the left and right of the center windshield pillar. Optionally, and with County approval, fans can be mounted above the windshield. The fan bases shall be mounted to a tapping plate that is installed to reinforce the dashboard. These plates shall be attached by welding or with machine screws. No rivets are allowed. The fans shall be attached by riv-nuts and machine screws. All parts of the fan, including cage and blade, shall be painted or colored per Attachment 11.

The fans shall be 'Bergstrom', or approved equal, with a 6.5-inch diameter (165 mm) four blade fan configuration and protected with metal cages. Fans shall be adjustable, and equipped with a Teflon washer. Switches on the secondary panel shall control each fan.

## SECTION C5 - PROPULSION AND BRAKING

### C5.01 Engine Propulsion System

#### C5.01.01

Each bus shall be equipped with an engine/transmission propulsion system capable of achieving the performance required in section C1.05. The propulsion system includes fuel storage, fuel delivery, the heavy-duty diesel fueled engine, a hybrid drive system or an automatic transmission, and a drive train to the driving wheels.

### C5.02 Engine

#### C5.02.01

The engine shall be specifically adapted for and proven on the transit bus duty cycle that includes long periods of idling as well as start and stop operation. It shall be a 'Cummins' ISL or ISM, or approved equal with Insite electronic control. It shall be turbocharged and after cooled. In addition to power required for propulsion, sufficient excess power shall be available to operate all accessories at their normal operating condition throughout the transit bus duty cycle. Sufficient power shall also be available at normal idling speed to operate all accessories. The engine shall be designed to operate on the fuel listed in Attachment 19. The engine shall not drip/leak, nor have any breather system that will drip/leak any fluids on the ground.

The heavy-duty transit bus horsepower rating of the engine shall be derated at least 20% from the highest horsepower on-highway rating of the same basic engine.

A programmable governor shall be provided to limit engine speed to a safe value. Engine operation, including fueling, shall be electronically controlled. It shall have a programmable engine performance operating system and the Insite maintenance and diagnostic software system.

The engine control system shall have onboard diagnostic capabilities able to monitor vital engine functions, store and time stamp out-of-parameter conditions in memory, and communicate faults and vital conditions to service personnel and to the hybrid drive logic. Diagnostic reader device connector ports, suitably protected against dirt and moisture, shall be provided in operator's area and near or inside engine compartment.

If running out of fuel will in any way damage the engine, the engine manufacturer together with the Contractor will provide sufficient warning to the operator. An approved engine shutdown may be used. Also see C5.04.01.01. Any automatic engine shut down system or power reduction system shall have County approval.

The engine shall have a minimum design life of 12 years or 500,000 miles (805,000 km) and it shall be designed to require no major overhaul to achieve this lifetime. A major overhaul consists of the concurrent replacement, due to wear, of major components such as cylinder sleeves, piston rings, bearings, and the like. The County shall approve the engine, all accessories and propulsion sub-systems.

#### C5.02.02 Drives & Belts

Gear driven mechanical takeoffs are strongly preferred to belts to drive accessories such as the water pump, alternator, power steering, air compressor and fuel pump. If belt drives are used, the number of belts shall be kept to a minimum and grooved belts are preferred. Sheaves and belts shall be sized for maximum strength and minimum wear, located to provide easy access for maintenance, and provided with guards. Provide hinged swing out guards with lift-off hinges, approved by the County. The tension in each belt shall be adjustable and the number of idler pulleys shall be minimized. Long belt lengths and configurations, which require routing the belts in devious directions or where wrap angles are small, shall be avoided. Chain drives are not permitted. The County must approve use of non-gear accessory drive systems.

#### C5.02.03 Mounting

The engine mounting shall be arranged so that accessibility for all routine maintenance is as easy as possible. With a T-drive, the engine and transmission shall be easily removable by one person.

Approved means for separating hydraulic, air and electrical systems shall be used. These disconnects shall be located for easy access in the engine compartment. Electrical quick disconnects shall be metal 'ITT Cannon' electrical plugs of aviation quality. 'Weather-Pak' and 'Deutsch' connectors may be used only with prior approval by the County.

The engine valve cover shall be easily removable with no disassembly of nearby components. No special tools other than standard dollies, hoists and hand tools shall be required to remove or replace the engine. All mountings shall be mechanically isolated to minimize the transmission of vibration and noise to the body structure.

#### **C5.02.04 Exhaust and After-Treatment**

Exhaust products and heat shall be vented so as not to impinge upon pedestrians adjacent to the rear of the bus. Special care shall be taken to prevent exhaust products or heat from entering the bus body. Exhaust system piping shall be located to present no burn hazard to pedestrians. If flexible pipes or couplings are planned, their use shall require the prior approval of the County. Special attention shall be paid to clamps and mounting. Engine exhaust outlet shall be at the left rear corner of the roof. The roof terminating point shall not allow water entry into the system. There shall be a 90-degree bend in the pipe, pointed to the rear. Use of any type of 'flapper valve' is prohibited. Routing of the exhaust system shall not place excess heat on wiring, lamps or any other components. Exhaust routing, piping, clamps, supports, access doors and panels and their fasteners to be approved by the County. The compartment containing the diesel particulate filter (DPF) and any bus components located adjacent to it shall be able to withstand the heat generated by the DPF in any operating mode, including failure. Provide an easy access door or panel with quarter-turn or other approved fasteners, to allow maintenance of the exhaust after-treatment device.

#### **C5.02.05 Cooling System**

The capacity of the cooling system shall be adequate to maintain design engine temperature under all operating conditions in the service area and environment of the County. The cooling system design shall take into account the fact that engines normally are shut down for time periods of any length, typically 5 to 10 minutes, at route terminals and then restarted. The Contractor shall provide evidence that the cooling system selected has the capability to handle peak heat rejection from the engine, the intercooler, the transmission retarder and the transmission torque converter with a partially clogged radiator at maximum ambient temperature plus heat reflected off the pavement. The Contractor shall submit an analysis verifying cooling system capabilities to the County. Cooling system to be approved by the County.

##### **C5.02.05.01 Fluid**

The entire cooling system shall be self-purging and shall require no longer than 10 minutes to be completely filled after draining. Drain plugs (reference section C5.02.08) shall be supplied at all the low points in the system. The engine shall be equipped with an electronic low water detection device to indicate low water level on the driver's control panel.

Buses shall be delivered filled with a mix of 50% anti-freeze, 3% 'Nalcool' water additive or approved equal, or other percentage as specified by the engine manufacturer, and the remainder of distilled water. If tap water is used, evidence of engine manufacturer approval of the chemical and mineral content shall be supplied to the County. Coolants and additives shall be as listed on Attachment 19.

##### **C5.02.05.02 Surge Tank**

A heavy-duty surge tank of non-corroding material with two sight glasses, or approved alternative sight method, shall be provided. A coolant fill shall be provided on this tank. The coolant fill shall be designed to eliminate the possibility of hot liquid splashing out of the fill due to heat expansion. The sight glasses and coolant fill location shall be accessible and clearly visible from the exterior of the coach through a separate access door on the left side without opening the main engine compartment door. This door shall be equipped with an over-center spring latch to retain it positively in the open or closed position.

A manual override shall be provided to safely eliminate pressure in the surge tank. This assembly shall be mounted separately from the coolant fill but accessible from the same access door as used for the coolant fill and sight glass. When activated, any coolant exiting this pressure relief shall drain to the ground without contacting any coach part.

##### **C5.02.05.03 Radiator**

The radiator shall be a heavy duty 'Young Touchstone', 'Modine' or approved equal unit constructed with BETA-WELD technology. It shall be of the tube type with bolted on upper and lower tanks and with no solder to coolant contact. The radiator shall be accessible for cleaning. It shall be mounted on the left side of the bus, and be easily removable from the bus.

##### **C5.02.05.04 Fan Assembly**

The radiator fan shall be hydraulically operated, or, with pre-bid approval, mechanically operated. It shall be thermostatically controlled. There shall be either: a manually operable by-pass valve/switch, located in an approved location in the engine compartment, that continuously activates the radiator fan if the control system fails; or a temperature control system that fails with the fan continuously engaged. Fan drive shall be soft-start.

##### **C5.02.05.05 Hoses**

All engine coolant and heater hoses, including hoses through the articulation, shall be of the silicon polyester covered type. 'FC 300 Aeroquip' premium silicone rubber hose may be provided with prior approval of the County. Any hose clamp shall be compatible with the type of hose used and be a constant torque type. Hose material must be chemically compatible with the specified coolant.

**C5.02.05.06 Water Filter**

The cooling system shall be equipped with a water filter able to remove particle contamination. This filter shall be a spin-on type and have no chemical pre-charge. The coolant lines shall have ¼ turn ball-type shut off valves on both sides of the filter. The engine manufacturer shall approve it.

**C5.02.05.07 Charge Air Cooler**

Provide a charge air cooler for the engine, preferably beside the radiator to minimize radiator stacking.

**C5.02.05.08 Hydraulic Cooler**

Provide a hydraulic cooler for the bus hydraulic systems, preferably mounted beside the radiator and charge air cooler.

**C5.02.06 Air Cleaners**

Dry type air cleaners shall be provided for engine aspiration. All filtering devices within the air cleaner shall be readily removable for cleaning and replacement. Air ducting shall minimize entry of water into the induction system.

Provide an 'Engineered Products Co.' or approved equal Filter Minder™ air filter gauge p.n. 136501-00525 (or 1875-320) in a location that is both easily seen and approved by the engine manufacturer. Provide a 'Parker' male coupler, p.n. PD323 plus a PD6-285 cap or approved interchangeable equal in an easily seen and accessible location.

**C5.02.07 Lubrication System**

The engine shall be equipped with oil filtration of ample capacity according to its manufacturer's recommendations. Filters shall be spin-on type. Lubricating oil shall be as listed on Attachment 19. The oil filler pipe shall be provided with a hinged, spring-loaded cap as recommended by the engine manufacturer. A small spring loaded separate access door shall be provided on the bus body on the right side or the rear to allow access to the engine oil dipstick and oil filler. Alternative door arrangements, or left side access, require the prior approval of the County.

For oil sampling, the engine shall be equipped with a 'KP' or approved equal pushbutton oil sampling valve, with Viton seal, metal cap and 3/16" tubing spout barb. This unit shall be approved by the County, and mounted in an accessible location in coordination with the engine manufacturer.

**C5.02.08 Drain Plugs**

All fuel, lubricant and hydraulic drain plugs shall be hexagon head made of steel. Coolant drain plugs shall be brass. Lubricant drain plugs shall be magnetic. The engine oil drain plug shall not be the lowest point on the engine oil pan. Fluid drain plugs shall point down, not sideways, to allow easy draining into standard portable automotive drain tanks, with the bus on a hoist or over a pit. Engine, hybrid drive, and transmission oil pans shall be equipped with 'Quick Changer' or approved equal oil drain system available from 'Unique Truck Equipment Inc.'.

**C5.02.09 Starter**

The engine starter on buses equipped with hydraulic transmissions shall operate from normal bus voltage and be sized to provide sufficient torque to turn the engine reliably under all hot or cold engine or ambient temperature conditions. The starter shall be a heavy-duty 24-volt 'Delco Remy' or approved equal as recommended by the engine manufacturer and approved by the County. Hybrid drive buses shall utilize the hybrid drive electric motor(s) to start the engine.

The starting function shall be interlocked so that:

Engine can be started in neutral gear only with the transmission selector in neutral only.

Starter will not operate when engine is running. The interlock shall be fuel pressure actuated or actuated by other approved means.

Other major electrical loads are disconnected while cranking.

**C5.02.10 Coolant Heater**

If the engine is unable to provide sufficient waste heat to: meet the heating pull-up requirements at Section C6.04.01, or provide a sufficient engine coolant temperature for optimum emission control, or both, the Contractor shall provide a diesel-fueled coolant heater, 'Webasto' or approved equal, to provide the necessary heat. The operation of this coolant heater must be coordinated with the operation of the engine thermostat and the engine fan to provide the most economical and the most efficient rise in coolant temperature under all conditions for which additional heat is required. The Contractor will present evidence of this coordination to the County. Auxiliary heater, mounting, and control scheme to be approved by the County.

**C5.03 Engine Compartment, Controls, Gauges and Linkages**

**C5.03.01**

Each motor bus shall be provided with all controls necessary for engine operation.

**C5.03.01.01 Starter Interlock**

A protective interlock shall be provided per section C5.02.09.

**C5.03.01.02 Fast Idle**

A fast idle system shall be supplied, to provide safe, rapid pump-up of the air system. It shall be operable by the driver only when the transmission is in neutral. It shall be adjustable and set at the engine manufacturer's recommended fast idle speed.

**C5.03.02 Engine Compartment**

The engine shall be contained in a separate compartment isolated from the passenger compartment to minimize entry of heat and noise and to minimize the danger from fire. It shall be designed for simplicity and ease of access and maintenance. Engine doors shall be vented when possible to allow heat to escape.

**C5.03.03 Compartment Lighting**

The compartment shall contain a sufficient number of low profile lamps (minimum 3) to adequately light the compartment for nighttime road service. There shall be a conveniently mounted ON and OFF waterproof toggle switch to control these lamps.

**C5.03.04 Engine Compartment Controls and Gauges**

Provide the following gauges and controls in the engine compartment: direct reading mechanical engine oil pressure; cooling system temperature; hand-operated throttle; engine diagnostic connector; front start lockout switch; and rear start/run/stop switch. Gauges shall be illuminated and gauges and switches shall be waterproof. The rear start switches shall be interlocked so they will not function with the transmission in gear and the parking brake not applied. Layout and functionality to be approved by the County.

#### **C5.03.05 Fluid Refill Tags**

Permanent metal tags, easily readable and riveted in place, listing fluid and refill capacities shall be provided for engine oil, power steering fluid, engine coolant, engine fuel, hybrid drive or transmission fluid, differential oil and ramp hydraulic fluid. Label design and location to be approved by the County.

#### **C5.03.06 Fire Detection/Suppression**

Provide a fully automatic fire detection and dry chemical fire suppression system 'Amerex' SafetyNet or approved equal. The fire suppression system shall have agent cylinders for each zone and zoned detection and release independently in a minimum in two zones, zone 1 – the engine compartment, and zone 2 – the diesel particulate filter compartment. All detectors shall be independently monitored. A minimum of 6 detectors and 6 discharge nozzles shall be supplied. The system shall be capable of event logging, data monitoring, communication to multiplex vehicle networks via I/O or relay switching, and providing trouble indications for all inputs and outputs. Operator/fault messages shall be displayed via text messages on an operator display panel. Provide a supplemental manual actuator in the driver's station for each detection zone. Provide appropriate status and warning lights on the driver's dash and an audible fire detection warning. System to be unaffected by engine compartment cleaning with high pressure hot water ("steam cleaning").

If necessary, provide a switch to disable the system with visible indication to the driver that the system is disabled. System to be as maintenance-free as possible. Access panel(s) shall be provided, if necessary, to allow reading the gauges on the fire suppression bottles and to easily remove and replace the bottles. Entire system, including component locations, to be approved by the County.

### **C5.04 Hybrid Drive or Transmission**

#### **C5.04.01.01 Hybrid Drive**

Buses shall have a hybrid drive unit that, coordinated with the engine and the rear axle drive ratio, enables the vehicle to achieve the required top speed, acceleration and hill climbing capability while still maintaining passenger comfort and providing a smooth ride. Hybrid drive input torque rating shall exceed engine output torque. The hybrid drive shall be rated to operate at the GVWR of the bus. Hybrid drive to be an 'Allison' E<sup>P</sup>, or approved equal, with the following components: two 1000/2000 Series™ System Controllers; Dual Power Inverter Module; an Energy Storage System, and all necessary interconnecting wiring and piping. Hybrid drive to have latest electronic control.

The engine and hybrid drive combination shall automatically prevent lugging when climbing hills of any gradient on which the bus is designed to operate. The hybrid drive and its push-button shift select control head shall be designed or interlocked so the possibility of damage or uncontrolled acceleration due to driver misuse of the shift select control head is minimized. Provide a 'Tunnel' or 'Hush' mode option for quiet operation in the downtown transit tunnel. Provide a means to insure that the driver has a consistent level of retardation, based on pedal angle, despite the level of charge in the battery. It is preferred that a dynamic brake resistor be utilized to dissipate excess electrical energy if the battery is not receptive. The Contractor, the hybrid drive and engine manufacturers and the County shall jointly optimize the performance program using the prototype bus in the Seattle/King County area. This electronic control shall be able to utilize full electronic diagnostic techniques with an industrial grade testing box.

The electronically controlled hybrid drive shall have on-board diagnostic capabilities, be able to monitor functions, store and time stamp out-of-parameter conditions in memory, and communicate faults and vital conditions to service personnel. The hybrid drive shall contain built-in protection software to guard against severe damage. A diagnostic reader device connector port, suitably protected against dirt and moisture, shall be provided in the operator's area. If the hybrid drive unit is controlling the engine, the hybrid drive logic will respond to all out of normal range outputs from the engine in order to protect the engine from damage. The Contractor will submit evidence of this coordination among the engine manufacturer, the hybrid drive manufacturer, and the Contractor, for the approval of the County.

Any devices cooled by engine coolant or oil shall have quarter-turn ball valves on each side of the device.

For oil sampling, the hybrid drive shall be equipped with a 'KP' or approved equal pushbutton oil sampling valve, with Viton seal, metal cap and 3/16" tubing spout barb. This unit shall be approved by the County, and mounted in coordination with the manufacturer's requirements.

The hybrid drive shall be equipped with an overheat warning at the driver's station as referenced in section C4.06.01.

#### **C5.04.01.02 Fluid Filters and Cooler**

An external hybrid drive fluid filter as recommended by the hybrid drive manufacturer shall be supplied. Hybrid drive fluid shall be as listed on Attachment 19. The hybrid drive shall be capable of being easily and completely drained. It shall be removable without removing the engine, unless other removal methods have pre-bid approval. An oil cooler that maintains the fluid temperature below the limit allowed by the fluid manufacturer under all service conditions shall be provided. The oil cooler shall be stainless steel, cleanable, and supplied by the hybrid drive manufacturer. The hybrid drive manufacturer shall supply all hoses and wiring harnesses.

#### **C5.04.01.03 Electric Energy Storage System**

The traction energy storage system shall be composed of nickel metal hydride batteries or another approved energy storage system, along with associated power electronics interface and controls, diagnostic systems, and environmental controls. This system shall be designed to provide a load-leveling function in the hybrid propulsion system. The energy storage devices used, and their arrangement shall be selected and sized to meet bus performance specifications and design goals, including: reduced vehicle exhaust emissions, improved vehicle fuel economy, long cycle life, low life-cycle cost, safety, maintainability, durability, and simple, robust diagnostics. The minimum design life of the energy storage system shall be 6 years.

Individual energy storage devices shall be packaged in one or more modules, which shall be mounted in an enclosure(s) that permits ease of servicing. Energy storage shall be roof-mounted on the lead unit to optimize weight distribution. The enclosure shall be double-hulled to prevent any leaked substance from escaping. The energy storage system and enclosure(s) shall be designed to minimize shock hazard to maintenance personnel. Access to individual devices within each module shall be through two covers or panels. Provide adequate walking and working room with both doors open. Hazard warnings shall be visible on the inner cover or panel and hazard warnings shall remain visible with both covers open. Individual devices within a module, or the entire module, shall be replaceable within 1 hour.

The storage system shall include a management system to monitor and control the operating conditions within each energy storage system module, including voltage, current, and temperature. This system shall include an over-current and an over-temperature protection feature that disconnect current to and from the energy storage modules in the event of an over-temperature or over-current condition. Energy storage A/C unit, if necessary, shall not activate passenger compartment evaporators and fans when it calls for cooling.

The energy storage system shall include a voltage equalization system that will provide real-time equalization of voltage between individual energy storage devices within each module. This equalization function shall be accomplished automatically, and shall not require manual intervention by the bus operator or maintenance personnel. The propulsion system shall be designed so that the energy storage system shall not require external charging from the electric grid. System, including mounting and location, to be approved by the County.

#### **C5.04.01.04 High Voltage Devices**

All devices that contain circuits or equipment energized or capable of being energized at high voltage shall be contained within protective enclosures or enclosed bus body compartments. All access covers for these compartments shall be permanently labeled with 'DANGER HIGH VOLTAGE' signs.

#### **C5.04.01.05 High Voltage Wiring**

All conductors carrying voltages of 50 Vac, 50 Vdc, or greater, shall be considered High Voltage (HV). All HV wiring shall be 'Exane™', 2000V 110°C rated, by 'Rockbestos Surprenant Cable Corp.' or approved equal. HV wiring specifically supplied and recommended by the hybrid drive manufacturer is allowed. HV wiring must be installed separately from low voltage wiring, and must be installed damage-free. Any box with HV terminations shall be sealed, with HV wires entering through high quality gland nuts of the correct size. HV terminations shall not be covered with tape or heat shrink.

#### **C5.04.02.01 Transmission**

Buses shall have an automatic transmission that, coordinated with the engine and the rear axle drive ratio, enables the vehicle to achieve the required top speed, acceleration and hill climbing capability while still maintaining passenger comfort and providing a smooth ride. Transmission input torque rating shall exceed engine output torque. The transmission shall be rated to operate at the GVWR of the bus. Transmission shall be an 'Allison' B500R capable of five speeds plus reverse, or approved equal. Transmission to have latest electronic control.

The engine and transmission combination shall automatically prevent lugging when climbing hills of any gradient on which the bus is designed to operate or a control shall be provided which shifts the transmission to a lower gear and holds it in that gear when required to prevent lugging. The transmission and its push-button shift select control head shall be designed or interlocked so the possibility of damage or uncontrolled acceleration due to driver misuse of the shift select control head is minimized. The transmission shift point control shall be fully electronic and have the ability to accept programming of the shift points for optimum performance. The Contractor, the transmission and engine manufacturers and the County shall jointly optimize the shift program using the prototype bus in the Seattle/King County area. This electronic control shall be able to utilize full electronic diagnostic techniques with an industrial grade testing box.

The electronically controlled transmission shall have on-board diagnostic capabilities, be able to monitor functions, store and time stamp out-of-parameter conditions in memory, and communicate faults and vital conditions to service personnel. The transmission shall contain built-in protection software to guard against severe damage. A diagnostic reader device connector port, suitably protected against dirt and moisture, shall be provided in the operator's area.

For oil sampling, the transmission shall be equipped with a 'KP' or approved equal pushbutton oil sampling valve, with Viton seal, metal cap and 3/16" tubing spout barb. This unit shall be approved by the County, and mounted in coordination with the transmission used and manufacturer's requirements.

The transmission shall be equipped with an overheat warning at the driver's station as referenced in section C4.06.01.

#### **C5.04.02.02 Transmission Fluid, Filters and Cooler**

An external transmission fluid filter as recommended by the transmission manufacturer shall be supplied. Transmission fluid shall be as listed on Attachment 19. The transmission shall be capable of being easily and completely drained. It shall be removable without removing the engine, unless other removal methods have pre-bid approval. A transmission oil cooler that maintains the fluid temperature below the limit allowed by the fluid manufacturer under all service conditions shall be provided. The transmission oil cooler shall be supplied by the transmission manufacturer and shall be rebuildable. The transmission manufacturer shall supply all hoses and wiring harnesses.

#### **C5.04.02.03 Transmission Retarder**

The transmission shall be equipped with an integral retarder, and the braking effort it develops shall blend with and augment the air brakes in order to maximize the life of wearing components in the air brake system. While using the retarder, the bus shall be capable of descending long, steep grades at reasonable speeds with minimal transmission heat build-up. Retarder stage 1 shall activate upon release of the throttle and be not more than 33% of total retarder application. Sequential air pressure switches operating from the brake pedal shall control additional retarder stages. Air pressure switches shall be in 2-psi increments beginning with 2 psi. Full retarder effectivity shall be available under all ambient temperature, load and grade conditions.

Provide a retarder override switch to be located in the front destination sign compartment. The switch will allow retarder function to be shut off; its location shall not interfere with destination sign and equipment access.

The retarder shall be capable of limiting the speed of the bus to 30 mph (48 km/h) on a 7 percent grade under the following conditions: transmission at operating temperature; initial speed below the limiting speed; service air brakes not used; bus at capacity load; length of downgrade 0.62 mi. (1 km). The Contractor shall submit speed limiting performance and transmission temperature rise data for the approval of the County.

#### **C5.04.03 Drive Shaft**

The drive shaft and universal joints shall be heavy duty, 'Spicer Industries', 'Dana Corp.' or approved equal, approved by the hybrid drive, transmission, and drive axle manufacturers. Provide a drive shaft guard, or functionally equivalent structure, to prevent the drive shaft from hitting the ground in case of shaft or universal joint failure. Universal joints and drive shaft slip joints shall have separate grease fittings accessible by a

standard grease gun. Universal joints shall be installed with proper phasing and the drive shaft shall be balanced for all bus speeds up to the maximum specified for the type of vehicle. Drive shaft angles and offset must not exceed universal joint manufacturer's recommendations. The slip joint must not 'bottom out' even at maximum drive axle suspension travel. Provide a strap-type yoke or a flange at the differential end of the drive shaft. The drive shaft assembly, mounting and components to be approved by the County.

### **C5.05 Axles, Wheel Bearings & Air Suspension**

#### **C5.05.01 Axles**

Suspension shall be by solid axles, unless other methods have pre-bid approval, and all components shall be of sufficient capacity to carry all static and dynamic loads imposed upon them on the severe transit bus duty cycle through the expected service life of the bus. Special attention should be given to the aisle width requirements in sections C1.02.07 and C6.08.

Drive axle gearing shall be designed for long life and quiet operation at all speeds and conditions of positive or negative torque and shall be easily accessible for lubrication. Hub reduction units may be used. Drive axle lubricant shall be as listed on Attachment 19. Front and center axles to be 'MAN' or approved equal. Rear axle to be the latest heavy duty 'MAN' or approved equal, with gearing ground for quiet operation. Axles to be approved by the County.

All wheel hubs shall be painted with 'E.I. DuPont' Imron, 'PPG' Delta 3500 'PPG' Delta 2800 or approved equal. Color is given in Attachment 11.

#### **C5.05.02 Wheel Bearings**

Wheel bearings shall be sized for anticipated loads and shall provide smooth low friction rotation of the wheels under all conditions of temperature, loading and operating speed herein described. The bearings shall be easily accessible, serviceable and replaceable and shall be properly sealed to prevent leakage of lubricant. Non-drive axle wheel bearings shall be lubricated by an oil bath system. Oil seals shall be the unitized type, 'National' or approved equal, or another brand as recommended by the axle supplier. Supply 'Stemco' or approved equal hubcaps on the front axle.

#### **C5.05.03 Suspension**

Buses shall be provided with a full air suspension system. It shall include provisions for stabilizing and damping so as to produce a satisfactory ride quality as described in section C1.07 under all load conditions. All suspension components shall be sized for at least 150% of a seated load or GAWRs, whichever is less. Methods of construction and materials used shall permit easy access to and convenient replacement of bellows, shock absorbers and other suspension components.

##### **C5.05.03.01 Air Bellows**

Provide two or four air bellows on the front axle and four air bellows on the second and drive axle, with a heavy-duty 'Koni', or approved equal, shock absorber on each side of each axle. Air bellows should be placed as far outboard as possible. The air suspension system shall, by use of leveling valves, the air supply, and the bellows, automatically regulate air pressure to maintain constant spring characteristics and height of the bus body regardless of loading of the bus. The valves shall have a damping or compensating feature to prevent excessive consumption of air during rapid axle fluctuations. Leveling valve exhaust ports shall be protected to avoid plugging with road dirt. Leveling valves to be approved by the County.

##### **C5.05.03.02 Stabilizing Devices**

Radius rods and other stabilizing devices shall be provided as necessary at the axles to control lateral, longitudinal and torsional movement of the suspension system. Anti-sway bars shall be provided at any axle as required to minimize bus sway while maneuvering in traffic. Radius rods and their wearing components shall be sized for allowable loads, engineered for long life, and designed and integrated into the bus for ease of accessibility for replacement.

##### **C5.05.03.03 Alignment**

All normal alignment adjustments to steered axles shall be capable of being performed easily and without disassembly of suspension components. Steering linkages and components shall be adjustable using standard shop tools. All coaches shall have the axles aligned to the coach body and the front wheels aligned before delivery.

##### **C5.05.03.04 Lubrication**

All joints and parts of the suspension and steering system requiring lubrication shall be provided with zerk type fittings that are designed and located for ease of visual inspection, accessibility and serviceability. Chassis lube

is listed on Attachment 19. If 'lifetime-lubricated' steering system components are proposed, the County shall approve their use.

**C5.05.04 Kneeling**

Provide a means to quickly exhaust the air from the front suspension or the right side suspension in order to lower the floor at the front door. System to be interlocked with brake and accelerator. System to be approved.

**C5.06 Fuel Storage and Handling**

**C5.06.01**

The fuel system consists of the fuel tank, filler provisions, filters, lines to deliver the fuel to the engine and all auxiliary equipment required so the fuel system will function under all loading and operating conditions described in this specification. The County shall approve the fuel system.

**C5.06.02 Fuel Tank(s)**

The fuel tank (or tanks if necessary) shall be rigidly attached to the bus chassis, baffled to prevent sloshing and vented to relieve over pressure without fuel spillage. The fuel tank shall be located between the joint and third axle, and shall have a hex head sump drain plug. The fuel tank shall be an approved heavy-duty unit constructed of stainless steel. The fuel outlet shall be at the center of the tank. Minimum usable capacity shall be 130 gallons (492 liters). The fuel tank shall be removable from the underside of the bus.

**C5.06.03 Fuel Filling**

The fuel filler pipe shall be located on the right side of the bus, between the joint and the third axle. The fuel fill shall be at least 30 inches (762 mm) above ground level. The minimum fuel-filling rate shall be 40 gallons per minute (152 l/min).

An 'Emco-Wheaton' Posi/Lock-II™ with Posisnap™ Cap or interchangeable approved equal Dry-Break® pressure fueling system shall be used. Length of the filler neck shall be minimized. Any flexible hose used between the fuel filler neck and the fuel tank shall be impervious to diesel and meet the requirements of section C5.06.06. Body and trim in the vicinity of the filler shall allow any overflow to drop to the ground without spilling on side panels. A plastic protector may be required on the surrounding body to eliminate damage from the fuel fill nozzle. A metal-hinged access door with replaceable over-center springs shall be provided. The fuel fill opening and/or door shall not interfere with the fuel nozzle in any position.

**C5.06.04 Filter**

Spin-on type fuel filters, as recommended by the engine manufacturer, shall be mounted on the engine in an area easily accessible for servicing.

**C5.06.05 Siphoning & Priming**

Provision shall be made in the fuel system to prevent fuel from siphoning or draining back into the tank from the system or from siphoning during fuel filter maintenance.

**C5.06.06 Flexible Fuel and Oil Line Hose Assemblies**

Flexible fuel and oil hose assemblies shall preferably be of the Teflon liner type, TFE fluorocarbon resin flexible hose, wire braid reinforced with a plastic outer cover. 'Synflex FC300' orange nylon tubing may be provided with prior approval of the County.

**C5.07 Braking System**

**C5.07.01**

Buses shall be equipped with brake systems that conform to the requirements of all Federal and State of Washington regulations, designed so such conformance can be maintained throughout the normal adjustment cycle. An approved supplemental brake shall be provided. The supplemental braking shall not be used in meeting regulatory criteria. The braking system shall include service brakes, a parking and emergency brake, and a hill holder.

**C5.07.02 Service Brakes**

Service air brakes shall be furnished on all wheels of each bus. The County shall approve the brake system including all components.

**C5.07.03 Control**

The driver's brake pedal shall control the service brake and the supplemental brake in a coordinated manner to give a total braking effort depending on the position of the pedal up to the maximum capability of the braking system. The control shall make maximum practical use of the supplemental brake to minimize brake fade and to

achieve maximum brake lining lifetimes. Braking forces shall be proportioned among the axles to assure balanced braking and equalize lining life between axles. Braking shall be initiated at the rear axle.

The brake lamps shall illuminate only when the brake pedal is depressed (not when auxiliary braking is applied). Also, reference sections C3.04.02.01 and C5.09.01 for other systems that shall activate the brake lamps.

#### **C5.07.04 Brake Drums, Shoes and Linings**

Brake drums shall accommodate 14.5 to 16.5 inch brakes. Brake shoes shall be of two-shoe type, heavy duty, heavily ribbed to insure uniform pressure. Linings shall be riveted on and non-asbestos. A method of visually indicating wear of the brake lining shall be provided. 'S'-cam brakes shall be supplied. Drums shall be labeled with the maximum safe diameter for drum refinishing. Provide zerk fittings or another approved method to lubricate S-cam bushings or bearings. Other brake configurations, such as disc brakes may be supplied with the prior approval of the County.

#### **C5.07.05 Brake Adjustment**

Brakes shall be provided with 'Haldex' or approved equal automatic slack adjusters. All slack adjusters shall be removable without disassembly or removal of other components. Slack adjuster travel and geometry shall be designed not to exceed 90 degrees in relation to the pushrod, when properly adjusted, throughout the lining life.

#### **C5.07.06 Brake Hoses**

Brake hoses shall be installed in locations where the possibility of damage is minimized. Hoses shall be clamped and supported by the bus structure to minimize long unsupported hose lengths and to eliminate rubbing and/or chafing.

#### **C5.07.08 Brake Chambers**

Chambers shall be long-stroke, 'MAXI', 'MGM'—Tubed style or approved equal with a brake adjustment indicator if available. Chambers shall be sealed to prevent entry of dirt or water. Rubber diaphragms will be replaceable without removing the chamber from the coach. Geometry of the brake chambers in relation to the slack adjuster will eliminate any possible contact between the push rod and the chamber housing.

#### **C5.07.09 Anti-Lock Braking**

The buses shall be equipped with an all wheel Anti-Lock Braking System (ABS) by 'WABCO' or approved equal to reduce the possibility of tire skid on slippery roads and/or during panic stops.

This system shall have sensors located at every wheel and the electronic/air controls and operation shall be fully automatic and transparent to the driver. The ABS system shall have onboard diagnostic capabilities able to monitor vital functions, store and time stamp out of parameter conditions in memory, and communicate faults and vital conditions to service personnel. Diagnostic reader device connector ports, suitably protected against dirt and moisture, shall be provided in an approved location. The County shall approve the installation.

#### **C5.07.10 Automatic Traction Control**

The Contractor shall supply an automatic traction control system on each drive axle wheel end to maximize torque to the wheel end having the best traction. The system shall be transparent to the bus operator. The County shall approve the hardware and installation.

#### **C5.07.11 Brake Balance**

It is required that brake wear be distributed approximately equally among the axles. To insure this, the Contractor and the designer/supplier of the foundation braking system on each type of bus will work with the County's Fleet Engineering group to perform brake thermal balance testing on the prototype bus or a production bus at King County in order to optimize the following parameters: crack pressure; application timing; pressure balance throughout the operating range during application and release; release timing; and thermal balance of the foundation brakes under load. Results to be approved by the County. Resulting modifications will be incorporated on all production buses, and retrofitted to the prototype(s).

### **C5.08 Parking and Emergency Brake**

#### **C5.08.01**

The parking and emergency brake shall be a spring applied/air released brake, acting on the drive axle, controlled by a manual valve located to the left of, and convenient to, the driver. The control valve shall be a 'Bendix' Model PP-1, or approved equal valve. It shall automatically apply if air system pressure falls below 40 - 45 psi. (2.76 - 3.10 bar) or such other value as is recommended by the Contractor. This brake shall hold the bus with a capacity load on a 20% grade, both uphill and downhill, with new brake linings; it shall also keep the bus from moving under full throttle on level ground when the coach is in gear. The parking brake shall fully release within two seconds of pressing the PP1 valve. Position and special requirements can be referenced in section C4.04.04.

#### **C5.09 Hill Holder**

##### **C5.09.01**

A means shall be provided so the driver can hold brakes on while moving his or her foot from the brake pedal to the accelerator, to prevent rollback. The control shall be an extended arm toggle switch positioned for actuation by the driver's left hand. The control shall activate the service brakes on all axles except the first. Operator activation of the hill holder shall be accomplished through the hill holder switch. Deactivation of the hill holder shall occur upon activation of the throttle. Hill holder may not be engaged unless coach speed is below 3 mph. Activation of the hill holder shall light the brake lamps. The County shall approve the hill holder and its location.

#### **C5.10 Tow Vehicle - Controlled Braking**

##### **C5.10.01**

Supply the necessary piping and valving to allow a County tow truck to proportionally actuate all axle braking (except the first axle) on the bus while the bus is being towed from the front. The air signal is taken from the tow truck's glad hand. Provide an Industrial design plug, 1/4 inch coupler size, protected with a brass push-to-connect socket with a screen, behind the front access door or other approved location for control air hose hook up while towing. The 'Push to Connect' air connector is to be a 'Parker' type 30 or approved interchangeable equal. Hardware and piping layout to be approved by the County.

## SECTION C6 - EQUIPMENT AND SUSPENSION COMPONENTS

### C6.01 Compressed Air System

#### C6.01.01 Air Compressor

The air compressor shall be a 'WABCO' 18.7, 'Bendix' 922 or approved equal. A fast idle control, (reference section C5.03.01.03), shall be provided to rapidly raise the air pressure to operating level.

The compressor shall have pumping capacity sufficient to maintain all systems at rated pressure and makeup and shall be adequately cooled and lubricated so it will last the service life of the bus without excessive maintenance. The compressor air intake shall be supplied with clean air, taken down stream from the engine air intake filters. The compressor shall provide its rated output at 120 psi. (8.4 bar). Provide a 'Bendix' model D-2 or approved equal governor in an easily accessible location.

#### C6.01.02 Air Reservoirs

Non-corroding tanks or reservoirs shall be provided of sufficient capacity and quantity to supply all components that depend on the compressed air system. Tanks shall meet the requirements specified in S.A.E. J10. Provide a 'ping' tank between the compressor and air dryer to smooth compressor output. Provide a means to drain this tank from beneath the bus, including a remote drain if necessary. All tanks shall be provided with a readily accessible manually operated drain valve. The valves shall be protected to prevent accidental breakage.

#### C6.01.03 Air Dryer

The air system shall be equipped with an air dryer located before the No.1 air tank and as far from the compressor as possible. The dryer shall be a 'Graham-White' SludgeBraker® model QBA 15, or approved equal, desiccant dryer with heating element.

#### C6.01.04 Valves, Piping and Air Control Equipment

All valves, piping and air control equipment shall be of non-rusting and non-corroding materials. Flexible lines shall be provided where excessive vibration or flexing of lines would lead to failure of rigid lines. All air lines shall be installed to minimize freezing. All exhaust ports on the air system shall be protected to avoid plugging by road dirt or debris. A check valve or valves shall be provided to isolate air using equipment other than brakes from the air system so that brakes can operate despite failures such as ruptured air bags, etc. Air exhausting to the atmosphere from air filters, valves, dryers etc. shall be muffled with permanent no-maintenance silencers to prevent annoying noise, particularly when the bus is stopped.

Air lines, except necessary flexible lines, shall conform to the installation and material requirements of SAE Standard J844-Type 1 for copper tubing with standard, brass, flared or ball sleeve fittings, or SAE Standard J844-Type 3B for nylon tubing if not subject to temperatures over 200 degrees F. Accessory and other non-critical lines may use Type 3A tubing. Nylon tubing shall be installed in accordance with the following color-coding standards:

<b>Green</b>	Indicates primary brakes and supply
<b>Red</b>	Indicates secondary brakes
<b>Brown</b>	Indicates parking brake
<b>Yellow</b>	Indicates compressor governor signal
<b>Black</b>	Indicates accessories

The air system shall have air pressure tap off ports to allow accurate measurement of air pressures at each pressure regulator valve. These ports shall be covered when not being used.

#### C6.01.05 Air System Charging Connectors

Buses shall be provided with a front air connector to be used for supplying air for releasing the bus brakes while towing. The connector shall be located in a closed box on the front panel of the bus above the bumper. The connector shall be easily accessible, but shall not be subject to damage from towing hardware connections.

Buses shall be provided with a rear air connector in or near the engine compartment for supplying the coach with compressed air in the shop. Front and rear air connectors shall be plumbed through the air dryer.

Both connectors to be 'Parker' Type 30 or approved equal brass, Industrial design, push-to-connect sockets, ¼ inch coupler size. Location to be easily accessible with an air hose and shall be approved by the County.

Provide a 1/4-inch coupler size Industrial design plug and a 90-degree fitting on the end of wet tank or other approved location to apply shop air to the bus from a pit.

## C6.02 Hydraulic Systems

### C6.02.01

The hydraulic system is defined as those components consisting of all the valves, fittings, lines, pumps, reservoirs, filters and accumulators required to serve its loads. These loads are defined as the power steering, engine fan, ramp, and/or any other approved load. The hydraulic system shall provide a separate hydraulic circuit for each load. Special attention shall be paid to joints, fittings, valves and welds to reduce the possibility of leakage. All lines shall be protected from chafing and rubbing. The system shall use the fluids as listed in Attachment 19. The hydraulic pump(s), except as noted below, shall be driven by the engine, preferably with a mechanical takeoff.

### C6.02.02

The ramp system shall be straight hydraulic, electric over hydraulic, or straight electric.

### C6.02.03

Filtering shall be provided as recommended by the manufacturers of the hydraulically powered units. Spin-on filters are preferred. Hydraulic reservoirs shall be located in easily accessible locations, approved by the County. There shall be a sight glass or other approved fluid level checking method on each hydraulic system reservoir and it shall be easily readable. The fluid level-checking requirement may be deleted with prior approval from the County.

### C6.02.04

All hydraulic systems shall have pressure tap off ports to allow accurate measurement of hydraulic pressures at test points necessary for maintenance or troubleshooting. These ports shall be a quick disconnect in design and covered when not being used.

## C6.03 Electrical, Electronic and Data Communication Systems

### C6.03.01

General requirements for the electrical system shall be as specified in Subsection C6.03.02. The Electrical System consists of the vehicle batteries and all other equipment that generate, distribute and use battery power throughout the vehicle (e.g., generator, voltage regulator, wiring, relays, and connectors).

General requirements for electronics shall be as specified in Subsection C6.03.03. Electronics are those components of the electrical system made up of discrete solid-state devices such as transistors, resistors, capacitors and diodes that are part of individual vehicle systems. Electronics also include the integrated circuits that are part of microprocessors that allow individual vehicle systems to process and store data.

Data Communication Systems shall be as specified in Subsection C6.03.04. These systems consist of the bi-directional communications networks that electronic devices use to share data with other electronic devices and systems. Communication networks are essential to integrating electronic functions both onboard the vehicle and off.

Data Communications Systems are divided into three levels to reflect the use of multiple data networks.

- 1) Drive train Level – Components related to the drive train including the engine, hybrid drive unit or transmission, and anti-lock braking system (ABS), including traction control.
- 2) Multiplex Level – Electrical devices controlled through input/output signals such as discrete, analog, and serial data information (i.e., on/off switch inputs, relay or relay control outputs). Multiplexing is used to control components not typically found on the Drive train or Information Levels such as lights, ramp, doors, and heating, ventilation, air conditioning (HVAC) systems.
- 3) Information Level – Components whose primary function is the collection, control or display of data that is not necessary to the safe driveability of the vehicle (i.e., those functions, that when inoperable, will still allow the vehicle to operate). These components typically consist of those required for automatic vehicle location (AVL) systems, destination signs, fareboxes, passenger counters, radio systems, automated voice and signage systems, video surveillance, and similar components.

Design of the electrical, electronic and data communication systems shall be modular so that each major component, apparatus panel, or wiring bundle is easily separable with standard hand tools or by means of connectors. Each module, except the main body wiring harness, shall be removable and replaceable in less than 1 hour by a 3M mechanic. Power plant wiring shall be an independent wiring module. Replacement of the engine compartment wiring module(s) shall not require pulling wires through any bulkhead or removing any terminals from the wires.

### C6.03.01.01 Environmental and Mounting Requirements

The electrical system and its electronic components shall be capable of operating in the area of the vehicle in which they will be installed as recommended in SAE J1455, except as modified by the temperature requirements found in Attachment 3.

Electrical and electronic equipment shall not be located in an environment that will reduce the performance or shorten the life of the component or electrical system. No vehicle component shall generate, or be affected by, electromagnetic interference or radio frequency interference (EMI/RFI) that can disturb the performance of electrical/electronic equipment as defined in SAE J1113.

The County shall follow recommendations that must be provided by bus manufacturers and subsystem suppliers regarding methods to prevent damage from voltage spikes generated from welding, jump starts, shorts, etc. The Contractor will supply a checklist of connectors and connections to be opened when electric welding is performed on the bus.

#### **C6.03.01.02 Mounting**

All electrical/electronic hardware shall be accessible and replaced by a 3M mechanic in 30 minutes. It shall be mounted on an insulating panel to facilitate replacement. The mounting of the hardware shall not be used to provide the sole source ground, and all hardware shall be isolated from potential EMI/RFI.

All electrical/electronic hardware mounted in the interior of the vehicle shall be inaccessible to passengers and hidden from view unless intended to be viewed. The hardware shall be mounted in such a manner as to protect it from splash or spray.

All electrical/electronic hardware mounted on the exterior of the vehicle, that is not designed to be installed in an exposed environment, shall be mounted in a sealed enclosure.

All electrical/electronic hardware and its mounting shall comply with the shock and vibration requirements of SAE J1455.

#### **C6.03.02 General Electrical Requirements**

##### **C6.03.02.01 Batteries**

The system shall supply a nominal 12 Vdc and 24 Vdc. Batteries, except those used for auxiliary power, shall be easily accessible for inspection and service from the outside of the vehicle only.

Provide four "Odyssey" model PC2150S group 31 sealed, maintenance-free batteries (without metal jacket) or approved equal. Each battery shall have a purchase date no more than 180 days before the date of delivery of the bus. Batteries, while in the Contractor's possession, shall be maintained according to the battery manufacturer's instructions.

The battery terminals shall be 3/8-16 UNC thread, stainless steel. The battery terminal ends and cables shall be color-coded with red for the primary positive, black for negative, and another color for any intermediate voltage cables. Battery cables shall be flexible and sufficiently long to reach the batteries with tray in the extended position without stretching or pulling on any connection and shall not lie directly on top of the batteries. Cables shall not rub on the tray or compartment, shall not touch each other, and shall be securely clamped. Except as interrupted by the master battery switch, battery and starter wiring shall be continuous cables with connections secured by bolted terminals; and shall conform to specification requirements of SAE Standard J1127 –Type SGT or SGX and SAE Recommended Practice J541.

Jump-start connectors, 'Anderson Power Products' Model 6322G1, or approved interchangeable equal, shall be provided in the engine compartment and next to the battery main switch, equipped with dust cap, adequately protected from moisture, dirt and debris, and located so that the mating connector can easily be connected.

The County is interested in a battery-configuration scheme that would isolate starting batteries from the house load batteries, so the growing number of key-off electrical loads cannot cause a no start condition.

##### **C6.03.02.02 Dedicated Electronic Power Supply**

If required, gel-pack, or any form of encased batteries used for auxiliary power, are allowed to be mounted on the interior of the vehicle if they are contained in an enclosed, non-airtight compartment and accessible only to maintenance personnel. This compartment shall contain a warning label prohibiting the use of lead-acid batteries.

##### **C6.03.02.03 Master Battery Switch**

A single master switch shall be provided near the battery compartment for the disconnecting of all battery positives (12V & 24V) except for safety devices such as fire suppression system, the radio system, and other systems as specified. The location of the master battery switch shall be clearly identified on the exterior access panel, be

accessible in less than 10 seconds for de-activation, and prevent corrosion from fumes and battery acid when the batteries are washed off or are in normal service.

Turning the master switch "OFF", with the power plant operating, shall not damage any component of the electrical system. The master switch shall be capable of carrying and interrupting the total circuit load.

**C6.03.02.04 Voltage Equalizer**

If the bus electrical system is 24 volts, a 'Vanner' battery equalizer, or approved equal, shall be used to provide 12 volts for exterior lights and other equipment.

**C6.03.02.05 Power Generation and Distribution**

**C6.03.02.05.01 Power Generation**

The power generating system shall maintain the charge on fully charged batteries, except when the vehicle is at standard idle with a total alternator load exceeding 70 percent of the alternator nameplate rating. Use of fast idle shall maintain a charge on fully charged batteries so long as the total alternator load does not exceed 90 percent of the alternator nameplate rating.

The vehicle manufacturer shall provide to the County both at time of bid and actual production an analysis of the estimated electrical load for each system. Alternator over-voltage output protection shall be provided. Alternator shall be 'Niehoff' C703 air-cooled or approved equal; regulator shall be external, solid state and adjustable, 'Niehoff' or approved equal.

**C6.03.02.05.02 Power Distribution**

Power distribution to all equipment requiring dedicated power and ground wiring to the batteries shall be accomplished by using power bus bars consisting of either a solid copper bar or heavy-duty terminal strip. One bus bar for each voltage potential, including ground, shall be located as close to the source of the potential as possible. Cabling from the bus bars to the equipment must be sized to supply the total current requirements with no greater than a five percent volt drop across the length of the cable.

**C6.03.02.05.03 Special Equipment Circuits**

Supply a coil of wire under the floor powered by a dedicated circuit for later hookup of farebox power by the County (reference Section C4.13.02).

A dedicated electrical circuit for the radio communication equipment shall be provided. This circuit shall be initiated at the batteries and terminated at the electronic equipment compartment (reference Section C2.24). It shall be isolated from the coach's starting batteries and all other electronic and electrical equipment. This circuit shall be independent of the electrical main switch, be capable of delivering 25 continuous amperes at 12 volts, measured at the electronic equipment compartment. It shall be protected at the source with an adequately sized, manually tripped and resettable circuit breaker. The radio equipment positive and negative cables shall be continuous from the battery compartment to the electronic equipment compartment and be installed to minimize pickup of electrical noise, hash, and voltage transients. If a 24-volt coach electrical system is used for the bus, an 'Electric Transit Laboratories Inc. (ETL)' or approved equal converter shall be provided in the electronic equipment compartment to supply the required power. Provide a 'Cole Hersee' 95517-A or approved equal keyed switch with key no. 83357 mounted on the front side of the electronic equipment compartment in an approved location. (This switch is used to reset radio power).

The electronic equipment compartment at Section C2.24 shall also be equipped with the following labeled power supplies:

One switched 12 Vdc 5A; one switched 24 Vdc 5A; one 12 Vdc 10A battery; three 24 Vdc 10A battery.

**C6.03.02.06 Circuit Protection**

All branch circuits, except battery-to-starting motor and battery-to-generator/alternator circuits, shall be protected by circuit breakers or fuses sized to the requirements of the load. Electronic circuit protection for the cranking motor shall be provided to prevent engaging of the motor for no more than 30 seconds at a time to prevent overheating. The circuit breakers or fuses shall be easily accessible for authorized personnel. Fuses shall be used only where it can be demonstrated that circuit breakers are not practicable. Circuit breakers shall be manually trippable and resettable, and shall provide visible indication of open circuits. Radio power circuit breaker shall be specifically labeled and located in an approved location.

Circuit breakers or fuses shall be sized to a minimum of 15 percent larger than the total circuit load current. The current rating for the wire used for each circuit must exceed the size of the circuit protection being used. Wire and cable ampacity for wire sizes 18 AWG and larger shall be in accordance with the Wire Ampacity Chart found in Attachment 20.

**C6.03.02.07 Grounds**

The battery shall be grounded to the vehicle chassis/frame at one location only, as close to the batteries as possible. When using a chassis ground system, the chassis shall be grounded to the frame in multiple locations, evenly distributed throughout the vehicle to eliminate ground loops. No more than four ground connections shall be made per ground stud. Electronic equipment requiring an isolated ground to the battery (i.e., electronic ground) shall not be grounded to the chassis.

#### **C6.03.02.08** Wiring and Terminals

All power and ground wiring shall have double electrical insulation, shall be waterproof, and shall conform to specification requirements of SAE Recommended Practice J1127, J1128 and J1292. Double insulation shall be maintained as close to the junction box, electrical compartment, or terminals as possible.

Wiring shall be grouped, numbered, and color-coded (with at least six colors). Wiring harnesses shall not contain wires of different voltage classes unless all wires within the harness are insulated for the highest voltage present in the harness. Kinking, grounding at multiple points, stretching, and exceeding minimum bend radius shall be prevented.

Strain-relief fittings shall be provided at points where wiring enters all electrical compartments. Grommets or other protective material shall be installed at points where wiring penetrates metal structures outside of electrical enclosures. Wiring supports shall be protective and non-conductive at areas of wire contact and shall not be damaged by heat, water, solvents, or chafing. Wiring shall be strain-relieved near terminations.

To the extent practicable, wiring shall not be located in environmentally exposed locations under the vehicle. Wiring and electrical equipment necessarily located under the vehicle shall be insulated from water, heat, corrosion, and mechanical damage. Where feasible, front to rear electrical harnesses should be installed above the window line of the vehicle.

All wiring harnesses over five feet long and containing at least five wires shall include 10 percent (minimum one [1]) excess wires for spares. This requirement for spare wires does not apply to data links and/or communication cables. Wiring length shall allow end terminals to be replaced twice without pulling, stretching, or replacing the wire. Except for large wires such as battery cables, terminals shall be crimped according to connector manufacturers recommendations for techniques and tools to the wiring and may be soldered only if the wire is not stiffened above the terminal and no flux residue remains on the terminal. Battery cable connectors shall be crimped and soldered.

Terminals shall be crimped, corrosion-resistant and full ring type or interlocking lugs with insulating ferrules. When using pressure type screw terminal strips, stranded wire only shall be used. Insulation clearance shall ensure wires have a minimum of 'visible clearance' and a maximum of two (2) times the conductor diameter or 1/16 inch whichever is less. When using shielded or coaxial cable, upon stripping of the insulation, the metallic braid shall be free from frayed strands that can penetrate the insulation of the inner wires.

For shielding and coaxial requirements refer to Section C6.03.03.03.

Ultra-sonic and T-splices may be used with 7 AWG or smaller wire. When a T-splice is used it shall meet these additional requirements: include a mechanical clamp in addition to solder on the splice; the wire supports no mechanical load in the area of the splice; and the wire is supported to prevent flexing. All splicing shall be staggered in the harness so that no two splices are positioned in the same location within the harness.

For wiring harness connectors, pins shall be removable, crimp contact type of the correct size, and rated for the wire being terminated. All supply-side terminations shall end in a socket, not a pin. Unused pin positions shall be sealed with sealing plugs. Adjacent connectors shall either use opposing pin genders, different insert orientations, or different connectors to prevent incorrect connections. All cable connectors shall be placed to provide adequate space for ease of removal and disconnection. All electrical connectors subjected to environmental exposure outside the passenger compartment shall be corrosion resistant and splash proof.

#### **C6.03.02.09** Electrical Components

All electrical components, including switches, relays, flashers, and circuit breakers, shall be heavy-duty designs with either a successful history of application to heavy-duty vehicles, or design specifications for an equivalent environment. These components shall be replaceable in less than 5 minutes by a 3M mechanic.

All electric motors shall be either heavy-duty brushless type where practical, or have a constant duty rating of no less than 40,000 hours (except cranking motors). All electric motors shall be easily accessible for servicing.

#### **C6.03.02.10** Electrical Compartments

All relays, controllers, flashers, circuit breakers, and other electrical components shall be mounted in easily accessible electrical compartments. All compartments exposed to the outside environment shall be corrosion resistant and sealed. The components and circuits in each electrical compartment shall be identified and their location permanently recorded on a drawing attached to the inside of the access panel or door. The drawing shall be protected from oil, grease, fuel, and

abrasion. The front compartment shall be completely serviceable from the operator's seat, vestibule, or from outside. A rear start and run control box shall be mounted in an accessible location in the engine compartment.

### **C6.03.03** General Electronic Requirements

#### **C6.03.03.01**

If an electronic component has an internal clock, it shall provide its own battery backup to monitor time when battery power is disconnected. Any component with its own real-time clock will be set to Pacific Standard Time.

All electronic component suppliers shall ensure that their equipment is self-protecting in the event of shorts in the cabling, and also in over-voltage and reverse polarity conditions. If an electronic component is required to interface with other components, it shall not require external pull-up and/or pull-down resistors.

Kinking, grounding at multiple points, stretching, and exceeding minimum bend radius shall be prevented.

#### **C6.03.03.02 Discrete I/O (Inputs/Outputs)**

All wiring to I/O devices, either at the harness level or individual wires, shall be labeled, stamped or color-coded in a fashion that allows unique identification. Labels shall be resistant to rubbing (hot stamped tubing and protected printing are service-proven examples of acceptable labels). Wiring for each I/O device shall be bundled together. If the I/O terminals are the same voltages, then jumpers may be used to connect the common of each I/O terminal.

#### **C6.03.03.03 Shielding**

All wiring that requires shielding shall meet the following minimum requirements. A shield shall be generated by connecting to a ground, which is sourced from a power distribution bus bar or chassis. A shield shall be connected at one location only, typically at one end of the cable. However certain standards or special requirements, such as SAE J1939 or RF applications, have separate shielding techniques that shall also be used as applicable. *Note: A shield grounded at both ends forms a ground loop, which can cause intermittent control or faults.* When using shielded or coaxial cable, upon stripping of the insulation, the metallic braid shall be free from frayed strands, which can penetrate the insulation of the inner wires. To prevent the introduction of noise, the shield shall not be connected to the common side of a logic circuit.

#### **C6.03.03.04 Communications**

The data network cabling shall be selected and installed according to the selected protocol requirements. The physical layer of all network communication systems shall not be used for any other purpose other than communication between the system components, unless provided for in the network specifications.

Communications networks that use power line carriers (e.g. data modulated on a 24V-power line) shall meet the most stringent applicable wiring and terminal specifications.

#### **C6.03.03.05 Radio Frequency (RF)**

RF components, such as radios, video devices, cameras, global positioning systems (GPS), etc, shall use coaxial cable to carry the signal. All RF systems require special design consideration for losses along the cable. Connectors shall be minimized, since each connector and crimp has a loss, which will attribute to attenuation of the signal. Cabling should allow for the removal of antennas or attached electronics without removing the installed cable between them. The corresponding component vendors shall be consulted for proper application of equipment including installation of cables.

#### **C6.03.03.06 Audio**

Cabling used for microphone level and line level signals shall be 22 AWG minimum with shielded twisted pair and with drain wire. Cabling used for amplifier level signals shall be 18 AWG minimum.

#### **C6.03.04 Multiplexing**

##### **C6.03.04.01 General**

All vehicles shall be equipped with a multiplexing system. The primary purpose of the multiplexing system is control of components necessary to operate the vehicle. This is accomplished by processing information from input devices and controlling output devices through the use of an internal logic program. This system shall meet the network communications requirements of Section C6.03.02. The County shall approve the multiplex system.

Versatility and future expansion shall be provided for by an expandable system architecture. The multiplex system shall be capable of accepting new inputs and outputs through the addition of new modules and/or the utilization of existing spare inputs and outputs. All like components in the multiplex system shall be modular and interchangeable with self-diagnostic capabilities. The modules shall be easily accessible for troubleshooting electrical failures and performing system maintenance. Multiplex input/output modules shall use solid-state devices to provide extended service life and individual circuit protection.

Ten percent (10%) of the total number of inputs and outputs (or at least one each) at each zone location shall be designated as spares. Zone locations are: (1) behind the rear bulkhead; (2) forward of the bulkhead above the window line; and (3) forward of the bulkhead below the window line.

#### **C6.03.04.02 System Configuration**

Multiplexing may either be distributed or centralized. A distributed system shall process information on multiple control modules within the network. A centralized system shall process the information on a single control module. Both systems shall consist of several modules connected to form a control network.

#### **C6.03.04.03 I/O (Input/Output) Signals**

The input/output for the multiplex system may contain three types of electrical signals: discrete, analog, or serial data.

Discrete signals shall reflect the on/off status of switches, levers, limit switches, lights, etc. Analog signals shall reflect numerical data as represented by a voltage signal (0-12V, 10-24V, etc) or current signal (4-20mA). Both types of analog signals shall represent the status of variable devices such as rheostats, potentiometers, temperature probes, etc. Serial data signals shall reflect ASCII or alphanumeric data used in the communication between other on-board components.

#### **C6.03.05 Data Communications Systems**

##### **C6.03.05.01 General**

All data communication networks shall be either in accordance with a nationally recognized interface standard such as those published by SAE, IEEE, or ISO, or shall be published to the County with the following minimum information:

1. Protocol requirements for all timing issues (bit, byte, packet, inter-packet timing, idle line timing, etc.) packet sizes, error checking, and transport (bulk transfer of data to/from the device)
2. Data definition requirements that ensure access to diagnostic information and performance characteristics
3. The capability and procedures for uploading new application or configuration data
4. Access to revision levels of data, application software and firmware
5. The capability and procedures for uploading new firmware or application software

Any electronic vehicle components used on a network shall be conformance tested to the corresponding network standard.

All components on the Drive train network shall communicate data over the network as specified in Section C6.03.05.02.

The Multiplex Level shall use a communications network that meets the requirements of Section C6.03.05.03.

Components integrated on the Information Level shall communicate data over the network selected in Section C6.03.05.04.

##### **C6.03.05.02 Drive train Level**

###### **C6.03.05.02.01 General**

Drive train components, consisting of the engine, hybrid drive or transmission, retarder, anti-lock braking system, and all other related components shall communicate data using a combination of the SAE Recommended Communications Protocols J1939 and/or J1708/J1587, or other open protocols as referenced in Section C3.06.05.01.

###### **C6.03.05.02.02 Diagnostics & Fault Detection**

Drive train performance, maintenance and diagnostic data, and other electronic messages shall be formatted and transmitted on the communications networks.

The Drive train Level shall have the ability to record abnormal events in memory and provide diagnostic codes and other information to service personnel. At a minimum, this network level shall provide live/fail status, current hardware serial number, software/data revisions, and uninterrupted timing functions.

###### **C6.03.05.02.03 Data Access**

Access to Drive train data shall be provided through diagnostic device connector ports. Location of these diagnostic ports shall comply with Sections C5.02.01 for the engine; C5.04.01 for the transmission; and C5.07.09 for brake actuation.

###### **C6.03.05.02.04 Programmability (Software)**

The Drive train Level components shall be programmable by the County with limitations as specified by the sub-system supplier.

##### **C6.03.05.03 Multiplex Level**

###### **C6.03.05.03.01 Data Access**

At a minimum, information shall be made available via a communication port on the multiplex system. The location of the communication port shall be easily accessible.

###### **C6.03.05.03.02 Diagnostics And Fault Detection**

The multiplex system shall have a proven method of determining its status (system health and input/output status) and detecting either active (Online) or inactive (Offline) faults through the use of on-board visual/audible indicators.

In addition to the indicators, the system shall employ an advanced diagnostic and fault detection system, which shall be accessible via either a personal computer (PC) or a hand held unit. Either unit shall have the ability to check logic function.

#### **C6.03.05.03.03 Programmability (Software)**

The multiplex system shall have security provisions to protect its software from unwanted changes. This shall be achieved through any or all of the following procedures: password protection, limited distribution of the configuration software, limited access to the programming tools required to change the software, and hardware protection that prevents undesired changes to the software.

Provisions for programming the multiplex system shall be possible through a PC/laptop. The multiplex system shall have proper revision control to insure that the hardware and software is identical on each vehicle equipped with the system. Revision control shall be provided by all of the following: hardware component identification where labels are included on all multiplex hardware to identify components; hardware series identification where all multiplex hardware displays the current hardware serial number and firmware revision employed by the module; and software revision identification where all copies of the software in service displays the most recent revision number, and a method of determining which version of the software is currently in use in the multiplex system.

#### **C6.03.06 Information Level Component Integration**

##### **C6.03.06.01 Not Used**

### **C6.04 Heating and Ventilation System**

#### **C6.04.01 Capacity and Performance**

The Heating, Ventilation and Air Conditioning (HVAC) climate control system shall be capable of maintaining the interior of the bus at the temperature and humidity levels defined in the following paragraphs.

The HVAC unit shall be rear-mounted, with an additional unit for the front section of an articulated bus. Accessibility and serviceability of components preferably shall be provided without requiring maintenance personnel to climb-up on the roof of the bus.

With the bus running at the design operating profile with corresponding door opening cycle, and carrying a number of passengers equal to 150 percent of the seated load, the HVAC system shall maintain an average passenger compartment temperature within a range between 65° and 80° F, while controlling the relative humidity to a value of 50 percent or less. The system shall maintain these conditions while subjected to any outside ambient temperatures within a range of 10° to 95° F and at any ambient relative humidity levels between 5 and 50 percent. If reheat is insufficient to control humidity, provide auxiliary coolant heating, per Section C5.02.10. Reheat system water control valve to be pulsing type to provide even heat distribution.

When the bus is operated in outside ambient temperatures of 95° to 115° F, the interior temperature of the bus shall be permitted to rise one degree for each degree of exterior temperature in excess of 95° F.

When bus is operated in outside ambient temperatures in the range of -10° to +10° F, the interior temperature of the bus shall not fall below 55° F while bus is running on the Design Operating Profile.

System capacity testing, including pull down/warm-up, stabilization and profile, shall be conducted in accordance to the APTA "Recommended Instrumentation and Performance Testing for Transit Bus Air Conditioning System".

Temperature measurements shall be made in accordance to this document with the following modifications:

The three primary locations used for temperature probes are (1) 6 inches aft of front wheel housing, (2) centered between the first and second (and second and third for articulated buses) axles and (3) 6 inches aft of rear wheel housing. At each primary location, the nine (9) temperature sensing devices shall be (A) 72 inches above floor level, (B) 6 inches above top surface of seat cushion and (C) 6 inches above floor.

The recommended locations of temperature probes are only guidelines and may require slight modifications to address actual bus design. Care must be taken to avoid placement of sensing devices in immediate path of air duct outlet. In general, the locations are intended to accurately represent the interior passenger area.

The heating system shall have sufficient capacity to maintain an interior air temperature of 55° F (13° C) with an outside temperature of 15° F (-9° C) with the doors cycled open 15% of the test time, evenly distributed through out the test duration. The cooling system fluid and engine shall be at normal operating temperature. The engine and cooling system temperatures shall be monitored. A cold room may be used to simulate the environmental factors.

From a cold start, the heating system shall be able to increase the interior air temperature by 15° F (8° C) within 20 minutes, and reach specified inside air temperature within 30 minutes, with an outside temperature of 15° F (-9° C). The Contractor shall supply information detailing what engine load will be required to meet this condition. The engine and cooling system temperatures shall be monitored. A cold room may be used to simulate the environmental factors.

Additional testing shall be performed as necessary to ensure compliance to performance requirements stated herein.

The air conditioning portion of the HVAC system shall be capable of reducing the passenger compartment temperature from 110° to 90° F in less than 20 minutes after engine start-up. Engine temperature shall be within the normal operating range at the time of start-up of the cool-down test and the engine speed shall be limited to fast idle that may be activated by an operator-controlled device. During the cool-down period the refrigerant pressure shall not exceed safe high-side pressures and the condenser discharge air temperature, measured 6 inches from the surface of the coil, shall be less than 45° F above the condenser inlet air temperature. The appropriate solar load as recommended in the APTA "Recommended Instrumentation and Performance Testing for Transit Bus Air Conditioning System," representing 4 P.M. on August 21, shall be used. There shall be no passengers on board, and the doors and windows shall be closed.

The air conditioning system shall meet these performance requirements using HFC R134a.

The climate control blower motors and fan shall be designed such that their operation complies with the interior noise level requirements as specified in Section C1.16.01.

Note air conditioning requirements for hybrid drive batteries, if necessary, at C5.04.01.03.

HVAC unit and controls to be 'Thermo King' or approved equal, utilizing a model 616 screw compressor.

Provide five sets of 'SMART-PAC' software, including diagnostic cables, with the first production bus in each order group.

Provide an additional data port in or near the driver's area. The County to approve location.

#### **C6.04.02 Controls and Temperature Uniformity**

The HVAC system excluding the operator's heater/defroster shall be centrally controlled with an advanced electronic/diagnostic control system with provisions for extracting/reading data. Driver's control shall be an IntelliAIRE II or approved equal standard four-key keypad. Settings will not be lost when the master switch is turned off.

After manual selection and/or activation of climate control system operation mode, all interior climate control system requirements for the selected mode shall be attained automatically to within  $\pm 2^\circ$  F of specified temperature control set point.

The temperature control set point for the system in the cooling mode shall be 70° F and 68° F in the heating mode.

Contractor to provide all HVAC programming options to the County. The County will select initial settings. The operator shall have full control over the defroster and operator's heater. The operator shall be able to adjust the temperature in the operator's area through air distribution and fans. The interior climate control system shall switch automatically to the ventilating mode if the refrigerant compressor or condenser fan fails.

Interior temperature distribution shall be uniform to the extent practicable to prevent hot and/or cold spots. After stabilization with doors closed, the temperatures between any two points in the passenger compartment in the same vertical plane, and 6 inches to 72 inches above the floor, shall not vary by more than 5° F with doors closed. The interior temperatures, measured at the same height above the floor, shall not vary more than  $\pm 5^\circ$  F, from the front to the rear, from the average temperature determined in accordance to APTA "Recommended Instrumentation and Performance Testing for Transit Bus Air Conditioning System". Variations of greater than  $\pm 5^\circ$  F will be allowed for limited, localized areas provided the majority of the measured temperatures fall within the specified requirement. Given the difficulty in providing an even temperature in a low floor bus with top down heated air distribution, maximize the number of floor heaters and have them turn on any time that heat is called for.

#### **C6.04.03 Air Flow**

Passenger Area: The cooling mode of the interior climate control system shall introduce air into the bus at or near the ceiling height at a minimum rate of 25 cubic feet per minute (cfm) per passenger based on the standard configuration bus carrying a number of passengers equal to 150 percent of the seated load. Airflow shall be evenly distributed throughout the bus with air velocity not exceeding 100 feet per minute on any passenger. The ventilating mode shall provide air at a minimum flow rate of 20 cfm per passenger.

Airflow may be reduced to 15 cfm per passenger (150 percent of seated load) when operating in the heating mode. The fans shall not activate until the heating element has warmed sufficiently to assure at least 70° F air outlet temperature. The heating air outlet temperature shall not exceed 120° F under any normal operating conditions.

Operator's Area The bus interior climate control system shall deliver at least 100 cfm of air to the operator's area when operating in the ventilating and cooling modes. Adjustable nozzles shall permit variable distribution or shutdown of the airflow. Airflow in the heating mode shall be reduced proportionally to the reduction of airflow into the passenger area. The windshield defroster unit shall meet the requirements of SAE Recommended Practice J382, Windshield Defrosting Systems Performance Requirements, and shall have the capability of diverting heated air to the operator's feet and legs. The defroster or interior climate control system shall maintain visibility through the operator's side window.

Controls for the Climate Control System (CCS) The controls for the operator's compartment for heating, ventilation, and cooling systems shall be integrated and shall meet the following requirements.

- (1) A separate switch that has an "Off" position and at least two positions for speed control shall control the heat/defrost system fan. All switches and controls shall preclude the possibility of clothing becoming entangled and shields shall be provided, if required.
- (2) A manually operated control valve shall control the coolant flow through the heater core.  
If a cable operated manual control valve is used, the cable length shall be kept to a minimum and it shall be well supported to reduce cable seizing. Heater water control valves shall be 'positive' type, closed or open. The County shall approve the method of operating remote valves.

Operator's Compartment Requirements A separate heating, ventilation, and defroster system for the operator's area shall be provided and shall be controlled by the operator. The system shall meet the following requirements:

- (1) The heater and defroster system shall provide heating for the operator and heated air to completely defrost and defog the windshield, operator's side window, and the front door glasses in all operating conditions. Fan(s) shall be able to draw air from the bus body interior and/or the exterior through a control device and pass it through the heater core to the defroster system and over the operator's feet. A minimum capacity of 100cfm shall be provided. The operator shall have complete control of the heat and fresh airflow for their area.
- (2) The defroster supply outlets shall be located at the lower edge of the windshield. These outlets shall be unbreakable and shall be free of sharp edges that can catch clothes during normal daily cleaning. The system shall be such that foreign objects such as coins or tickets cannot fall into the defroster air outlets. Adjustable ball vents shall be provided at the left of the operator's position to allow direction of air onto the side windows. Two additional ball vents shall be located on the vertical front dash panel adjacent to the front door to allow direction of air onto the door windows and/or entrance area

A ventilation system shall be provided to ensure operator comfort and shall be capable of providing fresh air in both the foot and head areas. Vents shall be controllable by the operator from the normal driving position. Decals shall be provided indicating, 'operating instructions' and 'open' and 'closed' positions as well. When closed, vents shall be sealed to prevent the migration of water or air into the bus.

A ram-type ventilator that will not allow water entry into the driver's area under any operating condition, including freeway speeds, shall be provided on the front of the bus to bring fresh air into the driver's station. This ventilator and associated ducting shall be no smaller than 12 inches by 6 inches (305 mm by 152 mm). Control of airflow shall be easily accessible to the operator. Provide an extension handle if necessary. When closed, the vent shall be sealed against drafts. Sealing material shall be replaceable.

#### **C6.04.04 Air Filtration**

Air shall be filtered before discharge into the passenger compartment. The filter shall meet the ANSI/ASHRAE 52.1 requirement for 5 percent or better atmospheric dust spot efficiency, 50 percent weight arrestance, and a minimum dust holding capacity of 120 gram per 1,000 cfm cell. More efficient air filtration may be provided to maintain efficient heater and/or evaporator operation. Air filters shall be easily removable for service. Air filters shall be of disposable type.

#### **C6.04.05 Roof Ventilators**

Provide ventilators in the roof of the bus, one approximately over each axle.

Each ventilator shall be easily opened and closed manually. When open with the bus in motion, this ventilator shall provide fresh air inside the bus. Ventilator shall cover an opening area no less than 425 square inches and shall be capable of being positioned as a scoop with either the leading or trailing edge open no less than 4 inches, or with all four edges raised simultaneously to a height of no less than 3-1/2 inches. An escape hatch shall be incorporated into the roof ventilator. Roof ventilator(s) shall be sealed to prevent entry of water when closed. Roof ventilators to be Pro-Lo by 'Specialty Manufacturing Co.', or approved equal.

#### **C6.04.06 Maintainability**

Manually controlled shutoff valves in the refrigerant lines shall allow isolation of the compressor and dehydrator filter for service. To the extent practicable, self-sealing couplings utilizing O-ring seals shall be used to break and seal the refrigerant lines during removal of major components, such as the refrigerant compressor. Shut-off valves may be provided in lieu of self-sealing couplings. The condenser shall be located to efficiently transfer heat to the atmosphere, and shall not ingest air warmed above the ambient temperature by the bus mechanical equipment, or to discharge air into any other system of the bus. The location of the condenser shall preclude its obstruction by wheel splash, road dirt or debris. HVAC components located within 6 inches of floor level shall be constructed to resist damage and corrosion.

Coolant boost pumps shall be 'EG&G Rotron Inc.' ECDC Seal-less or approved equal. It is preferred they operate on 24 volts. These pumps shall be wired to be electrically 'off' when the HVAC system is not calling for heat. In the event of a charging system failure, the pumps shall be deactivated. Supply brass ball valves with hand-operated quarter-turn handles on each side (inlet and outlet) of all boost pumps.

### **C6.05 – C6.07 Not Used**

### **C6.08 Wheelchair Ramp**

#### **C6.08.01 Ramp**

Provide a deployable ramp at the front door to provide easy access for mobility aid devices. The ramp shall be equipped with side rails, and any surfaces designed to be walked on shall be covered with flooring or non-skid material. Wheelchair ramp floor pocket shall have yellow edge/stripe visible when ramp is deployed, to warn passengers of uneven floor surface.

The ramp shall be controlled by a toggle switch on the dash. Ramp operation shall actuate brake and acceleration interlocks. Front door operation shall be interlocked with ramp operation. Visual and adjustable audible warning devices shall alert passengers that the ramp is in operation.

The ramp shall be straight hydraulic, 24 V electric over hydraulic, or straight electric. The hydraulic power source is referenced in Section C6.02.02. Provide a manual backup system.

Ramp, control, power source, and backup system to be approved by the County.

The County is interested in proposals for a longer ramp, to reduce the ramp angle when deployed to the street.

### **C6.09 Wheels and Tires**

#### **C6.09.01 Wheels**

Wheels shall be steel one piece, hub-piloted style made by 'Accuride' or approved equal. They shall be the self-ventilating disc type, and all shall be interchangeable wheel to wheel and coach to coach. Wheels shall be coated per Attachment 11. Mating surfaces on dual wheel assemblies shall be corrosion protected without the use of paint. Wheels and attachment system to be approved by the County.

#### **C6.09.02 Tires**

The Contractor, together with the County's tire supplier, is responsible for choosing tires of adequate load rating. When this is determined, the County will supply tires to a Contractor's plant located in the U.S. or Canada. The Contractor will be responsible for shipping tires to any other location. The County uses leased radial tubeless mileage tires, presently supplied by 'Bridgestone Firestone', and it is required that the tire size and type proposed by the Contractor be one that the County's tire supplier can provide.

Tires and wheels shall not be the limiting factors in GAWRs.

#### **C6.09.03 Balancing**

All front wheel and tire assemblies shall be spin balanced. Weights used shall be specifically approved for use on these wheels.

#### **C6.09.04 Wheel Attachment System**

Wheel studs and nuts shall be sized to the GAWRs and transit duty cycle and shall meet J429 and J1102 (studs) and J995 (nuts).

### **C6.10 Steering**

#### **C6.10.01**

Buses shall be equipped with a steering mechanism that makes the bus easy to steer and which produces a natural and precise handling characteristic for the driver, free of wander and motions that are hard to predict. The steering system shall be power assisted with a hydraulic system. Design factors for this power source are given in section C6.02 (Hydraulic System). The County shall approve the power steering system.

The steering gear shall be an integral type with flexible lines eliminated or the number and length minimized. Steering torque applied by the driver shall not exceed 10 foot-pounds. Steering effort shall be measured with the coach at capacity load, stopped with the brakes released and the engine at normal idling speed on clean, dry, level, commercial asphalt pavement and the tires inflated to recommended pressure. Power steering failure shall not result in loss of steering control. With the coach at capacity load, engine off, coasting in neutral at 8 to 10 mph, the steering effort shall not exceed 55 pounds at the steering wheel rim and perceived free play in the steering system shall not materially increase as a result of power assist failure. Gearing shall require no more than seven turns of the steering wheel lock-to-lock.

#### **C6.10.02 Steering Wheel and Column**

The design and placement of the steering wheel and the design of the steering mechanisms as it relates to forces necessary to steer the bus shall be with consideration given to human factors. The steering wheel and steering mechanism shall be designed so the bus can be driven by drivers defined in section C4.01 for long periods of time without undue effort or fatigue. The steering column shall be 'Douglas Autotech' or approved equal, shall be telescoping and shall have two separate tilt locations, one near the top of the column and one at the universal joint below the floor where the column is connected to the right angle steering box; tilt and telescope are controlled by levers on the left side of the column (reference Attachment 16). Driver's knees shall not contact wheel spokes at any adjustment point.

The steering wheel shall be a 20-inch (508 mm) diameter two-spoke soft rim wheel from 'VIP' or approved equal. Color is given in Attachment 11. It shall be provided with a horn button, and with puller holes in the hub so that a standard or universal puller may be used.

## **SECTION C7 - MATERIALS**

### **C7.01 Materials and Construction**

#### **C7.01.01**

For economy in maintenance, it is essential that parts and units be arranged so that rapid assembly and disassembly will be possible. All units or parts not specified shall be the Contractor's standard items, conforming in material, design and workmanship to the best practices in the heavy vehicle industry.

#### **C7.01.02**

All parts shall be new and in no case will used, reconditioned, repaired or obsolete parts be accepted. Any one part used shall be an exact duplicate in each of the buses, except as provided in section B3.02.

#### **C7.01.03**

Workmanship throughout shall conform to the highest standard of commercially accepted practice for the class of work and shall result in a neat and finished appearance. All exposed surfaces and edges shall be smooth, free from burrs, scratches, mars, discolorations and other deviations from a neat, quality finish. All bolted and torqued metal-to-metal joints must have corrosion protection on the facing surfaces while not allowing any coating elasticity to loosen correctly torqued fasteners (reference section C2.17.03).

#### **C7.01.04**

No slotted head screws shall be used. All screws shall use Phillips type heads unless otherwise specified. The County prefers very limited use of pop-rivets. Access covers and any cover or component removed for maintenance access shall be secured with riv-nuts and machine screws. Use of any type of sheet metal screw or well nut is prohibited. Any tapping plate shall be the thickness of a standard nut, minimum.

### **C7.02 Not Used**

### **C7.03 Hazardous Materials**

#### **C7.03.01**

It shall be a design objective to eliminate from the buses, all materials that are or may become hazardous to passengers, drivers or maintenance workers. Of particular concern are materials that produce toxic smoke or gases when heated, possibly due to an accidental fire or when bodywork using welding equipment or cutting torches is necessary. No asbestos shall be used in any part of the bus including gaskets; no PCBs shall be used in the bus. Any use of polyurethane foam material shall require County approval.

The Contractor shall identify any hazardous materials and coatings used and provide information on how to safely deal with them under normal maintenance conditions, when discarding or in response to destruction by fire. The Contractor shall provide Material Safety Data Sheets (MSDS) for all coatings, paints, adhesives and insulation used on the bus. The Contractor will also supply, in a timely manner, MSDS for any other materials on the bus at the request of the County. All documentation shall be supplied in advance of the Design Review for approval by the County.

### **C7.04 Welding**

#### **C7.04.01**

All welding shall be in accordance with the requirements of the American Welding Society as specified in the current AWS specification. Work performed outside the U.S. must conform to U.S. welding standards as approved by the County. An English language copy of these standards shall be made available to the County for review. The Contractor shall supply descriptions on the components making up the weld process. This description should include (but may not be limited to) material composition (types of steel used in the basic body and chassis frame), weld wire composition, and types of welding machines used for each differing function.

#### **C7.04.02**

The Contractor shall have an on-going quality control program of inspection, non-destructive and destructive testing to insure quality welds. The Contractor shall supply complete documentation as to how its welders are certified and monitored. Complete documentation shall be provided describing, in specific detail to this Contract, the type of weld testing performed, frequency of the tests and actions taken if defective workmanship is found. Documentation shall also be supplied on the testing and monitoring of the welding devices used. All documentation shall be supplied in advance of the Design Review for approval by the County.

## **C7.05 Fire Resistance**

### **C7.05.01**

Attachment 21 shows the FTA/DOT Notice of Recommended Fire Safety Practices for Transit Bus and Van Materials. Adoption of these recommended fire safety practices will help to minimize the fire threat in the buses and, thereby reduce injuries and damage resulting from possible fire.

All materials proposed for the construction of the buses that are listed in the attachment must be tested according to the procedures and performance criteria set forth in Attachment 21. If any material proposed by the County will not pass these requirements, the Contractor is responsible to propose alternative materials.

The County will require certification that the materials to be used in the construction of the buses have been tested by a recognized testing laboratory and that the results are within the recommended limits. The Contractor shall supply complete test report results before the shipment of the first production bus.

**SECTION C8 - DOCUMENTATION, TRAINING, SPECIAL TOOLS**

**C8.01 - C8.06 Not Used**

**C8.07 Electronic Maintenance Information**

**C8.07.01**

The Contractor shall supply all software information, including source codes for any programmed module or component. Also to be supplied is any special hardware necessary to repair or modify any microprocessors and/or software used in the bus. The Contractor shall supply: complete schematic drawings containing component identification, and the location of the components on the circuit board; circuit descriptions and theory of operation for all electronic components. The Contractor shall also supply information on programmed array logic (PAL) and any other preprogrammed device. The County will consider all such data as proprietary.

## SECTION C9 - OPTIONS

### C9.01 Fareboxes

#### C9.01.01

Provide and install 'GFI' CENTSaBILL electronic fareboxes with the following features: 36 in. tall; Route/Run Segmenter; Electronic Lock; Dollar Bill Accelerator; Card Reader; Cash Box I.D.; 3 Digit Display; 16 Button Keypad; Passenger Display; and 'Gold Contacts'. To the extent practicable, make these fareboxes compatible with the groups of 'GFI' fareboxes previously purchased by the County (1350 + 100). Farebox details to be approved by the County.

### C9.02 Farebox Cash Boxes

#### C9.02.01

Provide 'GFI' S/A cash boxes to fit the fareboxes in section C9.01.01.

### C9.03 Revised Styling Features

#### C9.03.01

Provide restyled front and rear caps in place of the standard or base model features specified in this RFP.

### C9.04 Advanced Styling Features

#### C9.04.01

Provide the advanced styling features consisting of the front cap, rear cap, full length roof cap and skirts on the second and third wheel openings, in place of the standard or base model features specified in this RFP. The front cap includes a large, one-piece windshield. The roof cap must include maintenance access to A/C units and energy storage units plus safety features for maintenance personnel. Maintenance access to be approved by the County.

#### C9.04.02 Bridge Plate

Provide a remotely extendable and retractable bridge plate at a single rear doorway. Provide a guarded, momentary contact toggle switch for operator control, location to be approved. The bridge plate shall be equipped with a sensitive edge. Design and function to be approved by the County.

### C9.05 Revised and Advanced Options

#### C9.05.01 Flush-appearing Side Windows

Provide side windows on the bus that appear to be continuous, but which retain the ease of replacement feature of current windows mounted in sash. All other requirements for liners, emergency escape, tint, etc. must still be met. Installation to be approved by the County.

#### C9.05.02 Rear Door Wheelchair Ramp

Provide a wheelchair ramp at the second or third curbside doorway. Provide a secure, remote control so the driver can operate the ramp from the doorway in question. Ramp and control to be approved by the County.

#### C9.05.03 Streetside Doors

Provide two streetside doors, complete with actuators, sensitive edges, stanchions and handrails, and mirrors. Design to be approved by the County.

#### C9.05.04 Streetside Destination Signs

Delete the specified streetside route number sign (C3.17.04) and provide two (2) streetside destination signs like the sign specified in Section C3.17.03. These streetside signs would be placed in the window ahead of each streetside door. Installation to be approved by the County.

#### C9.05.05 Inside Bike Storage

Provide racks or hooks to hang three bikes adjacent to the rear door. Provide simple barriers to keep bikes from contacting one another and passengers. Design and installation to be approved by the County.

**C9.05.06 Third Doorway**

Provide a third doorway on the curbside of the bus between the first and second axle that is the same width as the rear door, and meets the requirements of Section C3. The middle and rear doors would be controlled together as the "rear" door.

**C9.06 Seating and Upholstery Options****C9.06.01**

Substitute 'American Seating Co.' model 6895 (model 6484 for side facing) or approved equal passenger seats for the seat model specified in Section C3.06.01. Layout and installation to be approved by the County. All other requirements of MB 06-2 must be met.

**C9.06.02**

Substitute 'Irwin Transportation Seating Co.' model i298 or approved equal passenger seats for the seat model specified in Section C3.06.01. Layout and installation to be approved by the County. All other requirements of MB 06-2 must be met.

**C9.06.03**

Delete the passenger seat and back cushion upholstery in Attachment 11 and substitute the following: 'Lantal' D60143/CS Trevira.

**C9.07 Alternate Engine****C9.07.01**

Provide a 'Caterpillar' C9 330 hp diesel engine or approved equal in place of the engine specified in Section C5.02. All other requirements of MB 06-2 must be met.

**C9.08 Alternate Transmission****C9.08.01**

Provide a 'Voith' model D864.5 or approved equal automatic transmission in place of the transmission specified in Section C5.04.02.01. All other requirements of MB 06-2 must be met.

**C9.09 Adjustable Pedals****C9.09.01**

Provide accelerator and brake pedals with fore and aft adjustment that can be easily adjusted by a driver. The pedal assembly must positively lock into position. Force to actuate either pedal must not increase through the range of adjustment. Design to be approved by the County.

**C9.10 Alternate Driver's Microphone****C9.10.01**

Provide a 'Clever Devices' SpeakEasy or approved equal driver's microphone in place of the microphone specified in Section C3.26.02. All other requirements of MB 06-2 must be met.

**C9.11 'Vapor' CLASS System****C9.11.01**

Provide the 'Vapor' CLASS or approved equal acoustic sensing system in one rear curbside or streetside doorway. If two or three doorways were to be equipped, the price would be 2x or 3x the single doorway price. System to operate from 24 Vdc and be configurable for driver control or driver enable/passenger control. Installation to be approved by the County.

**C9.12 Provision for an Additional "Smart Card" Reader****C9.12.01**

Provide a mounting location and provisions (as in C4.13.04) for an On-Board Fare Transaction Processor (OBFTP) and its active cradle at either a second or third rear door. Also provide wiring (as in C4.13.04.01) as follows:

OBFTP cradle location to the LDM location – 'Belden' 9494 3 core power cable or approved equal.

WDOLS location to the OBFTP location – 'Commscope' 2004 Ethernet cable or approved equal. Location and mounting provisions to be approved by the County.

**C9.13 Alternate Flooring****C9.13.01**

Delete the Flooring specified in Attachment 11 and substitute the following:

Coach Interior General 'Altro' Transflor Chroma

MB 06-2 C Attachment Section CONFORMED.DOC

ATT 169

	Color – Zenith TFCR2701
Driver's Platform	non-skid material, black
Floor Markings	'Altro' Transflor, color yellow
Door and Step Edges	'Altro' Safety Step System with a yellow abrasive strip.

#### **C9.14 Rear Doorway Surveillance**

##### **C9.14.01**

Provide CCTV surveillance of the rear doorway for the driver. Equipment to consist of a ceiling-mounted color camera, a color monitor in the driver's station, and interconnecting wiring. System to operate from 24 Vdc. System "on time" to be controlled through the bus multiplex system. Equipment and installation to be approved by the County.

#### **C9.15 Inside Sign Wiring**

##### **C9.15.01**

Provide wiring between two ceiling-mounted passenger information signs (to be supplied and installed by the County) and the electronic equipment cabinet. One sign will be located near the front of the bus, and the second sign will be located at the front of the trailing section. Leave three-foot coils of wire at each end. Wire to be two twisted, shielded pairs, 18 AWG, 'Alpha' 2242C or approved equal.

#### **C9.16 Maintenance Manuals, Parts Books and Training**

##### **C9.16.01.01 General**

For each separately ordered group of buses, the Contractor shall supply detailed and well-organized maintenance manuals and illustrated parts books covering all items on the bus. Hard copies of maintenance and parts manuals shall be delivered in three ring binders with the sections separated with sturdy plastic divider pages with tabs.

##### **C9.16.01.02 Maintenance Manuals**

Maintenance manuals shall contain complete data required for preventive and corrective maintenance of all parts of the buses including but not limited to the following:

General information and specifications.

A complete, well developed troubleshooting guide covering all the mechanical, electrical and electronic components.

All preventive maintenance, lubrication and adjustment requirements.

Complete wiring and schematic diagrams and schedules for wire and cable sizes and ratings including actual cable layout, plus locations in the bus of all electrical and electronic components.

Illustrative drawings, such as isometrics or exploded views, identifying components in relationship to each other as mounted in the buses.

Components shown in exploded views with all parts clearly identified.

Rebuilding procedures for all rebuildable components.

Detailed, well-illustrated procedures for component change-out plus servicing, adjusting, testing and run-in information as required.

Body and structural information and material specifications for major accident repairs.

Seating and stanchion layouts and window diagrams.

Repair and calibration instructions and values.

List of special test equipment/tools required to maintain and repair systems down to the component level.

The County prefers that the Contractor's maintenance manual thoroughly describe the maintenance of all parts of the bus. Realizing that some specialized OEM manuals will be provided, the County requires that the Contractor provide the following OEM vendor manuals and publications:

1. Bus electrical wiring diagrams.
2. Electrical system diagnostic and troubleshooting guides.

3. Electronic data control troubleshooting manuals.
4. Engine service, troubleshooting, and overhaul manuals.
5. Hybrid drive or transmission service, troubleshooting, and overhaul manuals.
6. HVAC system service, troubleshooting, and overhaul manuals.
7. Air system diagnostic and troubleshooting guides.
8. Comprehensive color-coded air system schematics.
9. Foundation brake system analysis and troubleshooting guides.
10. Anti-Lock Brake (ABS) and Automatic Traction Control (ATC) system service, troubleshooting, and overhaul manuals.
11. Differential and drive shaft service, troubleshooting, and overhaul manuals.
12. Not Used
13. Steering column service, troubleshooting, and overhaul manuals.
14. Steering gear service, troubleshooting, and overhaul manuals.
15. Wheelchair ramp system service, troubleshooting, and overhaul manuals.
16. Fire suppression system service, troubleshooting, and overhaul manuals.

**C9.16.01.03 Parts Manuals**

Illustrated parts books shall contain exploded views that show all parts used on buses built under this contract, and no other parts. The exploded views will show all fasteners and miscellaneous hardware. The books shall contain data arranged so that part numbers can be readily found and identified in the illustration for each system and subsystem component, assembly, subassembly or piece part from an orderly breakdown of the complete bus. It shall contain a ready reference part number index and part name index and be sufficiently well illustrated to identify items requiring repair, replacement and storage for use in the maintenance of the buses. All sub-assemblies (such as wiper motor, starter motor, etc.) preferably shall have the original manufacturer's part number displayed at the beginning of the appropriate parts listing section.

Lists shall include at least the following information for all parts:

- Generic description and specifications
- Contractor part number
- Brand name, where applicable
- Original manufacturer's part number (preferred)
- Indication if the part is custom manufactured only on request.
- Standard hardware described by size, type, material and grade.

It is preferred that the parts manual shall include all original manufacturer names and addresses. The parts manual shall include all special tools, test and diagnostic equipment supplied by the Contractor.

**C9.16.01.04 Parts Pricing List**

The parts pricing list shall list all parts by alpha order starting with "A" and ending with "Z" and then in numerically ascending order starting with "0" and ending with "9". The parts list shall supply the purchase price (including freight), and a description of the part. Updated price lists will note all part number supersessions since the last general issue of the price list. Unit of sale will also be noted, e.g. each, minimum 5, per foot, etc.

**C9.16.01.05 Special Tools & Diagnostic Equipment Manuals**

The Contractor shall supply one operator manual for any special tool or piece of diagnostic equipment supplied by the Contractor. These manuals shall be provided 90 days before the delivery of the first production bus.

**C9.16.01.06 Quantities and Drafts**

For each separately ordered group of buses:

Fifteen paper copies of maintenance manuals and ten CDs. Twenty paper copies of parts manuals and ten CDs. (Please note that multiple copies of vendor manuals are required for training C9.16.04.05.) The Contractor shall submit drafts of all maintenance manuals and parts books to the County for approval early enough to allow 60 days to review in order to have 100 percent of the final copies on hand when the first series bus is delivered.

Draft manuals shall be complete in every detail as to information content. They may have some cosmetic deficiencies such as temporary bindings, sketches in place of final artwork, etc. Manuals, schematics and prints shall be supplied to the County's engineering representative as soon as draft copies are available. Also note the parts manual requirement in Section B4.06.

**C9.16.01.07 Manual Updates**

Maintenance and parts manuals must be updated to include all changes made to the bus during production and post-delivery retrofits authorized or requested by the Contractor and to correct all errors and omissions found by the County. Changes required to the parts and maintenance manuals due to warranty and/or post delivery

retrofits shall be completed within 90 days from the date of modification approval. Maintenance manuals shall be updated as necessary with service letters during the life of the buses. Maintenance and parts manuals shall be available from the Contractor for ten years following acceptance of the last bus. Revised parts price lists will also be supplied as prices change.

#### **C9.16.02 Drawing Reproducibles**

##### **C9.16.02.01**

If available, Mylar drawing reproducibles shall be provided to supplement the maintenance manuals specified above. These are drawings that need to be in large sizes, those such as patterns that may be consumed when used, electrical, air and hydraulic system drawings, and those which otherwise are more useful unbound than as part of a book. A tree type or other index shall be supplied to identify the drawings. Reproducibles shall be durable and shall have a high standard of quality when printed for shop copies to assure ready legibility. Drawing sizes shall be such that they lend themselves to standard reproduction methods. Two sets of reproducibles shall be delivered no later than when the first production bus is delivered.

##### **C9.16.02.02**

Also required are two sets of general configuration and body framing reproducibles. The need for these is in case the bus requires major body rebuilding, as from an accident. These drawings shall be available in an approved electronic format, in English, and delivered with the maintenance manuals.

##### **C9.16.02.03**

Full size Mylar patterns for all flat glass shall be provided no later than 30 days before delivery of the first series bus.

##### **C9.16.02.04**

Material call-out information shall be supplied to the County when needed for maintenance or accident repair. All materials shall be identified with size and wall thickness. This information shall be supplied by the Contractor within five business days of the County's request.

### **C9.16.03 Operating Manual**

#### **C9.16.03.01**

The Contractor shall provide operating manuals for each separately ordered group and type of bus delivered. There shall be a separate manual for each type of bus. Two thousand five hundred sets of operating manuals shall be supplied.

#### **C9.16.03.02**

The Contractor shall submit drafts of the operating manuals to the County for approval early enough to have a final draft on hand when the prototype bus is delivered, and all final copies when the first production bus is delivered.

#### **C9.16.03.03**

The operating manual shall cover all operational requirements for the bus driver while in service, but exclude driving skills, rules of the road and interpretation of laws. Information and instructions for all phases of operation shall be provided, including but not limited to bus mechanical operation, response to safety alarm systems, engine operation, lighting system controls, emergency actions, maintenance checks and turning characteristics of the bus.

### **C9.16.04 Vehicle Maintenance Training**

#### **C9.16.04.01 General**

For each separately ordered group of buses, the Contractor shall provide a 60-hour program of instruction, instructional materials, and training aids targeted for specific groups of Vehicle Maintenance personnel. The timing of the maintenance training, delivery of the specified training aids and the Metro Transit Vehicle Maintenance Fleet Engineering Section (VMFE) will specify equipment, and constitution of the groups to be trained. Materials, schedule, instructors, and course outlines to be approved by the County.

The Contractor shall provide to VMFE copies of all lesson plans, detailed instructor guides for each training program, student workbooks, manuals, publications, videos, transparencies, and any other training aids used by an instructor when teaching a course 90 days prior to the delivery of the first production bus. The Contractor shall identify the instructors and provide the qualifications of the instructors. The Contractor shall inform the County of any training support equipment (such as VCR/TV, overhead projector, etc.) and/or supplies required of the County for the Contractor portion of the training.

The Contractor will designate a specific individual as the "Principal Training Contact" for the scheduling and accomplishment of the Contractor and vendor training. The Contractor will provide a name, complete mailing address, telephone number, and fax number for this person to the County not later than 90 days after Notice to Proceed.

#### **C9.16.04.02 Instructional Materials**

The Contractor will supply the following instructional materials for each separately ordered group of buses 90 days before delivery of the first production bus in each group.

1. The Contractor will provide two detailed electrical system instructor guides and training aids to cover:
  - a. Explanation of the electrical and electronic systems.
  - b. Electrical and electronic component function and location.
  - c. Wiring diagram analysis and interpretation.
  - d. Troubleshooting the electrical and electronic systems.
  - e. Use of diagnostic test equipment and analysis of results.
  - f. Preventive maintenance of the electrical system and components.
2. The Contractor will provide two complete sets of master engineering electrical and electronic wiring diagrams.
3. The Contractor will provide two sets Programmable Logic Controller videos.

4. The Contractor will provide two detailed engine system instructor guides and training aids to cover:
  - a. Explanation of the engine system.
  - b. Engine system component function and location.
  - c. Troubleshooting the engine
  - d. Use of diagnostic test equipment and analysis of results.
  - e. Preventive maintenance on the engine.
5. The Contractor will provide two OEM engine system videos and/or slide tape training sets.
6. The Contractor will provide one set of engine system wall chart training aids and one set of the color transparencies (for use with overhead projectors) of the wall charts.
7. The Contractor will provide two detailed hybrid drive and transmission system instructor guides and training aids to cover:
  - a. Explanation of the hybrid drive and transmission system.
  - b. Transmission system component function and location.
  - c. Troubleshooting of the electronic control system.
  - d. Troubleshooting of the hybrid drive and transmission.
  - e. Use of diagnostic test equipment and analysis of results.
  - f. Preventive maintenance of the hybrid drive and transmission.
8. The Contractor will provide one set of hybrid drive and transmission overhaul color transparencies.
9. The Contractor will provide two color slide and audiotape set (or video) of the hybrid drive and transmission overhaul process.
10. The Contractor will provide one color wall chart series of the hybrid drive and transmission.
11. The Contractor will provide two detailed HVAC system instructor guides and training aids to cover:
  - a. Explanation of the HVAC System.
  - b. Troubleshooting the HVAC System.
  - c. Use of test equipment and analysis of results.
  - d. Preventive maintenance on the HVAC System.
  - e. The function and operation of Programmable Logic Controller in the HVAC System.
12. The Contractor will provide one wall chart depicting the operation of the HVAC system and two color transparency sets depicting the operation of the HVAC system
13. The Contractor will provide two detailed air system instructor guides and training aids to cover:
  - a. Explanation of the air system.
  - b. Air system component function and location.
  - c. Troubleshooting the air system.
  - d. Use of test equipment and analysis of results.
  - e. Preventive maintenance on the air system.
14. The Contractor will provide one color wall chart of the bus air system depicting air flow, pressures, and components and two color transparency sets depicting the bus air system.
15. The Contractor will provide two comprehensive air system video sets.

16. The Contractor will provide two detailed foundation brake system instructor guides and training aids to cover:
  - a. Explanation of the foundation brake system.
  - b. Troubleshooting of the foundation brake system.
  - c. Use of diagnostic test equipment and analysis of results.
  - d. Preventive maintenance of the foundation brake system.
17. The Contractor will provide one set of color wall charts depicting foundation brake component functions and two sets of color transparencies of the foundation brake system wall charts.
18. The Contractor will provide two comprehensive foundation brake system video sets.
19. The Contractor will provide two detailed differential and propeller shaft instructor guides and training aids to cover:
  - a. Explanation of the differential and propeller shaft.
  - b. Troubleshooting of the differential and propeller shaft.
  - c. Preventive maintenance of the differential and propeller shaft.
20. The Contractor will provide two sets of color wall charts depicting the differential and drive shaft and two sets of color transparencies of the wall charts.
21. The Contractor will provide two detailed suspension, steering, alignment, articulation and axle instructor guides and training aids to cover:
  - a. Explanation of the suspension, steering, articulation and axle systems.
  - b. Troubleshooting of the suspension, steering, articulation and axle systems.
  - c. Use of diagnostic test equipment and analysis of results.
  - d. Preventive maintenance of the suspension, steering, articulation and axle systems.
  - e. Cutaway of the power steering pump supplied.
  - f. Cutaway of the power steering gear supplied.
  - g. Alignment procedures.
22. The Contractor will provide two sets of color wall charts depicting steering system components, hydraulic flow and pressures and two sets of color transparencies of the wall charts.
23. The Contractor will provide two detailed ramp instructor guides and training aids to cover:
  - a. Explanation of the ramp system.
  - b. Troubleshooting of the ramp system.
  - c. Use of diagnostic test equipment and analysis of results.
  - d. Preventive maintenance of the ramp system.
24. The Contractor will provide two sets of color wall charts depicting the ramp system components, electrical schematics, hydraulic flow and pressures and two sets of color transparencies of the wall charts.

The instructor guides are complete lesson plans, containing detailed presentation materials as well as all material included in the student guides described elsewhere. The instructor guide is sufficient to allow any vehicle maintenance trainer to pick up the material and give the class.

#### **C9.16.04.03 Training Aids**

The Contractor will supply the following training aids for each separately ordered group of buses 90 days before the delivery of the first production bus in each group.

#### **C9.16.04.04 OEM "Train the Trainer" Maintenance Training**

The Contractor will secure from the OEM vendors seven each "Train the Trainer" course slots for each separately ordered group of buses covering the systems listed below. The "Train the Trainer" program for VMFE Instructors will be accomplished through a combination of Contractor, OEM vendor County-site, and OEM-site training, covering preventive maintenance, overhaul, diagnostics and troubleshooting, and repair of the buses that the Contractor will provide to the County. This training will also include the use of the instructional materials described in C9.16.04.02. The training will be provided in two phases: pre-delivery, and post-delivery of buses. Scheduling of the phases of instruction will be done by VMFE in coordination with the Contractor.

The "Train the Trainer" program will include the following:

1. Multiplex  
The Multiplex courses will include but not be limited to:
  - Introduction to Multiplex
  - Diagnostics and Troubleshooting of Multiplex
  - Programming the Multiplex
  
2. Engine System  
The engine courses will include but not be limited to:
  - Engine diagnostics, troubleshooting, and use of diagnostic tools
  - Tune-up
  - Engine overhaul
  
3. Hybrid Drive and Transmission System  
The hybrid drive and transmission courses will include but not be limited to:
  - Hybrid drive and transmission diagnostics, troubleshooting, and use of diagnostic tools
  - Service and adjustments
  - Hybrid drive and transmission overhaul
  
4. Heating, Ventilation, and Air Conditioning System (HVAC)  
The HVAC courses will include but not be limited to:
  - HVAC diagnostics, troubleshooting, and use of diagnostic tools
  - Service and adjustments
  - AC Certification
  
5. Air System  
The Air System courses will include but not be limited to:
  - Diagnostics and troubleshooting
  - Repair, and service
  
6. Foundation Brake System  
The Foundation Brake courses will include but not be limited to:
  - Operation and maintenance
  - Foundation brake diagnostics and troubleshooting
  - Use of service and diagnostic tools
  - Service and adjustments

7. Differentials And Drive Shaft

The differential and drive shaft courses will include but not be limited to:

- Operation and maintenance
- Diagnostics and troubleshooting
- Use of service and diagnostic tools
- Overhaul, service and adjustments

8. Suspension, Steering, Articulation and Axle Systems

The Suspension, Steering, Articulation and Axle courses will include but not be limited to:

- Operation and maintenance
- Diagnostics and troubleshooting
- Use of service and diagnostic tools
- Overhaul, service and adjustments

9. Ramp

The ramp courses will include but not be limited to:

- Operation and maintenance
- Diagnostics and troubleshooting
- Use of service and diagnostic tools
- Overhaul, service and adjustments

10. Fire Detection/Suppression

The fire detection/suppression courses will include, but not be limited to:

- Operation and maintenance
- Diagnostics and troubleshooting
- Use of service and diagnostic tools
- Certification by the OEM as an Instructor for the Fire Detection/Suppression system

**C9.16.04.05 Maintenance Training Program Content**

The Contractor will provide maintenance training utilizing three modules of instruction: general orientation; technical orientation; and stand-alone courses.

All training will be delivered on a schedule determined by the VMFE and coordinated with the Contractor.

1. The General Orientation:

For each separately ordered group of buses the Contractor will provide an initial orientation for maintenance personnel. The general orientation will be provided in seven County bus maintenance facilities and may, at the discretion of the County, be provided on more than one shift. The orientation will be repeated until all available mechanics have received the orientation (approximately three presentations per facility). The orientation will be presented on and around the bus. The audience size will be approximately 15 personnel per session. The orientation session will not exceed four hours in duration and will include, but not be limited to, the following:

- Overview of vehicle's systems
- Component location and general function
- Bus operation and controls
- Servicing and inspection

The target population for this training is 270 maintenance and service personnel.

2. The Technical Orientation:

The Contractor will provide a structured program of technical training not to exceed 120 class hours to a maximum class size of fifteen mechanics. The number of times this program is delivered depends on the quantity of buses in each separately ordered group of buses. For 20-40 buses, one time; for 75-125 buses, four times; for 250 or more buses, seven times. This program will be delivered at County locations to be specified by the VMFE. The training will consist of specific and identifiable separate areas of instruction concerning the following:

- Electrical, Electronic, and Multiplex Systems
- Engine System
- Hybrid Drive or Transmission System

- Heating and Ventilation, and Air Conditioning
- Air and Brake System, including ABS and ATC
- Differential and Drive Shaft
- Suspension, Steering, Articulation and Steering Axle
- Ramp
- Fire Suppression System
- Use of all OEM & Contractor special purpose tools and diagnostic equipment

The target population is 105 mechanic personnel.

Specific attributes of the technical instruction are defined in the following sections (a) through (j).

a. Electrical and Electronics

Electrical system instruction will cover preventative maintenance and the major failure events experienced in the system, and how to recognize the failure signs through troubleshooting with test equipment. Students will be given failure/trouble parameters and shown step-by-step troubleshooting procedures to isolate problems. Hands on exercises with the actual electrical and electronic systems on a bus will reinforce troubleshooting procedures.

The contractor will provide suitable training aids, books, manuals, and publications covering the electrical and electronic systems that will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

b. Engine and Accessories

The engine system instruction will cover preventative maintenance and the major failure events experienced in the system, and how to recognize the failure signs through troubleshooting with test equipment. Students will be given failure/trouble parameters and shown step-by-step troubleshooting procedures to isolate the problem. Hands on exercises with the actual engine system on a bus will reinforce troubleshooting procedures.

The contractor will provide suitable training aids, books, manuals, and publications covering the engine system that will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

c. Hybrid Drive or Transmission and Controls

The transmission system instruction will cover preventative maintenance and the major failure events experienced in the system, and how to recognize the failure signs through troubleshooting with test equipment. Students will be given failure/trouble parameters and shown step-by-step troubleshooting procedures to isolate the problem. Hands on exercises with the actual hybrid drive or transmission system on a bus will reinforce troubleshooting procedures.

The contractor will provide suitable training aids, books, manuals, and publications covering the transmission system that will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

d. Heating, Ventilation and Air Conditioning (HVAC)

Heating, ventilation and air conditioning system instruction will cover preventative maintenance and the major failure events experienced in the system, and how to recognize the failure signs through troubleshooting with test equipment. The training will be to the level of AC certification. Students will be given failure/trouble parameters and shown step-by-step troubleshooting procedures to isolate problems. Hands on exercises with the actual HVAC system on a bus will reinforce troubleshooting procedures.

The contractor will provide suitable training aids, books, manuals, and publications covering the HVAC system that will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

e. Air System

Air system instruction will cover preventative maintenance and the major failure events experienced in the system, and how to recognize the failure signs through troubleshooting with test equipment. Students will be given failure/trouble parameters and shown step-by-step troubleshooting procedures to isolate problems. Hands on exercises with the actual air system on a bus will reinforce troubleshooting procedures.

The contractor will provide suitable training aids, books, manuals, and publications covering the air system, which will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

f. Brake System

The brake system instruction will cover preventative maintenance and the major failure events experienced in the system, and how to recognize the failure signs through troubleshooting with test equipment. Students will be given failure/trouble parameters and shown step-by-step troubleshooting procedures to isolate the problem. Hands on exercises with the actual brake system on a bus will reinforce troubleshooting procedures.

The contractor will provide suitable training aids, books, manuals, and publications covering the brake system that will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

g. Differential and Drive Shaft

The differential and drive shaft instruction will cover preventative maintenance and the major failure events experienced in the system, and how to recognize the failure signs through troubleshooting with test equipment. Students will be given failure/trouble parameters and shown step-by-step troubleshooting procedures to isolate the problem. Hands on exercises with the actual differential and drive shaft on a bus will reinforce troubleshooting procedures.

The contractor will provide suitable training aids, books, manuals, and publications covering the differential and drive shaft system that will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

h. Suspension, Steering, Articulation and Axles

Suspension, steering, articulation and axle system instruction will cover preventative maintenance and the major failure events experienced in the system, and how to recognize the failure signs through troubleshooting with test equipment. Students will be given failure/trouble parameters and shown step-by-step troubleshooting procedures to isolate the problem. Hands on exercises with the actual suspension, steering, articulation and axle systems on a bus will reinforce troubleshooting procedures.

The contractor will provide suitable training aids, books, manuals, and publications covering the suspension, steering, and axle systems that will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

i. Wheelchair Ramp

Ramp system instruction will cover preventative maintenance and the major failure events experienced in the system, and how to recognize the failure signs through troubleshooting with test equipment. Students will be given failure/trouble parameters and shown step-by-step troubleshooting procedures to isolate the problem. Hands on exercises with the actual ramp system on a bus will reinforce troubleshooting procedures.

The contractor will provide suitable training aids, books, manuals, and publications covering the ramp system that will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

j. Fire Suppression System

The fire suppression system instruction will cover preventative maintenance and the major failure events experienced in the system, and how to recognize the failure signs through troubleshooting with test equipment. Students will be given failure/trouble parameters and shown step-by-step troubleshooting procedures to isolate the problem. Hands on exercises with the actual fire suppression system on a bus will reinforce troubleshooting procedures. Training will be to the level of certification.

3. Stand Alone System Specific Courses

- Electronic Destination Sign System
- Engine Overhaul
- Transmission Overhaul
- Parts Worker Training
- PLC System Training

a. Electronic Destination Sign System: This will be a course of not less than four hours wherein the electronic sign system will be explained at a component level for electronic technicians. This course will be conducted at the County Training Facility. Delivery: Twice, to a class size of ten as coordinated with the VMFE, for each separately ordered group of buses.

The Contractor will provide suitable training aids, books, manuals, and publications covering the electronic destination sign system that will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

b. Overhaul of the Engine: This will be a course of not less than 40 hours wherein the engine will be taken through the overhaul and dyno test procedures. This course will be conducted at the County Unit Repair Facility or the OEM training facility. Delivery: Twice, to a class size of approximately seven maintenance personnel, for each separately ordered group of buses.

The Contractor will provide suitable training aids, books, manuals, and publications covering the engine system which will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

c. Overhaul of the Hybrid Drive and Transmission: This will be a course of not more than 40 hours, wherein the hybrid drive and transmission will be taken through the overhaul procedure and a dynamometer test. This course will be conducted in the County Unit Repair Facility or the OEM training facility. Delivery: Twice, to a class size of approximately seven maintenance personnel for each separately ordered group of buses.

The Contractor will provide suitable training aids, books, manuals, and publications covering the transmission system, which will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job.

d. Parts Worker Training

The Contractor will provide a familiarization course of approximately four hours for Transit Parts Specialists, Buyers and Chiefs for each separately ordered group of buses.

The Contractor will provide suitable training aides, books, manuals and publications that will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job. Delivery: Twice to a class of approximately 20 stores personnel for each separately ordered group of buses.

e. Multiplex System

These classes will be designed for the electronic technicians to learn the Multiplex systems at the component level. This will be a course of not more than 40 hours. The Contractor will provide suitable training aides, books, manuals and publications that will be distributed to students during training. These materials will be kept by the students and serve as reference materials while on the job. Delivery: Twice to a class of approximately 10 electronic technicians for each separately ordered group of buses.

**C9.16.05 Operator Training**

**C9.16.05.01**

For each separately ordered group of buses provide 4 hours of training to the County's Operations trainers on driving characteristics of the bus, use of all controls, gauges and warning lamps, driver's seat controls plus other operational items as requested. The Contractor will provide copies of all lesson plans, detailed instructor guides, videos, transparencies, and any other training aids. The Contractor shall identify the instructor and provide the qualifications of the instructor. Dates of the training and timing of deliverables will be determined by the Operations trainers in coordination with the Contractor. Training and materials to be approved by the County.

**C9.17 – C9.19 Reserved**

**C9.20 Electrically Driven Engine Accessories**

**C9.20.01**

On a hybrid bus, there is potentially sufficient electric power available to operate accessories that are now driven mechanically by the engine. The County is interested in proposals to operate the air compressor, hydraulic pump(s), alternator, A/C compressor, and radiator fan(s) with electric motors. Higher voltage ac motors would be preferable to 24 Vdc motors. This scheme could also involve switching existing 24 Vdc motors to higher voltage ac motors. The County must approve the proposal.

**C9.21 Air Disc Brakes**

**C9.21.01**

Provide straight air disc brakes on all axles. Disc brakes to be supplied by and/or approved by the axle manufacturer. All functional braking requirements in this RFP are still required. The County must approve hardware and piping layout.

**C9.22 Alternate Hybrid Drive System**

**C9.22.01**

Provide an 'ISE' Thunder Volt® or approved equal hybrid drive system in place of the system specified in Section C5.04. The 'ISE' system is to be complete, including 'Siemens' generator, motors and controller, nickel metal hydride batteries, inverter, and component cooling to allow sustained operation as described elsewhere in this specification. All necessary wiring, cabling, cooling lines, and software control package shall also be included. Dynamic brake resistors shall be roof-mounted. All other requirements of MB 06-2 must be met.

**ATTACHMENT 1  
INFORMATION TO BE SUPPLIED (For Each Type of Bus)**

The following information shall be attached by the Proposer as appendices to this attachment.

**Att 1.01 Dimensional Information**

Supply plan and elevation views of bus.

Supply turning envelope diagram.

Supply dimensional diagram of hoisting, jacking and towing points.

Show approach and departure angles and minimum midwheelbase underbody vertical clearance on the elevation view requested above.

Supply an elevation view of the front of the bus, with a deployed bicycle rack, and the overall approach angle.

**Att 1.02 Internal Dimensions and Layout**

Supply plan and left and right elevations of proposed seating, stanchion and handrail layout. Seat spacing, aisle ways, and tiedown areas to be dimensioned.

Supply a dimensioned plan view of wheelchair tie down locations and the turning diagram of a 30 inch by 48 inch mobility aid device moving forward-facing and rearward-facing from the ramp to the tiedown area.

Supply aisle width between all wheelhouses, hip to knee distance for all forward-facing seating, correct doorway dimensions, location of modesty panels and location of driver's barrier and driver's seat. Note locations of any floor slopes and the amount of slope in percent grade.

It is required that the plan view and left and right elevations be shown on a 11 x 17 inch drawing.

Provide a drawing of the ramp showing width at the platform, length, and total deployed distance from the side of the bus.

**Att 1.03 Lubrication Information**

Supply component manufacturers' information on required lubrication, fuel and coolant products for the following:

Engine - oil, fuel, coolant

Hybrid Drive and Transmission - oil

Differential - oil

Power steering - oil

Ramp - oil

Chassis - grease

Front wheel bearings - oil

Articulation - oil

Review and note any exceptions to the County's fluids list (reference Attachment 19).

**ATTACHMENT 2**  
**QUESTIONS TO BE ANSWERED (For Each Type of Bus)**

**Answer one question per sheet.**

**Att 2.01** Questions on Vehicle Overall Requirements

What steps have been taken to keep the weight on the axles as low as possible?

How are reflections in the windshield effectively eliminated for the driver? The explanation must include detailed information on interior reflections, night glare etc.

Discuss measures taken to minimize interior and exterior noise; note specific measures used to quiet the diesel engine; if the bus will be noticeably quieter than specified, supply test results on a nearly identical bus and the testing procedures for evaluation by the County.

**Att 2.02** Questions on Vehicle Structure

Describe the type of bus structure used.

What materials will be used to construct the bus including chassis or frame, side sheets, roof sheets and end caps?

Describe in detail replacement of outside body panels.

Describe where riveting, arc welding and resistance welding will be used in the bus construction.

What is used for interior paneling and how is it retained?

Describe the thermal and sound insulation used in the roof and sidewalls.

How does the design of the bus and its components preclude resonant vibrations?

Explain how the design of the bus meets the requirements for fatigue life.

Describe the water test and what is installed in the bus when this test is made.

Explain how the requirements for corrosion resistance are met.

Describe preparations for painting, all fillers and primers used, and topcoat application.

Describe the electronic equipment (radio, camera recorder, APC) compartment.

Describe provisions and methods for towing and lifting the bus.

**Att 2.03** Questions on Furnishings

How are the door edges sealed to keep water and drafts out of the bus?

Describe the thickness and quality of all windows glass used.

Explain how window hardware is non-corroding.

Describe accessibility of the windshield wiper motor and washer equipment.

Describe the design of the interior lighting system, including compatibility of ballasts and lamps.

Which exterior lamps do you prefer to use and why?

Where is the rear route number sign located and how is maintenance accessibility accomplished?

Describe all outside access panels, including opening assists, latches and corrosion proof features.

Describe all floor hatches, their latches and the treatment of the opening in the floor.

Describe the design effort to ensure maximum readability of the destination signs by intending passengers. Show how a 60 inch (152.4 cm) tall person can easily read the front and side signs while standing 36 inches (91.4 cm) away from the bus at various angles to the vertical centerline of the bus.

Describe the details of the passenger signal system.

What size outside advertising frames can be installed on the bus?

#### **Att 2.04 Questions on Driver's Station and Controls**

Detail the design that has gone into making the driver's station a safe, comfortable place to work with controls within easy reach.

Provide fully dimensioned plan and elevation drawings of the driver's station, meeting the County's requirements, that you plan to supply; include the barrier, seat, steering column, pedals and dashboard.

How will the exterior and interior mirrors proposed meet the specification requirements?

Describe locations for mounting radio equipment, fare collection equipment, and Smart Card equipment in the driver's station.

#### **Att 2.05 Questions on Propulsion and Braking**

How are all engine accessories driven?

Describe accessibility of engine accessories and routinely serviced engine components.

Describe the cooling system including accessibility for radiator, charge air, and oil cooler cleaning.

Describe the hybrid drive, transmission and drive axle and their transit experience.

Describe the engine, hybrid drive, and transmission removal procedures.

Describe the engine/hybrid drive and engine/transmission mounting system and the methods and materials used to isolate vibrations from the diesel engine.

What type of brake system is supplied?

Describe the operation of the parking and emergency brake and hill holder.

Provide an air brake piping diagram showing all valves and other components.

#### **Att 2.06 Questions on Equipment and Suspension Components**

Describe the hydraulic pumps and their transit experience.

How will the HVAC system meet the specification requirements?

What are the components of the HVAC system and how have they been designed for long operation and low maintenance?

Describe the driver's heater and demistor.

Describe the design of the ramp and its integration into the bus structure.

Explain how the bus suspension is designed, is suitable for, and proven in transit service.

Describe in detail the low voltage wiring system including wire type, terminations, terminal boards, multiple pin connectors, shielding for RFI/EMI, wire numbering methods.

Describe the multiplex system.

Provide a list of all electrical loads on the bus.

**Att 2.07 Questions on Materials**

Describe any material which could produce toxic smoke or gases during collision repair.

Describe your experience in supplying materials which meet the requirements of Attachment 21.

Are you proposing any materials which do not meet the requirements of Attachment 21?

How have electrical wire and cable insulation been selected to minimize fire and toxic smoke hazards?

Describe how welders in the bus assembly plant are certified.

Describe the testing program to ensure quality welds.

Detail how any off-site welding is inspected and tested.

**Att 2.08 Questions on Documentation**

Supply a proposed delivery schedule, keyed to bus deliveries, for all manuals.

Describe the training program to be supplied.

**ATTACHMENT 3**

**Page 1 of 2**

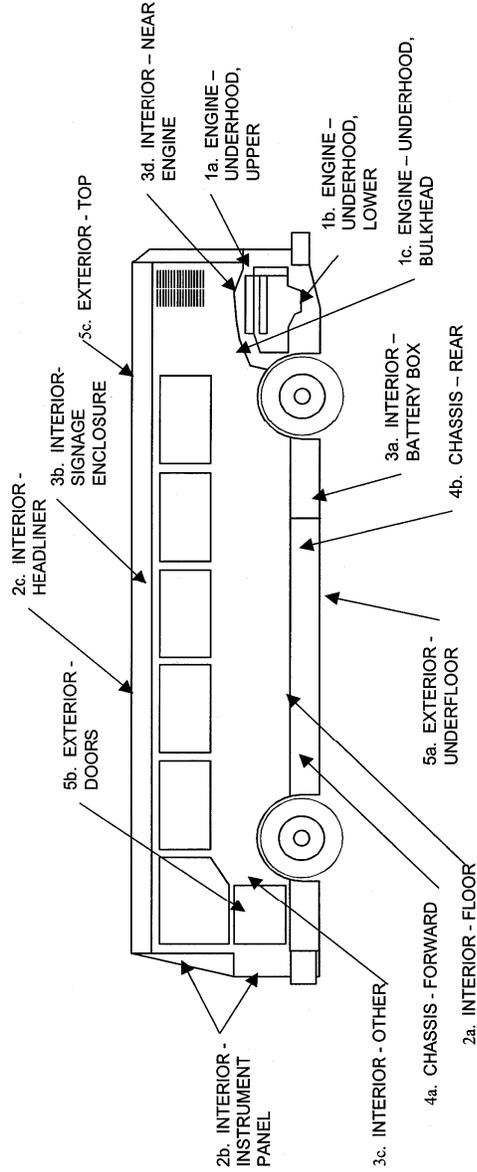
**OPERATING TEMPERATURES FOR HEAVY DUTY TRANSIT BUS COMPONENTS**

**TEMPERATURE EXTREMES SUMMARY - HEAVY-DUTY TRANSIT BUS (1)**

	Location <sup>(2)</sup>	Operating Temperature (3, 4)		Storage Temperature (3, 4)	
		Temperatures MIN	Transit Bus MAX	Temperature MIN	Temperatures MAX
ENGINE (5):	1a Underhood – Lower	-20 °F	185 ° F	-40 °F	212 °F
	1b Underhood – Upper	-20 °F	212° F(5)	-40 °F	221°F
	1c Underhood – Bulkhead	-20 °F	185 ° F	-40 °F	212 °F
INTERIOR, OCCUPIED:	2a Floor (7)	-20 °F	158 ° F	-40 °F	185 °F
	2b Instrumental Panels	-20 °F	158 ° F(6)	-40 °F	185 °F
	2c Headliner (7)	-20 °F	158 ° F	-40 °F	185 °F
	2d Doors (7)	-20 °F	158 ° F	-40 °F	185 °F
INTERIOR, UNOCCUPIED:	3a Battery Box	-20 °F	158 ° F	-40 °F	185 °F
	3b Signage Enclosure	-20 °F	158 ° F	-40 °F	185 °F
	3c Enclosure, Other	-20 °F	158 ° F	-40 °F	185 °F
	3d Enclosure, Near Engine	-20 °F	185 ° F	-40 °F	212 °F
CHASSIS:	4a Forward (7)	-20 °F	158° F	-40 °F	185 °F
	4b Rear (7)	-20 °F	185° F	-40 °F	212 °F
EXTERIOR:	5a Underfloor	-20 °F	158 ° F	-40 °F	185 °F
	5b Rear	-20 °F	158 ° F	-40 °F	185 °F
	5c Doors (7)	-20 °F	158 ° F	-40 °F	185 °F
	5d Top	-20 °F	158 ° F	-40 °F	185 °F

**NOTES:**

1. This table is based on TABLE 1A in SAE J1455 (AUG94); The J1455 information has been revised for Transit Bus Applications by APTA Electrical Interface Working Group, 2000.
2. See following page for Pictorial Description of Locations.
3. If temperature characterization has been performed on the target vehicle, then the measured temperature may be substituted for the values in the Operating columns of the Table.
4. Maximum ambient temperature may reach 158 °F. Minimum ambient is -40 °F. The MAX Storage temperatures are based on the ambient and an estimate of the effects of thermal soakback.
5. Exhaust Manifold and Turbo surfaces can reach 1500 °F. Mount electronic control units and other electronics at least 18” away from these surfaces and at least 6” away from the Engine unless mounting instructions allow otherwise.
6. Direct Sunlight surface temperature can be 185°F.
7. Suggested limits for areas where no significant data is recorded. See notes above.



TEMPERATURE EXTREME LOCATIONS - HEAVY-DUTY TRANSIT BUS  
 AREA 1 IS IN ENGINE COMPARTMENT (BUT NOT ON THE ENGINE OR EXHAUST); AREA 2 IS THE OCCUPIED INTERIOR; AREA 3 IS THE UNOCCUPIED INTERIOR; AREA 4 IS THE VEHICLE CHASSIS; AND AREA 5 IS THE EXTERIOR OF THE VEHICLE.

## ATTACHMENT 4 APPROVALS

**This list is provided for INFORMATION ONLY, and it should not be regarded as exhaustive. Omissions or errors in this list do not affect the bidder's or Contractor's obligation to secure approval for all items required in the Specification.**

C1.03.01	Any part of bus below wheel rim
C1.03.02	Approach and departure angle testing wedge
C1.11.02	Windshield reflections
C1.14.03	Special tools
C1.14.05	Potted electronic components
C1.15.03	Shielded cabling (RFI/EMI)
C2.01.01	Alternate bus construction methods
C2.01.02	Exterior design and materials
C2.02.01	Anti-jackknife joint
C2.02.02	Interior connection structure
C2.03.01	Bellows
C2.04.01	Waterproofing material
C2.04.02	Sub-flooring
C2.05.01	Floor covering
C2.05.02	Step design
C2.07.01	Interior panels, sizes, and installation
C2.08.01	Wheel Housings
C2.12.02	Alternate roof insulation methods
C2.16.02	Water test methods
C2.17.02	Under car corrosion inhibitor
C2.17.03	Alternate tests for hardware corrosion resistance
C2.17.04	Shipping methods & corrosion protection
C2.18.03	Location of manufacturer insignias on exterior of coach
C2.19.01	Driver's station interior semi-gloss black paint.
C2.19.02	Location of manufacturer insignias on interior of coach
C2.20.01	Painting preparation
C2.21.01	Numbering list for VIN numbers
C2.21.02	Fleet numbering style and locations
C2.22.01	Builder's plate location
C2.23.01	Battery compartment
C2.24.02	Equipment compartment
C2.25.01	Towing and lifting methods and alternate procedures
C2.25.04	Towing and lifting identification tags and diagrams
C3.01.01	Door panels, handrails and glass and alternate designs
C3.02.01	Door actuator venting, general system and alternate designs
C3.03.01	Door controls and mounting locations and alternate designs
C3.03.02	Door button location
C3.03.04	Manual door air valve
C3.04.01	Rear door interlock system
C3.05.06	Seating layout
C3.06.02	Seat attachment methods
C3.06.03	Wheelchair tie-down instruction plate
C3.08.08	Lose belt storage location/Securement system
C3.09.04	Drop strap

C3.09.08	Ceiling stanchion attachment
C3.09.10	Handrail and stanchion system
C3.11.01	Window, hardware, arrangement and alternate design
C3.11.06	Emergency exit plates
C3.13.01	Wiper motor accessibility, controls and parked wiper position
C3.13.02	Washer reservoir accessibility
C3.14.01	Interior lighting system
C3.16.01	Exterior lamp design and placement
C3.16.09	Third brake lamp location
C3.16.11	Towing connector
C3.17.01	Destination sign system, placement and readability
C3.18.04	Sign glass and black masking
C3.20.01	Dash sign holder
C3.21.01	Quick disconnect exterior access panels
C3.21.04	Access panels and floor hatches
C3.22.01	Bumpers
C3.23.02	Radio antennas/ground planes
C3.23.04	Steps and handholds for cleaning windshield
C3.23.06	Static ground
C3.23.08	Fenders and rub rails
C3.23.11	Roof safety features
C3.24.01	Chime systems
C3.25.01	Component and camera location
C3.26.01	Public address system and alternate designs
C3.27.02	Advertising frame position and size changes
C3.29.01	Fire extinguisher mounting location
C3.29.03	Wheel chock holders
C3.29.04	Safety equipment
C4.01.03	Driver station design
C4.03.01	Driver barrier
C4.04.01	Driver console
C4.04.02	Accelerator and brake pedal angles
C4.04.04	Parking emergency brake
C4.04.27	Indicator test switch
C4.04.32	Interlocks
C4.05.01.01	Speedometer
C4.06.02	Instrument panel indicators
C4.07.01	Coat hook and tie back loop
C4.08.01	Convenience lighting
C4.09.01	Sun shades
C4.10.01	Driver's platform
C4.11.01	Exterior mirrors and anti skid for steps and handholds
C4.11.04	Harness routing from bus skin to connector
C4.12.01	Interior mirrors
C4.13.02.03	Ground strap
C4.13.03	Transfer cutter
C4.14.01	Radio handset and control head locations
C4.14.04	Control head conduit
C4.15.01	Registration certificate holder
C5.02.01	Engine, accessories and propulsion sub-systems

C5.02.02	Alternate engine accessory drive methods
C5.02.03	Mounting
C5.02.04	Exhaust system
C5.02.05	Cooling system
C5.02.05.04	By-pass valve/switch location
C5.02.07	Alternate engine oil checking access
C5.02.10	Auxiliary heater, mounting and control scheme
C5.03.04	Rear engine controls
C5.03.05	Fluid refill quantity tag design and placement
C5.03.06	Fire detection and suppression system
C5.04.01.01	Evidence of cooperation with engine manufacturer, oil sampling unit
C5.04.01.03	Electric energy storage system
C5.04.02.03	Transmission retarder
C5.04.03	Drive shaft
C5.05.01	Drive axle and hub reduction units (if used)
C5.05.03.01	Leveling valves
C5.05.03.04	Lifetime lubricated steering system components
C5.05.04	Kneeling
C5.06.01	Fuel system
C5.07.01	Supplemental brake
C5.07.02	Brake system
C5.07.04	Alternate brake hardware
C5.07.09	Anti-lock braking
C5.07.10	Automatic traction control
C5.07.11	Brake balance
C5.09.01	Hill holder
C5.10.01	Controlled braking
C6.01.05	Air system charging connector locations
C6.02.03	Hydraulic reservoir locations; fluid level checking
C6.03.02.06	Circuit protection
C6.03.04.01	Multiplex system
C6.04.01	Data port location
C6.04.03	Operating remote valves
C6.08.01	Ramp control, power, and backup system
C6.09.01	Wheels and attachment system
C6.10.01	Power steering
C7.03.01	Approval to use polyurethane foam; MSDS Safety data sheets
C7.04.01	Welding practices documentation, tests, equipment and procedures
C7.04.02	QA documentation
C9.16.01.06	Maintenance and parts manuals
C9.16.01.07	Manual updates
C9.16.03.02	Operator manuals
C9.16.04.01	Training program
C9.16.04.01	Training aids
C9.16.05.01	Operator training

**ATTACHMENT 5: COMPONENT MANUFACTURERS**

This list is provided for **INFORMATION ONLY**, and it should not be regarded as exhaustive. Omissions or errors in this list do not affect the Contractor's obligation to supply the equipment required in the Specification.

<b>Acme Specialty Mfg. Co.</b> AM Station "B", Toledo, OH 43606 Phone: 419-243-8103
<b>Allison Transmission</b> 4700 W. 10 <sup>th</sup> St., Indianapolis, IN 46222 Phone: (800) 252-5283 Fax: 317-242-3626
<b>Altro Floors, Transit Division</b> 467 Forbes Blvd. S. San Francisco, CA 94080 Phone: (800) 382-0333 Fax: (415) 583-9564
<b>Amerex Corp.</b> 5664 Cascade Place, Boulder, CO 80303 Phone: 303-494-9715 Fax: 303-499-2102
<b>American Seating Company</b> 401 American Seating Center, Grand Rapids, MI 49504 Phone: 800-748-0353 Fax: 616-732-6491
<b>Amflo</b> 1111 E. McFadden Ave., Santa Ana, CA 92705
<b>AMP , Inc.</b> 2800 Fulling Mill Road, Middletown, PA 17057
<b>Ashland Petroleum Co.</b> Box 391, Ashland, KY 41101 Phone: 606-329-3333
<b>Attwood Corp.</b> 1016 N. Monroe Street, Lowell, MI 49331-0260 Phone: 616-897-2412
<b>BASF</b> 100 Cherry Hill Road, Parsippany, NJ 07054 Phone: 201-316-4485 Fax: 201-316-4409
<b>Belden Wire &amp; Cable Co.</b> 2200 U.S. Hwy 27 So., Richmond, IN 47374
<b>Bendix (Allied Signal)</b> 901 Cleveland Street, Elyria, OH 44036-2016 Phone: 800-247-2725 Fax: 440-329-9607

**Chestnut Ridge Foam Inc.**

P.O. Box 781, Latrobe, PA 15650

Phone: 800-234-2734  
Fax: 724-537-9003**Cole-Hersee Co.**

20 Old Colony Ave., South Boston, MA 02127-2467

Phone: 617-268-2100  
Fax: 617-268-9490**Cummins Engine Co., Inc.**

500 Jackson St., Columbus, IN 47201

Phone: 800-377-5000 Fax: 812-377-3082

**Delco Remy America, Inc.**

2902 Enterprise Dr., Anderson, IN 46018

Phone: 765-646-2000  
Fax: 765-646-3717**DuPont OEM/Fleet Finishes**

Barley Mill Plaza, PO Box 80021, Wilmington, DE 19880

Phone: 302-772-5481  
Fax: 302-992-5843**EG&G Rotron Custom Division**

9 Hasbrouck Lane, Woodstock, NY 12498

Phone: 914-679-2401  
Fax 914-679-1898**Electronic Surveillance Corporation (ESC)**

50 East Pearce St., Richmond Hill, Ontario, Canada L4B 1B7

Phone: 905-709-2660  
Fax: 905-709-1202**Electronic Transit Laboratories Inc. (ETL)****(See Randtronics)****Emco Wheaton**

PO Box 688, Conneaut, Ohio 44030-0688

Phone: 216-599-8151

**Excel Industries Inc.**

1120 North Main Street, Elkhart, IN 46514

Phone: 219-264-2131  
Fax: 219-266-5418**Fiamm Technologies**

946 Frisbie St., Cadillac, MI 49601

Phone: 800-343-4266  
Fax: 616-775-4402**Floyd Bell, Inc.**

PO Box 12400, Columbus, OH 43212

Phone: 614-294-4000  
Fax: 614-291-0823**GFI Genfare**

751 Pratt Blvd., Elk Grove, IL 60007

Phone 847-593-8855  
Fax 847-593-1824

**Gen Corp. Polymer Products**

1722 Indian Wood Circle, Maumee, OH 43537

Phone 419-891-1500

**Goodyear Tire and Rubber Company**

1144 East Market Street, Akron, Ohio 44316-0001

Phone: 800-321-9647

Fax 330-796-2507

**Graham-White Manufacturing Co.**

1242 Colorado St.

Phone: 540-387-5620

P.O. Box 1099

Fax: 540-387-5639

Salem, VA 24153

[www.grahamwhite.com](http://www.grahamwhite.com)**Grote Industries**

2600 Lanier Dr., Madison, IN 47520

Phone: 812-273-1296

Fax: 812-265-8440

**Haldex**

2400 NE Coronado Dr., Grain Valley, MO 64029

Phone: 800-821-8469

Fax: 816-224-7090

**Hansen Manufacturing Co.**

4044 W. 150th St., Cleveland, OH 44135

**Hubner**

355 Wando Place Drive, Mount Pleasant, SC 29464

Phone: (803) 849-9400

Fax: (803) 849-9404

**ITT Cannon Electrical Division**

1851 T East Deere Avenue, Santa Ana, CA 92705

Phone: 714-261-5300

Fax: 714-757-8324

**IMPulse NC, Inc.**

P.O. Box 889 – 100 IMPulse Way, Mount Olive, N.C. 28365

Phone 919 658-2200

Fax: 919-658-2268

**Insul-8**

10102 "F" Street, Omaha, Nebraska 68127-1181

Phone: 1-800-521-4888 Fax: 402-339-9627

**King of the Road**

216 S. Torrence St., Dayton, OH 45403-3625

Phone: 937-253-0011

**Koni North America**

ITT Automotive

Phone 606-586-4100 Fax 606-334-3340

1961-A International Way, Hebron, KY 41048

E-mail [www.koni-na.com](http://www.koni-na.com)**Lift-U. Division of Hogan Mfg. INC.**

First &amp; Coley Streets P.O. Box 398, Escalon, CA 95320-0398

Phone: 209-838-2400

Fax: 209-838-8648

<b>Liquid Plastics Limited</b>	
<b>Luminator A Mark IV Industries Co.</b> 1200 E. Plano Parkway, Plano, TX 75074-0278	Phone: 972-424-6511 Fax: 972-423-8515
<b>MGM Brakes</b> 8530 Cliff Cameron Dr., Charlotte, NC 28269	Phone: 704-547-7411 Fax: 704-547-9367
<b>Arvin Meritor</b> 2135 W Maple Rd., Troy, MI 48084-7186	Phone: 1-800-535-5560 Fax: 248-435-1893
<b>Midwest Electronic Industries</b> 4945 W. Belmont Ave., Chicago, IL 60641	Phone: 312-685-3500 Fax: 312-685-5286
<b>Modine Manufacturing Company</b> 1500 DeKoven Avenue, Racine, Wisconsin 53403-2554	Phone: 414-636-1200 Fax: 414-636-1424
<b>Nalco Chemical Company</b> One Nalco Center, Naperville, IL 60563	Phone: 708-305-1129 Fax: 708-305-2990
<b>National Guard Products, Inc.</b> 540 N. Parkway/ P.O. Box 7353, Memphis, TN 38107	Phone: 1-800-647-7874
<b>Nevamar, Western District Sales</b> 6709 NE 59th Place, Portland, OR 97218-2711	Phone: 503-288-0606 Fax: 503- 573-9533
<b>PPG Industries</b> 19699 Progress Dr., Strongsville, OH 44136	Phone: 440-572-2800 Fax: 440-572-6880
<b>Power Plus Corporation</b> 170 Bosstick Blvd., San Marcos, CA 92069	Phone: 800-854-2984 Fax: 760-598-0330
<b>R.A. Miller Industries, Inc.</b> P.O. Box 858, Grand Haven, MI 49417	Phone: 616-842-9450 Fax: 616-842-2771
<b>RCA Rubber Co.</b> 1833 East Market St., Akron, OH 44305-0240	Phone: 330-784-1291 Fax: 330-784-2899

<b>Randtronics Propulsion Supply, Inc.</b> 9624 Airport Road, Snohomish, WA 98290 Phone: 360-568-1473 Fax: Same
<b>Rilsan Corporation</b> 139 Harristown Road, Glen Rock, NJ 07452 Phone: 201-447-3300
<b>Robert Bosch Corporation</b> 800'1-T Dorchester Road, P.O. Box 10347, Charleston, SC 29411 Phone: 803-552-6000
<b>Rockbestos Surprenant Cable Corp.</b> 172-T Sterling St., Clinton, MA 01510-1900 Phone: 978-365-6331 Fax: 978-365-4054
<b>Romeo-RIM Inc.</b> 74000 Van Dyke Ave., Romeo, MI 48065 Phone: 810-752-9605 Fax: 810-752-5021
<b>Rosco</b> 144-31 91 <sup>st</sup> Ave., Jamaica, NY 11435-4397 Phone 800-227-2095 Fax 718-297-0323
<b>Sinclair Radio Laboratories</b> PO Box 23, Tonawanda, NY 14150 Phone: 716-874-3682
<b>Sparton Engineered Products, Flora Group</b> PO Box 399, Flora, IL 62839 Phone: 800-851-6818 Fax: 618-662-4528
<b>Speciality Coatings and Chemical, Inc.</b> 7360 Varna Avenue, North Hollywood, CA 91605 Phone: 213-875-0233
<b>Specialty Manufacturing Co.</b> 10200 Pineville Rd./PO Box 790, Pineville, NC 28134 Phone: 800-951-7867 Fax: 704-889-2760
<b>Spicer Industries, Dana Corp.</b> 6151 T American Rd., Toledo, OH 43612 Phone: 419-729-1601 Fax 419-727-2666
<b>Sportworks</b> 15500 Wood-Red Road NE #C-600, Woodinville, WA 98072 Phone: 425-483-7000 Fax: 425-488-9001
<b>Stemco Inc.</b> P.O.Box 1989, Longview, TX 75606-1989 Phone: 800-527-8492 Fax: 800-874-4297
<b>Switchcraft</b>

**3M Commerical Graphics**

3M Center Building 220-6W-06, St. Paul MN 55144-1000 Phone: 800-328-3908  
Fax: 612-736-4233

**Texaco Lubricants, c/o Equilon Enterprises**

1111 Bagby St. ,Houston, TX 77002 Phone 800-782-7852  
Fax: 713-752-3235

**Titan Laboratories Div. of Siegel Oil Co.**

1380 Zuni Street P.O.Box 4567, Denver, CO. 80204 Phone: 800-848-4826  
Fax: 303-595-8741

**Transign**

3777 Airport Rd., Waterford, MI 48095 Phone: 313-623-6400

**Transit Surveillance Systems**

1190 N. Kraemer Blvd. Phone: (714) 765-0291  
Anahiem, CA 92806 Fax: (714) 632-1113

**Transmatic**

6145 Delfield Industrial Drive, Waterford, MI 48329 Phone: 313-623-2500  
Fax: 313-623-2839

**Truck-Lite Co. Inc**

310 East Elmwood Avenue, Falconer, NY 14733 Phone: 800-562-5012  
Fax: 800-685-6412

**Unique Truck Equipment Inc.**

P.O. Box 8798 Phone: 800-777-4855  
Grand Rapids, MI 49518 Fax: 866-531-3163  
[www.uniquetruck.com](http://www.uniquetruck.com)

**UNOCAL Union Oil Company of California**

1650 East Golf Road, Schaumburg, IL 60196 Phone: 708-330-5295  
Fax: 708-330-4869

**USSC Group, Inc.**

780 Third Ave., King of Prussia, PA 19406 Phone: 610-265-3610  
Fax: 610-265-8327

**Vanner Power Group**

4282 Reynolds Drive, Hilliard, OH 43026 Phone: 614-771-2718  
Fax: 614-771-4904

**Vapor Division Mark IV Trans Products Corp.**

6420 West Howard Street, Nilis, IL 60714 Phone: 847-967-8300  
Fax: 847-470-7800

**Waxoyl / Distributed by Northwest Anti Corrosion**

3834 25th Avenue West, Seattle, WA 98199

Phone: 206-285-6892

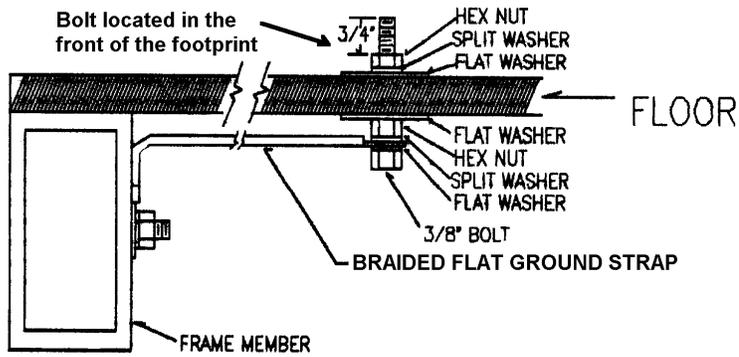
**Zolatone Process, Inc.**

33411 E. 15th. Street, Los Angeles, CA 90023

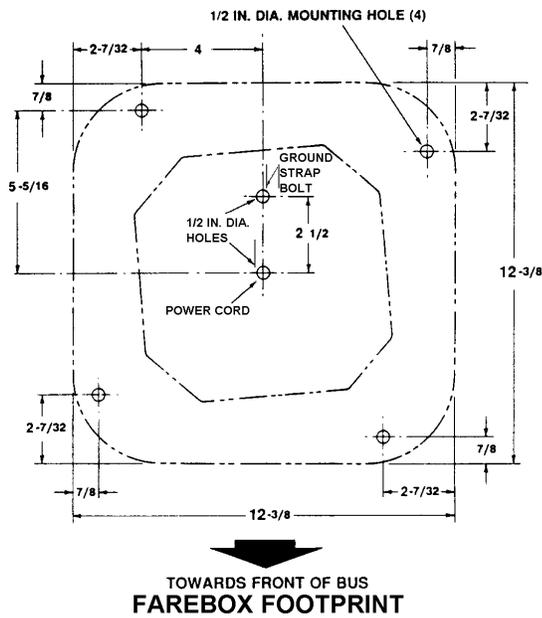
Phone: (213) 268-4742

# ATTACHMENT 6

## Ground Strap Installation for GFI Farebox

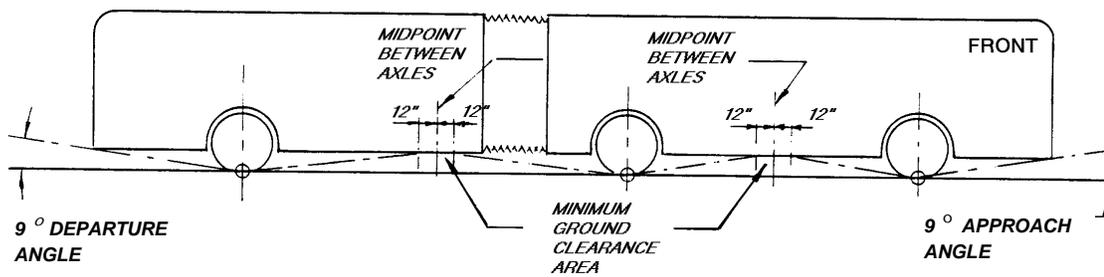
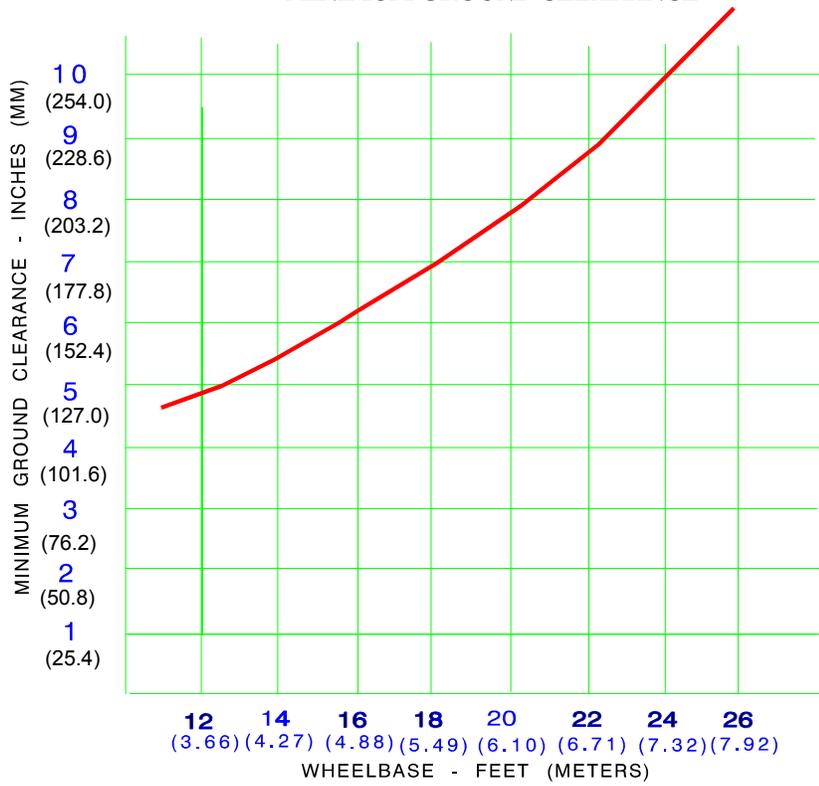


NOTE: All fasteners to be stainless steel.



**ATTACHMENT 7:  
MINIMUM GROUND CLEARANCE**

**MINIMUM GROUND CLEARANCE**



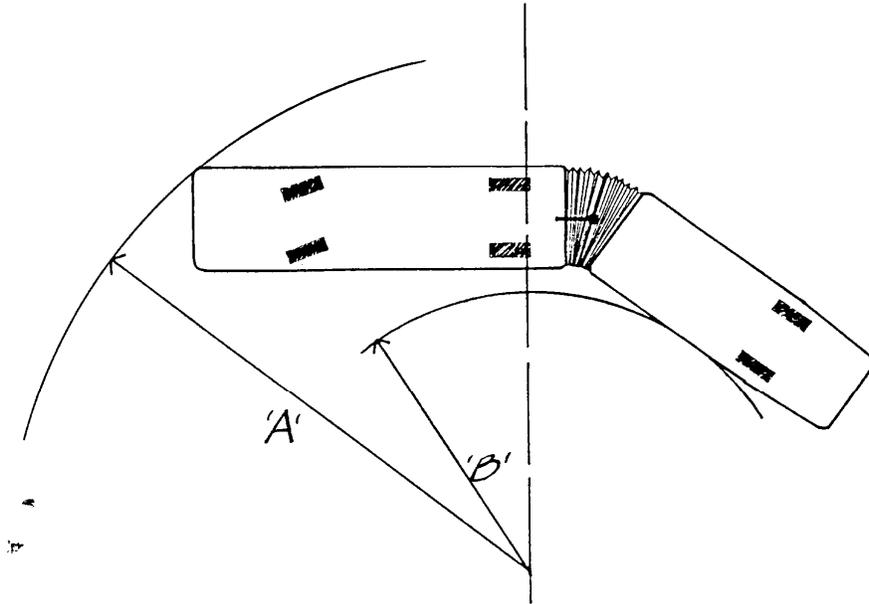
ATTACHMENT 8: TURNING RADIUS

Page 1 of 1

STANDARD 60 FT BUS

MAXIMUM TURNING RADIUS "A" = 520 INCHES (13,210 mm)

MINIMUM TURNING RADIUS "B" = 206.3 INCHES (5,240 mm)



## ATTACHMENT 9

### RCW 46.44.042

#### Maximum gross weights — Axle and tire factors.

\*\*\* CHANGE IN 2006 \*\*\* (SEE [6800-S.SL](#)) \*\*\*

Subject to the maximum gross weights specified in RCW [46.44.041](#), it is unlawful to operate any vehicle upon the public highways with a gross weight, including load, upon any tire concentrated upon the surface of the highway in excess of six hundred pounds per inch width of such tire. An axle manufactured after July 31, 1993, carrying more than ten thousand pounds gross weight must be equipped with four or more tires. Effective January 1, 1997, an axle carrying more than ten thousand pounds gross weight must have four or more tires, regardless of date of manufacture. Instead of the four or more tires per axle requirements of this section, an axle may be equipped with two tires limited to five hundred pounds per inch width of tire. This section does not apply to vehicles operating under oversize or overweight permits, or both, issued under RCW [46.44.090](#), while carrying a nonreducible load.

The following equipment may operate at six hundred pounds per inch width of tire: (1) A nonliftable steering axle or axles on the power unit; (2) a tiller axle on fire fighting apparatus; (3) a rear booster trailing axle equipped with two tires on a ready-mix concrete transit truck; and (4) a straddle trailer manufactured before January 1, 1996, equipped with single-tire axles or a single axle using a walking beam supported by two in-line single tires and used exclusively for the transport of fruit bins between field, storage, and processing. A straddle trailer manufactured after January 1, 1996, meeting this use criteria may carry five hundred fifteen pounds per inch width of tire on sixteen and one-half inch wide tires.

For the purpose of this section, the width of tire in case of solid rubber or hollow center cushion tires, so long as the use thereof may be permitted by the law, shall be measured between the flanges of the rim. For the purpose of this section, the width of tires in case of pneumatic tires shall be the maximum overall normal inflated width as stipulated by the manufacturer when inflated to the pressure specified and without load thereon.

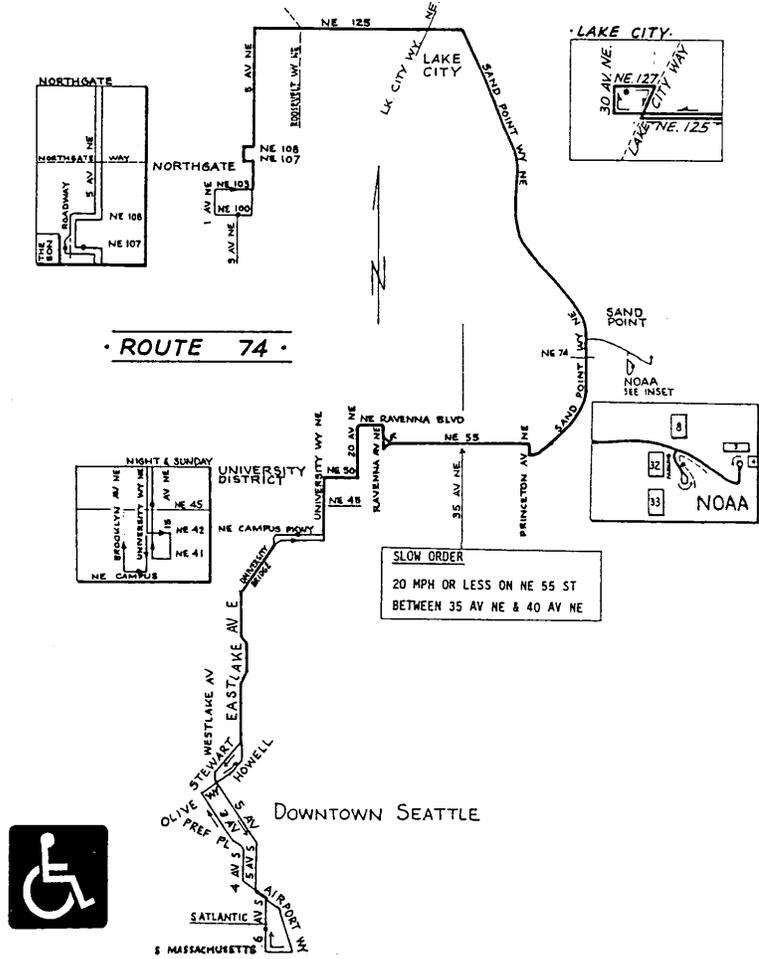
The department of transportation, under rules adopted by the transportation commission with respect to state highways, and a local authority, with respect to a public highway under its jurisdiction, may extend the weight table in RCW [46.44.041](#) to one hundred fifteen thousand pounds. However, the extension must be in compliance with federal law, and vehicles operating under the extension must be in full compliance with the 1997 axle and tire requirements under this section.

[1996 c 116 § 1; 1993 c 103 § 1; 1985 c 351 § 4; 1975-76 2nd ex.s. c 64 § 10; 1961 c 12 § [46.44.042](#). Prior: 1959 c 319 § 27; 1951 c 269 § 27; prior: 1949 c 221 § 2, part; 1947 c 200 § 6, part; 1941 c 116 § 2, part; 1937 c 189 § 50, part; Rem. Supp. 1949 § 6360-50, part; 1929 c 180 § 3, part; 1927 c 309 § 8, part; 1923 c 181 § 4, part; 1921 c 96 § 20, part; RRS § 6362-8, part.]

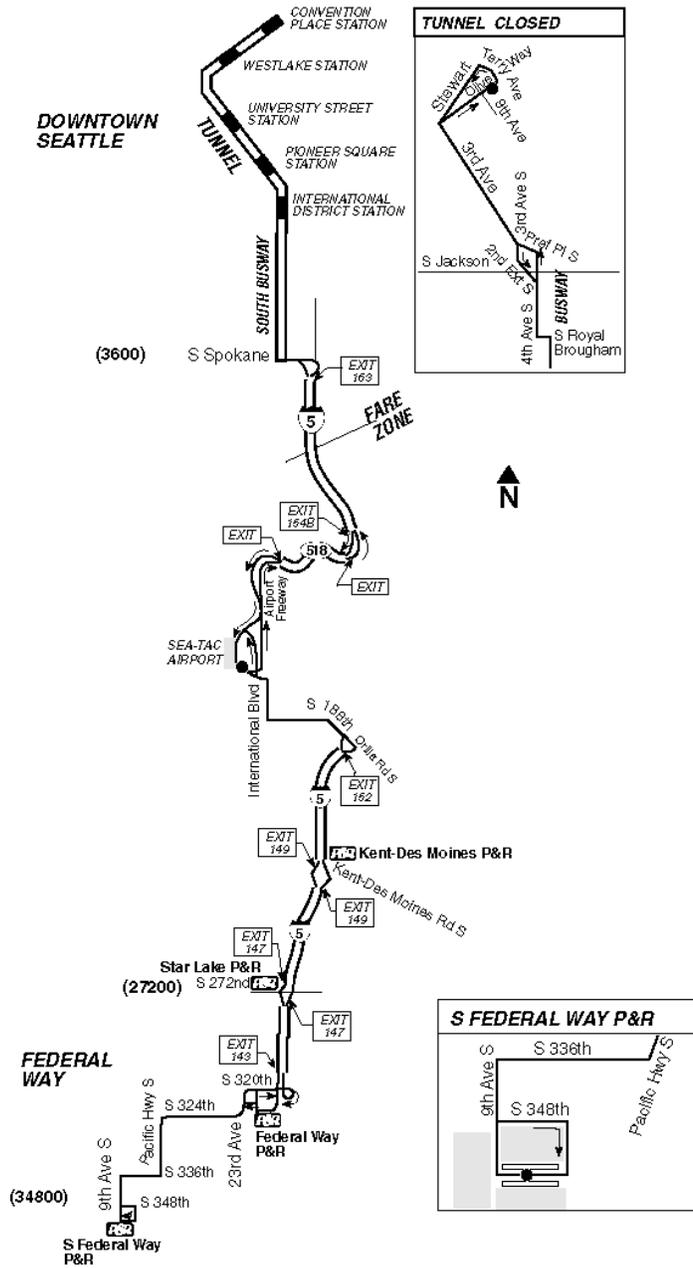
#### Notes:

**Effective dates -- Severability -- 1975-'76 2nd ex.s. c 64:** See notes following RCW [46.16.070](#).  
<http://apps.leg.wa.gov/RCW/default.aspx?cite=46.44.042>

TYPICAL CITY ARTERIAL ROUTE



TYPICAL FREEWAY EXPRESS ROUTE



**ATTACHMENT 11:  
Colors of Materials and Finishes**

NOTE: All brand name call-outs are understood to include the phrase, 'or approved equal'.

<b>BUMPERS</b>	
(General)	Black (colored throughout, not painted)
Reference: C3.22	
Locations:	Front Bumper, Rear Bumper
<b>EXTERIOR COLORS</b>	
(General)	See Attachment 12
Reference: C2.18	
Locations:	Exterior Finish
<b>FLOORING</b>	
(Coach Interior General)	"RCA Transit-Flor" rubber flooring, color no. 872.
Reference: C2.05	
Locations:	Aisle floor, Front entrance area, Steps (except as noted below), Flooring under seats.
(Driver's Platform)	"RCA Transit-Flor", color black
Reference: C2.05	
Locations:	Driver Platform
(Floor Markings)	"RCA Transit-Flor", color yellow
Reference: C2.05	
Locations:	Standee line, tie down area handicapped logo
(Step Edges)	"RCA Transit-Flor" step edges, color yellow, with abrasive strip
Reference: C2.05	
Locations:	Step tread edges, doorway edges
(Turntable)	"Altro TRANSFLOR Chroma ", color Zenith
Reference: C2.05	
Locations:	Turntable
<b>FLOOR TRIM</b>	
(General)	Matte black anodized aluminum.
Reference: C2.06	
Locations:	Interior moldings
<b>INTERIOR COLORS</b>	
(Driver's Station)	Flat or semi-gloss black "DuPont" Imron 5000 , "PPG Industries" Delta 3500 paint or aluminum anodizing) or "Zolatone" Coating System
Reference: C2.19, C4.02, C4.03, C4.07, C4.16	
Locations:	Driver's station, Driver's seat, Driver's seat frame and pedestal, Front dash, Sign box door, Front door mechanism box, Inside of front door panels, Above driver's sliding window, Metal parts of driver's barrier, General driver's station area items, Driver's OCR, Dash fans
(Coach Interior General)	"DuPont" Imron 5000 or "PPG Industries" Delta 3500, color to match Parker no.5361, semigloss finish
Reference: C2.19	
Locations:	Interior side panels (between windows), Rear door mechanism box, Inside rear door panels, Rear area, Ceiling trim strips (color of vinyl cladding)

**ATTACHMENT 11:  
Colors of Materials and Finishes**

<b>PANELING</b> (Coach Interior General) Reference: C2.07, C3.06, C3.10 Locations:	Plastic laminate, "Nevamar"® Armored Protection™, Smoke Essence Textured ES6003T Interior side panels below windows, Divider panels (see below)
(Driver's Station) Reference: C2.07, C3.10, Locations:	Plastic laminate, "Nevamar"® Matte Black Front most ceiling panel, Front divider panel (front side)
(Ceiling) Reference: C2.07 Locations:	Plastic laminate, "Nevamar"® Color: TQ-2-IT Crème Tranquility, ARP finish Ceiling panels behind front-most panel
<b>SEAT BACKS</b> Reference: C3.06 Locations:	Black Plastic back panels on transverse seats
<b>SEAT BARRIER AND ARM REST PANELS</b> Reference: C3.06 Locations:	E-469 Claret, R-61 Royalite Barrier in tiedown area; longitudinal seat arm rests
<b>SEAT BOTTOMS</b> Reference: C3.06 Locations:	Powder coat paint, Color: silver and red vein to match E-469 Claret, R-61 Royalite Seat bottom panels on aisle-facing folding seats
<b>SEAT FRAMES</b> Reference: C3.06 Locations:	Powder coat paint, Color: black and silver vein Cantilever frames on transverse seats
<b>SEAT HANDRAIL</b> Reference: C3.06 Locations:	To match E-469 Claret, R-61 Royalite On transverse seats
<b>STANCHIONS/HANDRAILS</b> (General) Reference: C3.09, C6.08, C4.03 Locations:	Driver's area, front coach area, "Rilsan Corp." baked, electrostatically deposited black epoxy powder coating. Other areas, natural stainless steel, AISI No. 2B finish Stanchions and handrails throughout the coach
<b>CARPETING</b> (Rear Bulkhead) Reference: C2.07 Location:	Carpet, "Lantal" 13558/38 Above rear couch seat

**ATTACHMENT 11:  
Colors of Materials and Finishes**

<b>STEERING WHEEL</b> (General) Reference: C6.12 Location:	Black (colored throughout, not painted)  Steering wheel
---	---

<b>UPHOLSTERY</b> (Vinyl) Reference C3.06 Locations:	"Gen Corp" Boltaflex Miler LS/GR with woven cotton backing; styling sample No. 7044-B Teal base  Passenger seat and back cushion
(Vinyl) Reference C3.06 Locations:	"Gen Corp" Boltaflex Miler LS/GR with woven cotton backing; styling sample No. 7044-A Navy base  Transverse passenger seat headrests
(Cloth) Reference C3.06 Locations:	"Concept Fabric Inc." 215 Basil Trevira Strand or approved replacement  Seat back boxing

<b>WHEELS and HUBS</b> Reference: C6.09 Locations:	"Accuride" Sparkle Silver Wheels
Reference: C5.05 Locations:	"DuPont" Imron 5000 or "PPG Industries" Delta 3500 gloss black Exterior wheel hubs

<b>WHEEL HOUSINGS</b> (General) Reference: C2.08 Locations:	"RCA Transit-Flor" smooth, color black  Second, third axle wheel housings
--	---

<b>WINDOW GLAZING</b> Reference: C3.11 Locations:	Blue-green tinted to provide 73% visible light transmittance. Windshield, driver's side window, front door
Reference: C3.11 Locations:	Gray tinted to provide 44% visible light transmittance. Sides, rear and rear door
Reference: C3.11 Location:	Clear Bin portion of side windows in front of side signs

<b>WINDOW SASH</b> (General) Reference: C3.11 Locations:	Black anodized aluminum.  All side, rear and driver's windows
---	---

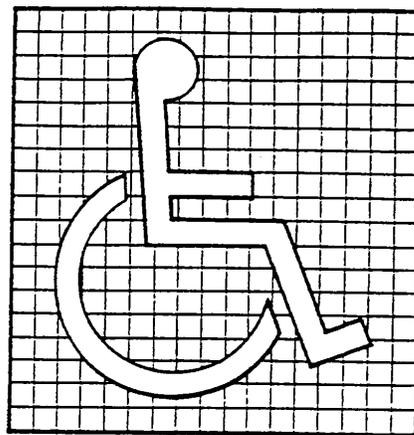
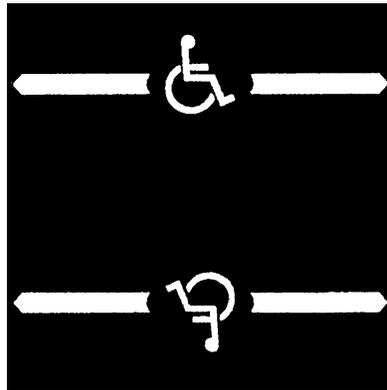
**ATTACHMENT 11:  
Colors of Materials and Finishes**

Wheelchair symbol and arrows in the tiedown areas.

Symbol is 6 inches high.

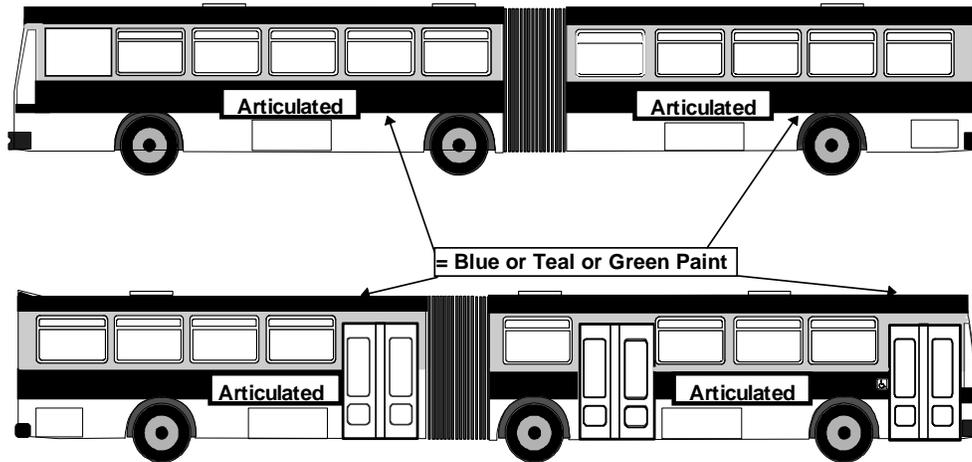
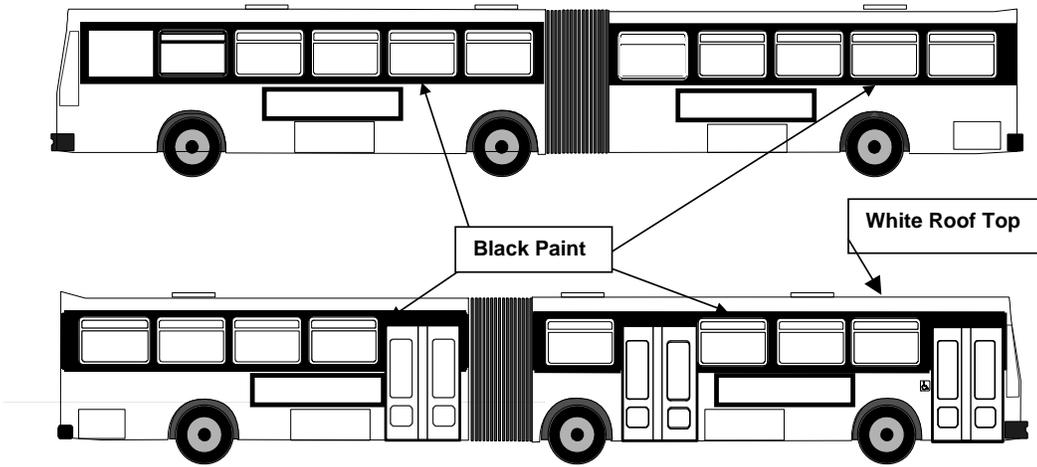
Each arrow is 1.5 in. x 10 in.

(See symbol proportions below)



(a)  
Proportions

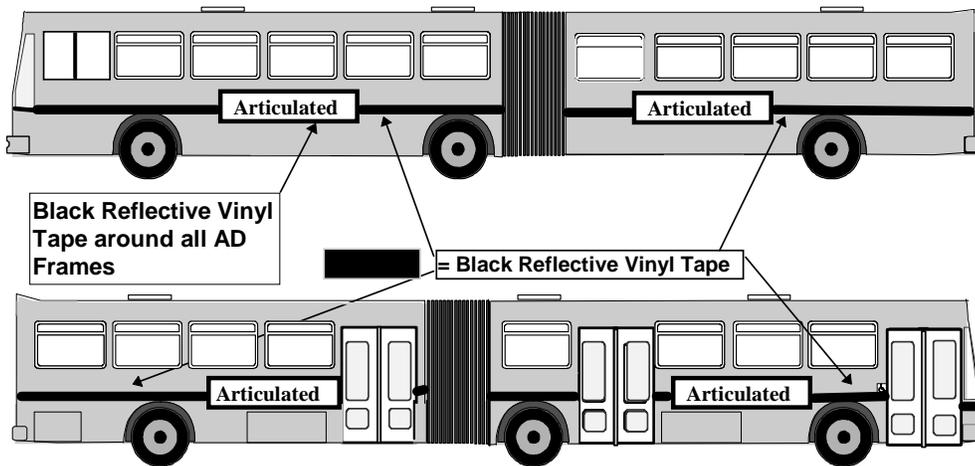
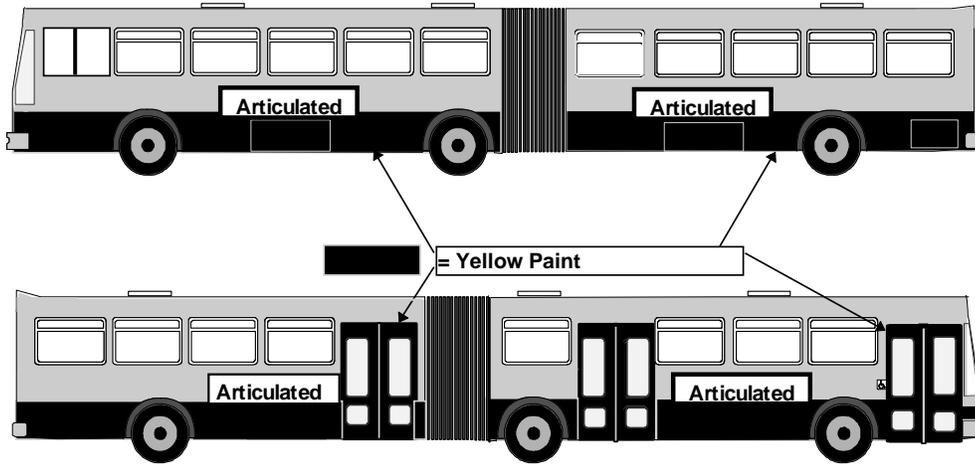
**ATTACHMENT 12:  
EXTERIOR PAINT AND TAPE SCHEME**



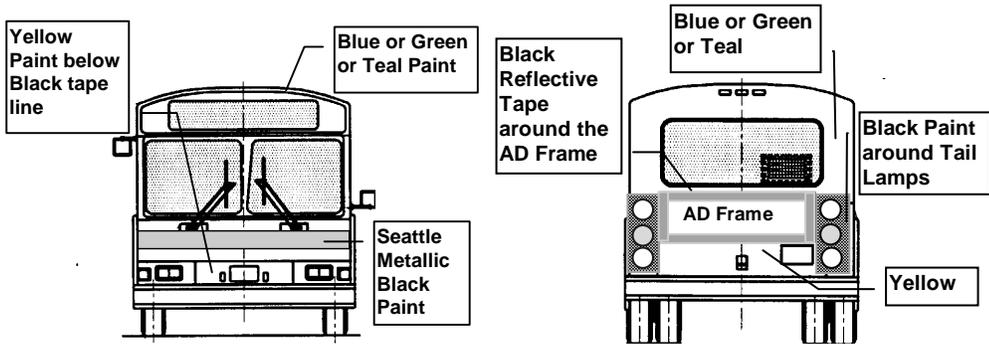
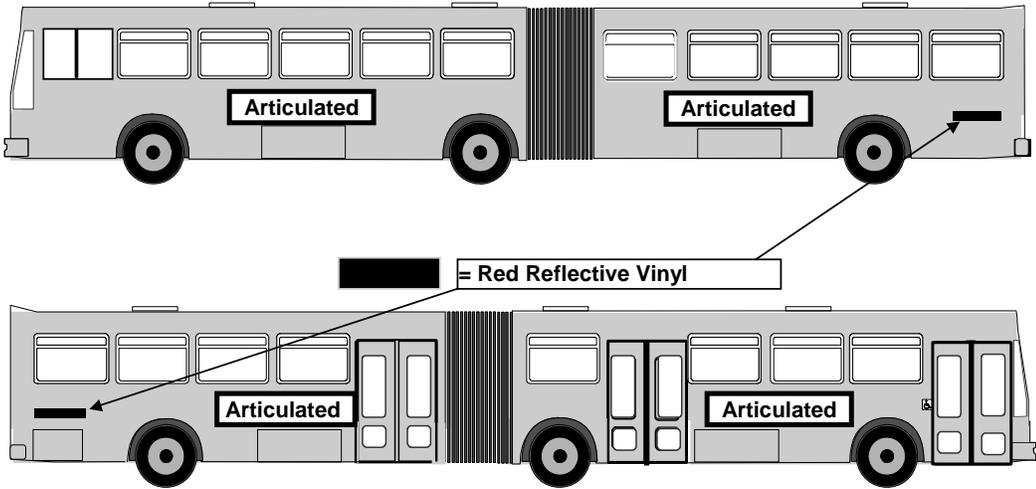
- PAINT:**  
Teal - DUHS47984  
Green - DUHS47983  
Blue - DUHS19712  
Yellow - DUHS83811  
Black - DUHS9000 + Flattener DX595  
Seattle Metallic Black -DCC 35509 (Front Cap Stripe)  
White - DHS90407F

- REFLECTIVE VINYL:**  
Black Reflective Tape - 3M Scotchlite #680CR-85  
Red Reflective Tape - 3M Scotchlite #580-72

ATTACHMENT 12  
PAGE 2 OF 4

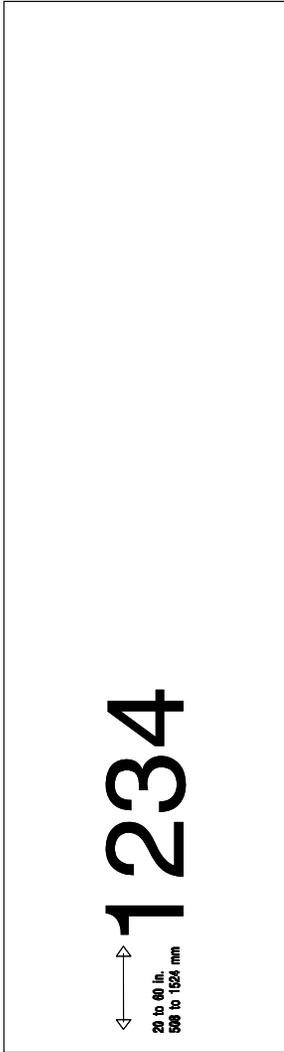


ATTACHMENT 12  
PAGE 3 OF 4

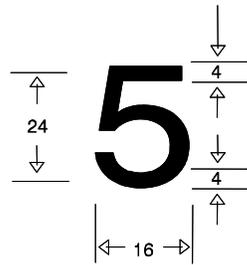
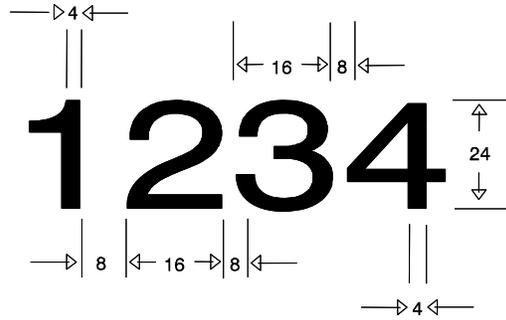




**Back**



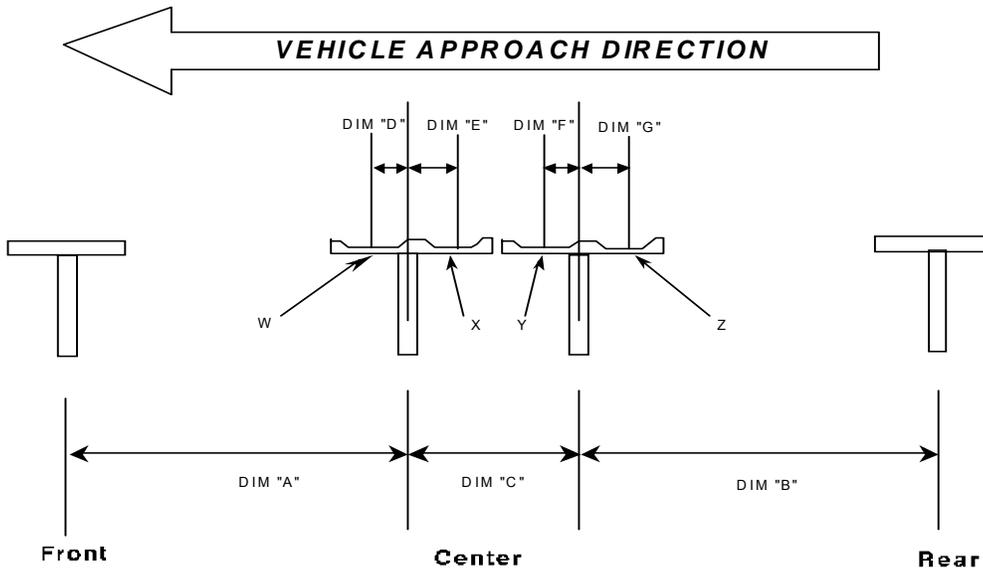
**Front**



All number dimensions are given in inches

**ROOF NUMBERING LAYOUT**

**ATTACHMENT 13:  
PLATFORM HOIST DIMENSIONS AND WEIGHT RATINGS**

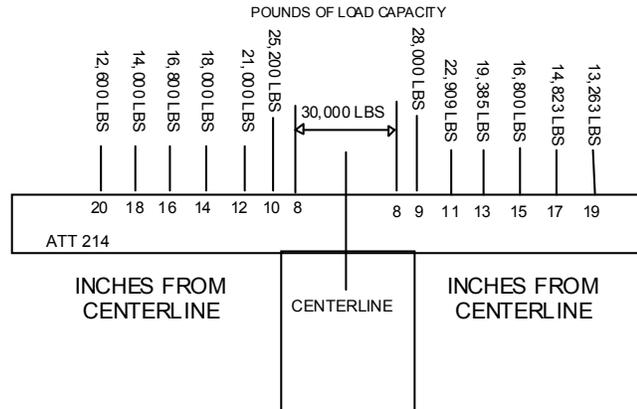


The County has both three and four post platform lifts. All posts are fixed. If the "C" dimension shown is zero then the lift has only three posts. The center platforms have two wheel dishes. The front and rear platforms have varying capacity, as shown below, depending on the location of the load. The County has 23 platform hoists.

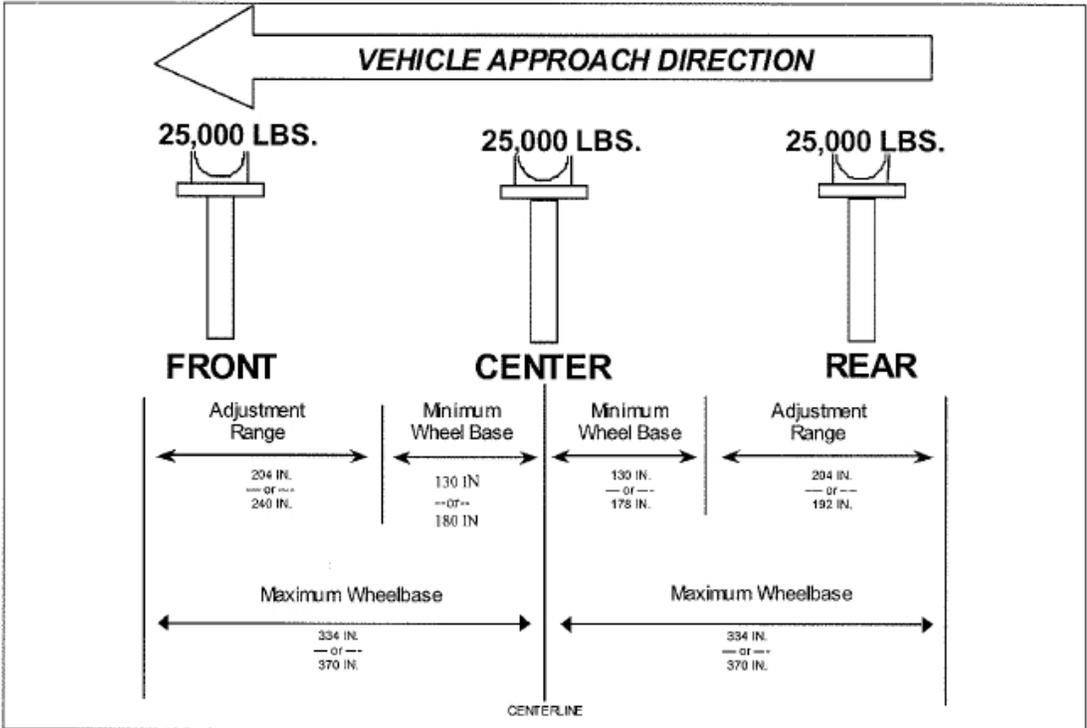
**Dimensions and weight ratings:**

Quantity	Dimension (inches)							Weight Ratings (pounds)			
	A	B	C	D	E	F	G	W	X	Y	Z
7	223"	293"	0	10.5"	12"	-	-	25,000	21,000	-	-
5	175"	293"	40"	10.5"	12"	10.5"	12"	25,000	21,000	25,000	21,000
5	223"	175"	118"	10.5"	12"	10.5"	12"	25,000	21,000	25,000	21,000
4	235"	280"	0	10.5"	12"	-	-	25,000	21,000	-	-
2	222"	293"	0	12"	10.5"	-	-	21,000	25,000	-	-

**FRONT, CENTER AND REAR  
PLATFORM WEIGHT RATINGS**







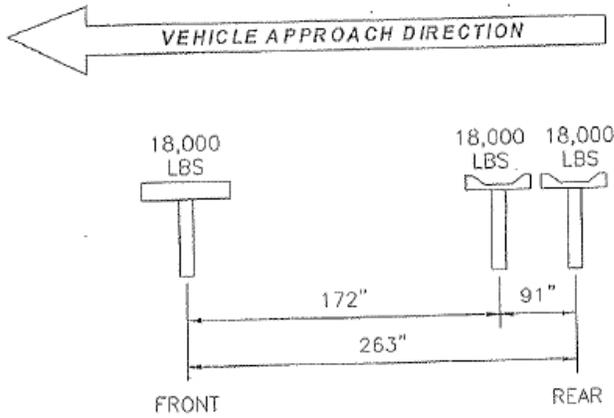
The County has two different styles of three post axle lifts. The front and rear posts of each style of axle hoist are adjustable as noted on this diagram. The center post is fixed. The County has 24 axle hoists (13 of the first style and 11 of the other). The weight shown for each post is its maximum load capacity.

<u>Weight Rating</u>	<u>Runway Length</u>
75,000 LBS	48 FEET
50,000 LBS	32 FEET

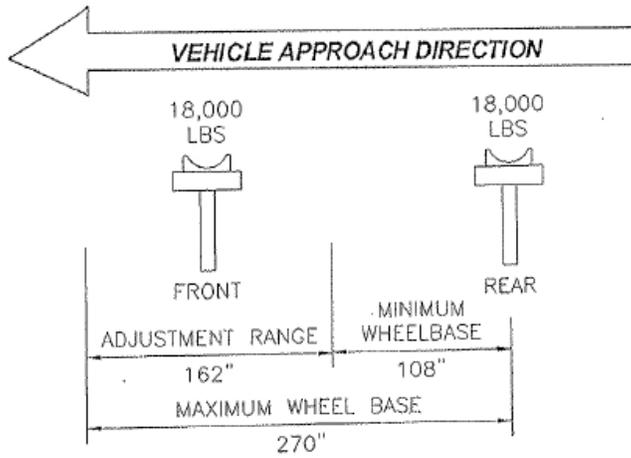


SIDE VIEW WITH LIFT AT  
MAX POSITION

**ATTACHMENT 13:  
PLATFORM HOIST DIMENSIONS AND WEIGHT RATINGS**

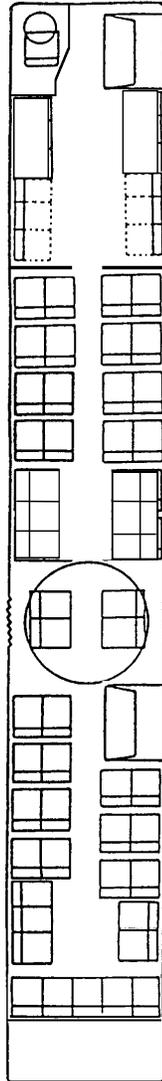


Metro has two post platform lifts. All posts are fixed. Both rear platforms have a single wheel dish. One rear post and the front post are used for 40 foot coaches. The other rear post and the front post are used for 30 foot coaches. The front platforms have varying load capacity.

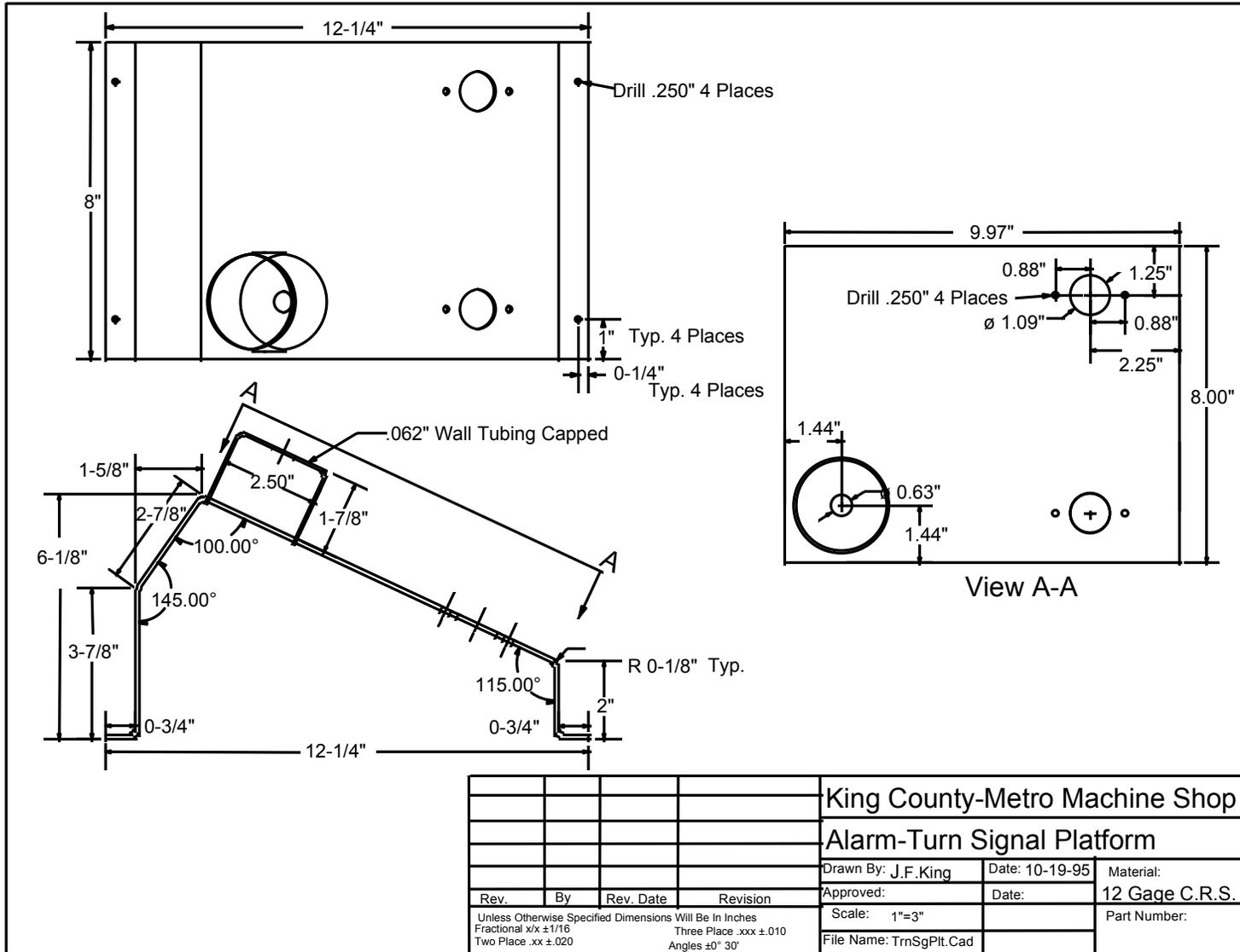


Metro has two post axle lifts. The front posts of each axle hoist are adjustable as noted on this diagram. The rear post is fixed. The weight shown for each post is its maximum load capacity.

**ATTACHMENT 14 : EXAMPLE OF LOW FLOOR SEATING LAYOUT**

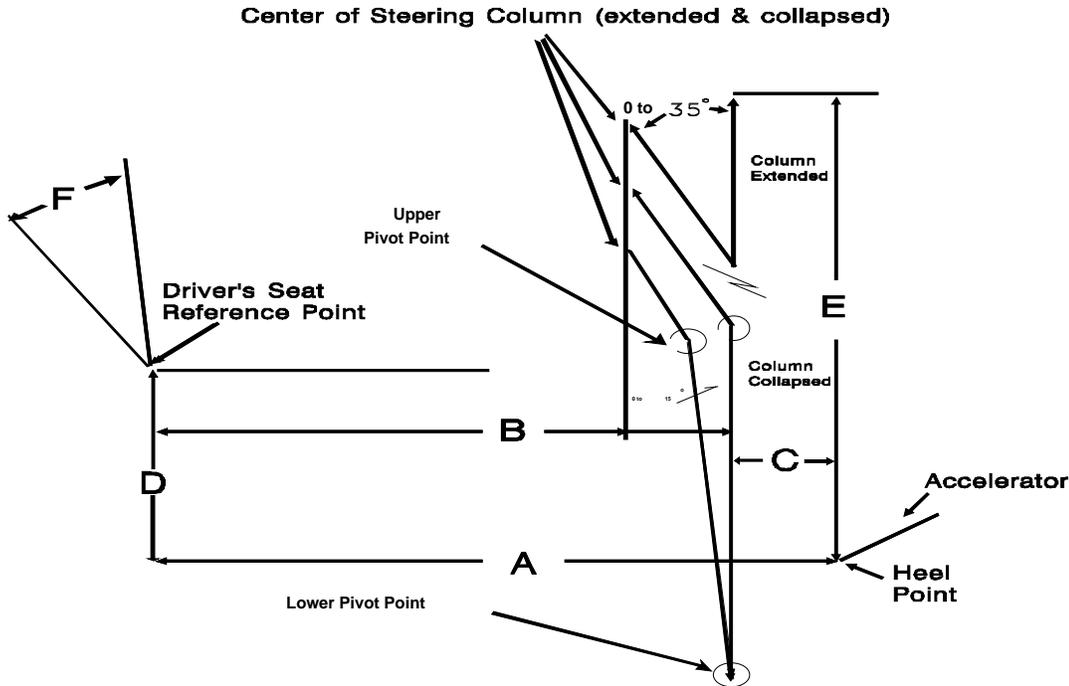


ATTACHMENT 15: TURN SIGNAL SWITCH MOUNTING BRACKET



				King County-Metro Machine Shop		
				Alarm-Turn Signal Platform		
				Drawn By: J.F.King	Date: 10-19-95	Material:
				Approved:	Date:	12 Gage C.R.S.
				Scale: 1"=3"		Part Number:
				File Name: TrnSgPlt.Cad		
Rev.	By	Rev. Date	Revision			
Unless Otherwise Specified Dimensions Will Be In Inches						
Fractional x/x ±1/16				Three Place .xxx ±.010		
Two Place .xx ±.020				Angles ±0° 30'		

**ATTACHMENT 16:  
DRIVER'S STATION DIMENSIONS**



**DRIVER'S STATION RANGE OF DIMENSIONS**

**Dimension A 24.0 - 33.5 in. (610 - 851 mm)**

Horizontal seat travel measured from the seat forward side of the seat back to the heel rest point of the accelerator pedal.

**Dimension B 23.5 - 33.0 in. (597 - 838 mm)**

Steering column in full upright vertical position with telescope feature collapsed. Measurement taken from seat back to steering wheel center point.

**15.5 - 25.0 in. (394 - 635 mm)**

Steering column fully tilted back (35°) with telescope feature fully extended. Measurement taken from seat back to steering wheel center point.

**16.5 - 26.0 in. (419 - 660 mm)**

Steering column fully tilted back (35°) with telescope feature fully collapsed. Measurement taken from seat back to steering wheel center point.

**Dimension C 1.5 - 9.5 in. (38 - 241 mm)**

Steering column fully upright vertical position to fully tilted back (35°) with telescope feature fully extended. Measurement taken from heel rest point on the accelerator to steering wheel center point.

**1.5 - 8.5 in. (38 - 216 mm)**

Steering column fully upright vertical position to fully tilted back (35°) with telescope feature fully collapsed. Measurement taken from heel rest point on the accelerator to steering wheel center point.

**Dimension D 14.5 - 18.5 in. (368 - 470 mm)**

Seat pedestal vertical up and down travel measured from the driver's platform floor to the junction of the inside driver's seat cushion back and bottom.

**Dimension E 30.75 - 33.25 in. (781 - 845 mm)**

Steering wheel telescoping travel measured from heel rest point on accelerator to the steering wheel center point.

**Dimension F 11-22 degrees**

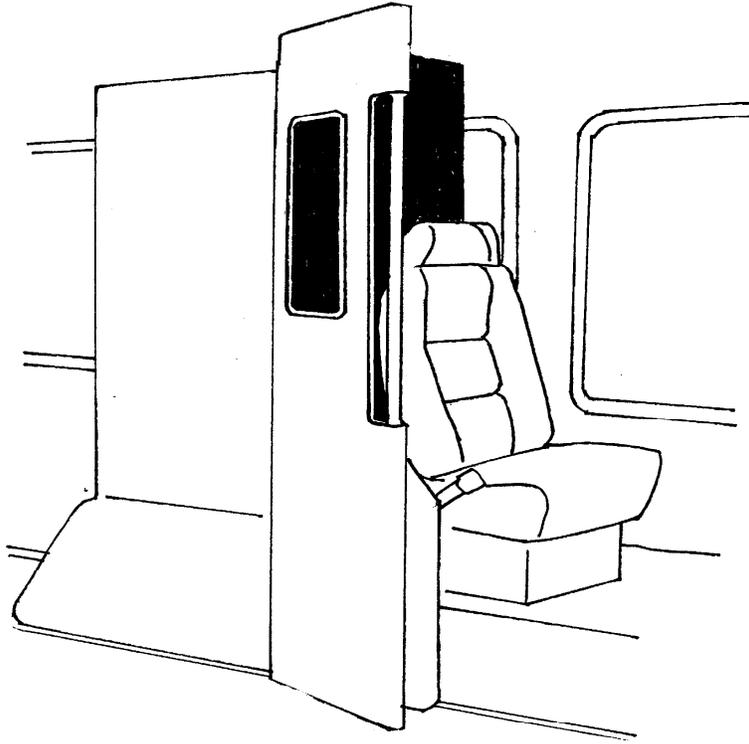
Driver's seat back minimum and maximum angle.

**Steering column has two pivot points.**

- The lower pivot point is to have a travel range of 0 - 15 degrees.
- The upper pivot point is to have a travel range of 0 - 35 degrees.

*Dimensions are based upon the steering column in the forward position at the lower pivot point.*

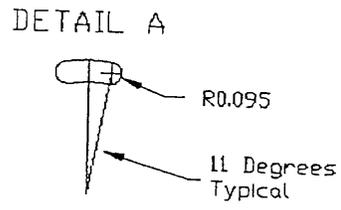
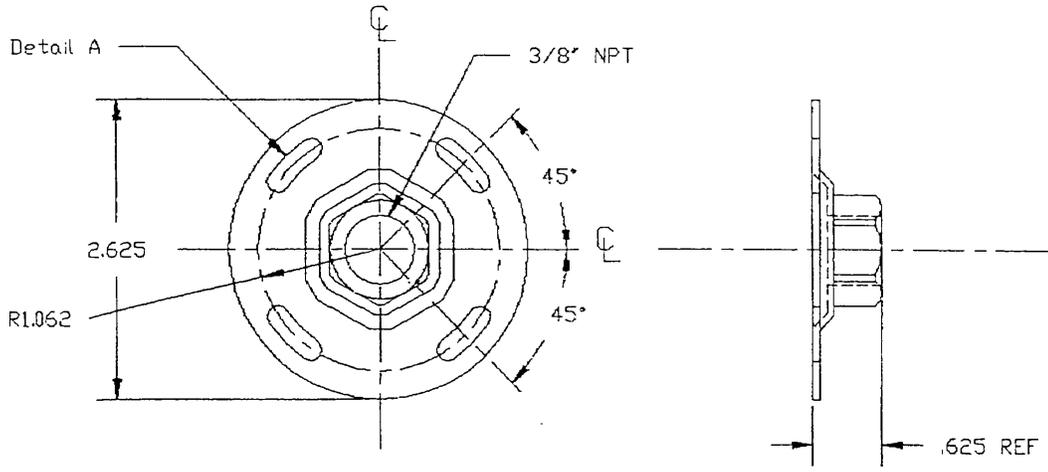
**ATTACHMENT 17:**  
**DRIVER'S BARRIER CONFIGURATION**



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ATTACHMENT 18

RADIO HANDSET MOUNTING BRACKET



**ATTACHMENT 19**

**VEHICLE FUEL, FLUIDS AND LUBRICANTS USED BY THE COUNTY**

**Fuel**

B20 Ultra Low Sulfur Diesel

**Engine Oil**

76 Firebird 15W / 40 Multi-Grade

**Transmission Fluid**

Petro-Canada Heavy Duty Synthetic ATF

**Hybrid Drive Fluid**

Allison Transynd

**Differential Oil**

Chevron Delo ESI 85W90 or 85W140

**Engine Coolant**

50/50 Mix ethylene glycol-based antifreeze plus water.

**Engine Coolant Additive**

Nalcool

**Power Steering Oil**

Petro-Canada Heavy Duty Synthetic ATF

**Chassis & Wheel Bearing Grease**

76 Multiplex Red Grease No. 2

**Windshield Washer Fluid**

20 - 10

**Turntable Fluid**

Shell Donax TA or Unocal Klondike 15

**ATTACHMENT 20**

**APPENDIX B - WIRE AMPACITY CHARTS**

Wire Gauge 0000 - 0

DISTANCE IN FEET/METERS								
OHMS AMP LOAD	0.04901		0.06182		0.07793		0.09825	
	WIRE GAUGE							
	0000		000		00		0	
10	1763	537	1398	426	1109	338	880	268
20	882	269	699	213	554	169	440	134
30	588	179	466	142	370	113	293	89
40	441	134	349	107	277	84	220	67
50	353	107	280	85	222	68	176	54
60	294	90	233	71	185	56	147	45
70	252	77	200	61	158	48	126	38
80	220	67	175	53	139	42	110	34
90	196	60	155	47	123	38	98	30
100	176	54	140	43	111	34	88	27
110	160	49	127	39	101	31	80	24
120	147	45	116	36	92	28	73	22
130	136	41	108	33	85	26	68	21
140	126	38	100	30	79	24	63	19
150	118	36	93	28	74	23	59	18
160	110	34	87	27	69	21	55	17
170	104	32	82	25	65	20	52	16
180	98	30	78	24	62	19	49	15
190	93	28	74	22	58	18	46	14
200	88	27	70	21	55	17	44	13
210	84	26	67	20	53	16	42	13
220	80	24	64	19	50	15	40	12
230	77	23	61	19	48	15	38	12
240	73	22	58	18	46	14	37	11
250	71	21	56	17	44	14	35	11
260	68	21	54	16	43	13	34	10
270	65	20	52	16	41	13	33	10
280	63	19	50	15	40	12	31	10
290	61	19	48	15	38	12	30	9
300	59	18	47	14	37	11	29	9
310	57	17	45	14	36	11	28	9



RECOMMENDATIONS FOR TESTING THE FLAMMABILITY AND SMOKE EMISSION CHARACTERISTICS OF TRANSIT BUS AND VAN MATERIALS

TABLE 1: RECOMMENDATIONS FOR TESTING THE FLAMMABILITY AND SMOKE EMISSION CHARACTERISTICS OF TRANSIT BUS AND VAN MATERIALS

Category	Function of Material	Test Procedure	Performance Criteria
Seating	Cushion <sup>1,2,3,5,9*</sup>	ASTM D-3675	$I_t \leq 25$
		ASTM E-662	$D_s(1.5) \leq 100; D_s(4.0) \leq 200$
	Frame <sup>1,5,8</sup>	ASTM E-162	$I_t \leq 35$
		ASTM E-662	$D_s(1.5) \leq 100; D_s(4.0) \leq 200$
	Shroud <sup>1,5</sup>	ASTM E-162	$I_t \leq 35$
		ASTM E-662	$D_s(1.5) \leq 100; D_s(4.0) \leq 200$
Upholstery <sup>1,3,4,5</sup>	FAR 25.853 (Vertical)	Flame time $\leq 10$ seconds; burn length $\leq 6$ inches	
	ASTM E-662	$D_s(4.0) \leq 250$ coated; $D_s(4.0) \leq 100$ uncoated	
Panels	Wall <sup>1,5</sup>	ASTM E-162	$I_t \leq 35$
		ASTM E-662	$D_s(1.5) \leq 100; D_s(4.0) \leq 200$
	Ceiling <sup>1,5</sup>	ASTM E-162	$I_t \leq 35$
		ASTM E-662	$D_s(1.5) \leq 100; D_s(4.0) \leq 200$
	Partition <sup>1,5</sup>	ASTM E-162	$I_t \leq 35$
		ASTM E-662	$D_s(1.5) \leq 100; D_s(4.0) \leq 200$
	Windscreen <sup>1,5</sup>	ASTM E-162	$I_t \leq 35$
		ASTM E-662	$D_s(1.5) \leq 100; D_s(4.0) \leq 200$
	HVAC Ducting <sup>1,5</sup>	ASTM E-162	$I_t \leq 35$
		ASTM E-662	$D_s(4.0) \leq 100$
Light Diffuser <sup>5</sup>	ASTM E-162	$I_t \leq 100$	
	ASTM E-662	$D_s(1.5) \leq 100; D_s(4.0) \leq 200$	
Flooring	Wheel Well and Structural <sup>6</sup>	ASTM E-119	Pass
	Carpeting <sup>7</sup>	ASTM E-648	C.R.F. $\geq 0.5$ w/cm <sup>2</sup>
Insulation	Thermal <sup>1,3,5</sup>	ASTM E-162	$I_t \leq 25$
		ASTM E-662	$D_s(4.0) \leq 100$
	Acoustic <sup>1,3,5</sup>	ASTM E-162	$I_t \leq 25$
		ASTM E-662	$D_s(4.0) \leq 100$
Miscellaneous	Firewall <sup>6</sup>	ASTM E-119	Pass
	Exterior Shell <sup>1,5</sup>	ASTM E-162	$I_t \leq 35$
		ASTM E-662	$D_s(1.5) \leq 100; D_s(4.0) \leq 200$

\* Refers to Notes on Table 1

## RECOMMENDATIONS FOR TESTING THE FLAMMABILITY AND SMOKE EMISSION CHARACTERISTICS OF TRANSIT BUS AND VAN MATERIALS

1. Materials tested for surface flammability should not exhibit any flaming running, or flaming dripping.

2. The surface flammability and smoke emission characteristics of seat cushion materials should be demonstrated to be permanent after testing according to ASTM D-3574 Dynamic Fatigue Tests  $I_s$  (Procedure B).

3. The surface flammability and smoke emission characteristics of a material should be demonstrated to be permanent by washing, if appropriate, according to FED-STD-191A Textile Test Method 5830.

4. The surface flammability and smoke emission characteristics of a material should be demonstrated to be permanent by dry cleaning, if appropriate, according to ASTM D-2724. Materials that cannot be washed or dry-cleaned should be so labeled, and should meet the applicable performance criteria after being cleaned as recommended by the manufacturer.

5. ASTM E-662 maximum test limits for smoke emission (specific optical density) should be measured in either the flaming or non-flaming mode, depending on which mode generates more smoke.

6. Flooring and Fire Wall assemblies should meet the performance criteria during a nominal test period determined by the transit property. The nominal test period should be twice the maximum expected period of time, under normal circumstances, for a vehicle to come to a complete, safe stop from maximum speed, plus the time

necessary to evacuate all passengers from a vehicle to a safe area. The nominal test period should not be less than 15 minutes. Only one specimen need be tested. A proportional reduction may be made in dimensions of the specimen provided that it represents a true test of its ability to perform as a barrier against vehicle fires. Penetrations (ducts, piping, etc.) should be designed against acting as conduits for fire and smoke.

7. Carpeting should be tested in according with ASTM E-648 with its padding, if the padding is used in actual installation.

8. Arm rests, if foamed plastic, are tested as cushions.

9. Testing is performed without upholstery.

### Definition of Terms

1. Flame spread index ( $I_s$ ) as defined in ASTM E-162 is a factor derived from the rate of progress of the flame front (F) and the rate of heat liberation by the material under test (Q), such that  $I_s = F \times Q$ .

2. Specific optical density ( $D_s$ ) is the optical density measured over unit path length within a chamber of unit volume produced from a specimen of unit surface area, that is irradiated by a heat flux of 2.5 watts/cm<sup>2</sup> for a specified period of time.

3. Surface flammability denotes the rate at which flames will travel along surfaces.

4. Flaming running denotes continuous flaming material leaving the site of the burning material at its installed location.

5. Flaming dripping denotes periodic dripping of flaming material from the site of burning material at its installed location.

### Referenced Fire Standards

The source of test procedures listed in Table 1 is as follows:

(1) Leaching Resistance of Cloth, FED-STD-191A-Textile Test Method 5830.

Availability from: General Services Administration Specifications Division,

Building 197, Washington, Navy Yard, Washington, DC 20407.

(2) Federal Aviation Administration Vertical Burn Test, FAR-25-853.

Available from: Superintendent of Documents, US Government Printing Office, Washington, DC 20402.

(3) American Society for Testing Materials (ASTM)

(a) Surface Flammability of Materials Using a Radiant Heat Energy Source, ASTM E-162;

(b) Surface Flammability for Flexible Cellular Materials Using a Radiant Heat Energy Source, ASTM D-3675;

(c) Fire Tests of Building Construction and Materials, ASTM E-119;

(d) Specific Optical Density of Smoke Generated by Solid Materials, ASTM E-662;

(e) Bonded and Laminated Apparel Fabrics, ASTM D-2724;

(f) Flexible Cellular Materials—Slab, Bonded, and Molded Urethane Foams, ASTM D-3574.

Available from: American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

In all instances, the most recent issue of the document or the revision in effect at the time of request should be employed in the evaluation of the material specified herein.

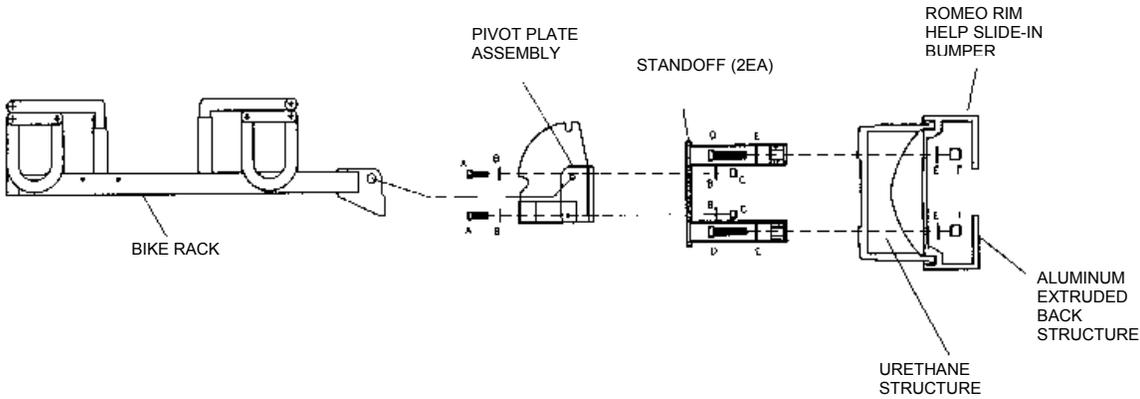
Issued: October 14, 1993.

Grace Crunican,  
Deputy Administrator.

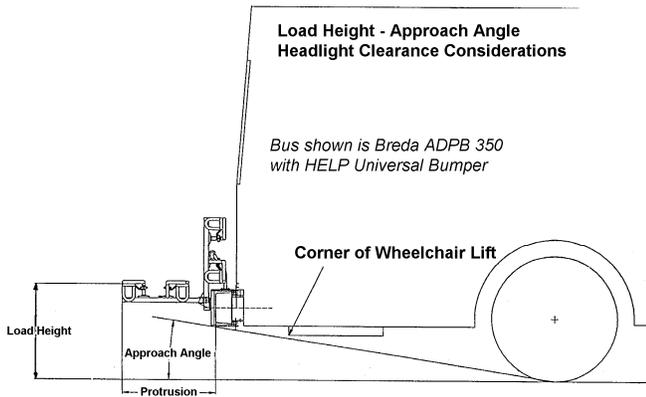
[FR Doc. 93-25709 Filed 10-19-93; 8:45 am]  
BILLING CODE 4910-57-P

**ATTACHMENT 22:**  
**BIKE RACK ASSEMBLY / INSTALLATION - HEADLIGHT CLEARANCE**

**Figure 1**  
**Bike Rack Assembly / Installation**  
**HELP Universal Bumper**



**Figure 2**  
**Bike Rack Load Height - Approach Angle - Headlight Clearance**  
**Street side View**



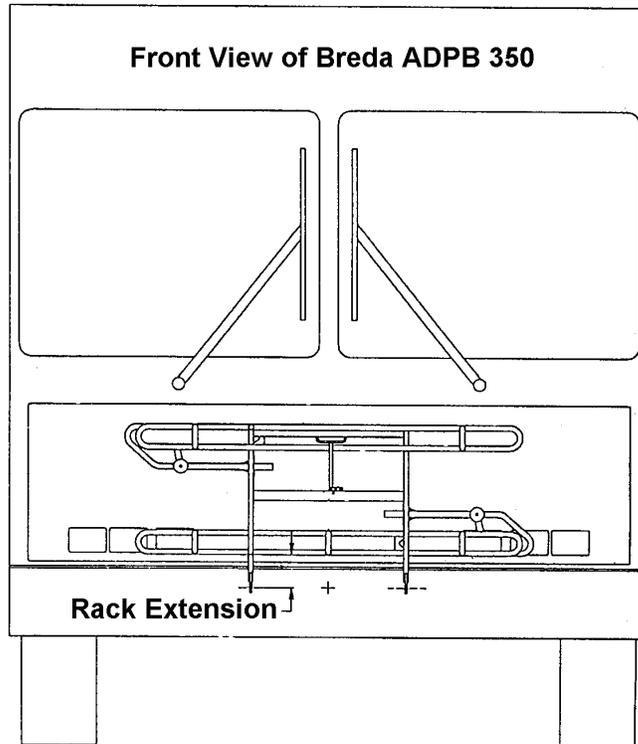
**Approach angle must be met with rack deployed.**

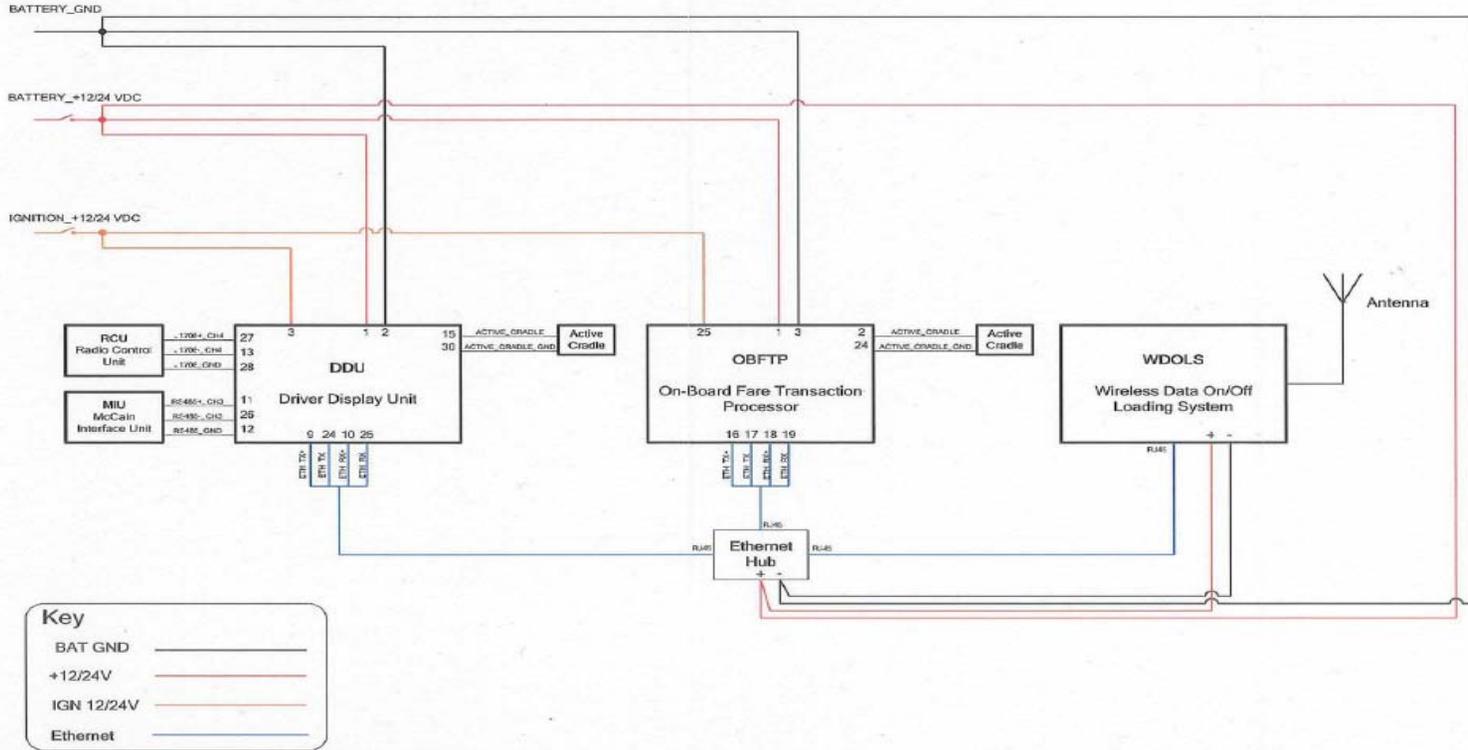
**ATTACHMENT 22:  
Bike Rack Assembly / Installation - Headlight Clearance**

Page 2 of 2

**Figure 3  
Bike Rack Load Height - Approach Angle - Headlight Clearance  
Front View**

**Load Height - Approach  
Angle - Headlight  
Clearance Issues**





Rev	Date	Description	Prep By	QA Mgr	Proj Mgr
1.0	6/14/2005	Initial Draft for PDR Submission	C.J.	S.W.	P.B.



Wiring Diagram, On-Board Equipment, Seattle

Draw No. 50- 0250 Page 1 of 1

Figure 23: Circuit Diagram

## ATTACHMENT 24 Amtech Tag Installation Procedure

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The Amtech AT5704, Transit Signal Priority Tag is mounted on the curb-side of the front of the coach. It should be mounted as high as possible with:

1. No interference with the destination sign
2. No protrusion from the side or roof of the coach that would cause catching on bus wash material or equipment

Tag mounting location is subject to approval by the County.

### Materials required

Amtech AT5704 tag

Aluminum reflector plate, 11 gauge, 3 3/8" x 9 3/4", painted flat or satin black

1/2" double stick foam tape

SekaFlex sealant or approved equal

DB9 connector, AMP p/n 205204-1, or approved equal

HDP-20 connector pins, AMP p/n 66507-9, or approved equal (4 per connector)

DB9 strain relief backshell, AMP p/n 749914-2, or approved equal

The tag is centered on the aluminum reflector plate (not required if the skin of the front cap of the coach is metallic), and attached to the reflector with two 1/2" x 8" pieces of double stick foam tape. The tag/reflector plate assembly is then mounted to the front of the coach, wire facing down, with 3 pieces of 1/2" x 9" double stick foam tape. Caulk along the top and sides of both the tag/reflector interface and the reflector/coach interface with SekaFlex, or approved equal. Do not caulk along the bottom edges.



The photograph above shows an ideal installation on a Gillig Phantom by King County personnel.

## ATTACHMENT 24 Amtech Tag Installation Procedure

Page 2 of 2



The photograph above shows an acceptable installation on a New Flyer DE60LF by King County personnel. The tag/reflector assembly should butt up against the bottom of the clearance light for optimal performance.

Feed the entire cable length through a ¼" diameter hole immediately below the center of the tag assembly, into the destination sign compartment. Seal the wire entry hole with SekaFlex or approved equal.

Install a DB9 connector, strain relief backshell, connector locking screws and screw retainers on the cable end, with pin-out as follows. Do not shorten cable.

- Pin 2 – White wire, RCV
- Pin 3 – Green wire, XMT
- Pin 4 – Black wire, RTN
- Pin 6 – Red wire, +VDC

Coil the excess cable inside the destination sign compartment, between the sign and the compartment access door.

## ATTACHMENT 25

### KING COUNTY EMPLOYEE CODE OF ETHICS

#### Chapter 3.04

#### EMPLOYEE CODE OF ETHICS

##### Sections:

- 3.04.010 Code of ethics.
- 3.04.015 Policy.
- 3.04.017 Definitions.
- 3.04.020 Just and equitable treatment.
- 3.04.030 Conflict of interest.
- 3.04.035 Conflict of interest - former employees and members of county boards and commissions.
- 3.04.037 Duty to notify supervisor.
- 3.04.040 Board of equalization appeals.
- 3.04.050 Statement of financial and other interests.
- 3.04.055 Complaints, Investigations.
- 3.04.057 Appeal.
- 3.04.060 Penalties.
- 3.04.070 Constitutionality.
- 3.04.080 Board of ethics - Membership and terms.
- 3.04.090 Board of ethics - Purpose.
- 3.04.100 Board of ethics - Authority.
- 3.04.110 Board of ethics - Income disclosure.
- 3.04.120 Disclosure of interests by consultants.
- 3.04.130 Authorization to Implement Procedures.
- 3.04.140 Forwarding to District and Superior Courts.
- 3.04.150 Severability.
- 3.04.160 Effective Date.

**3.04.010 Code of ethics.** There is established a code of ethics for all county officials and employees to provide guidance for public employees in the event of conflicts and to prevent conflicts of interest. (Ord. 1308 § 2, 1972).

##### **3.04.015 Policy.**

- A. It is the policy of King County that the private conduct and financial dealings of public officials and employees and of candidates for public office shall present no actual or apparent conflict of interest between the public trust and private interest.
- B. Public confidence in government is essential and must be sustained by establishing and enforcing rules to assure the impartiality and honesty of officials and employees in all public transactions and decisions. Each affected agency of county government should inform its employees of the provisions of this chapter and strive to effectively enforce its requirements by seeking appropriate assistance from the office of citizen complaints, the board of ethics and the prosecuting attorney when considering and acting upon allegations of misconduct.

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[For regulations prohibiting discrimination in employment by contractors, subcontractors or vendors, see K.C.C. chapter 12.16.]

(King County 6-2003)

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##### EMPLOYEE CODE OF ETHICS 3.04.015 - 3.04.017

- C. Former county employees should engage in transactions with the county consistent with the highest level of ethical conduct. It is essential that former county employees and the county maintain public confidence and ensure fair dealings with all persons by the county. A former county employee should not act, or appear to act, in such a manner as to take improper advantage of the former county employee's previous office or position with the county. A former county employee should not request or otherwise seek special consideration, treatment or advantage beyond that which is available to every other person. A former county employee should avoid circumstances in which it appears, or to a reasonable person might appear, that the former county employee is requesting or otherwise seeking special consideration, treatment or advantage. (Ord. 14689 § 1, 2003; Ord. 9704 § 1, 1990).

**3.04.017 Definitions.** All words shall have their ordinary and usual meanings except those defined in this section which shall have, in addition, the following meanings. In the event of conflict, the specific definitions set forth in this section shall presumptively, but not conclusively, prevail.

- A. "Accomplice" means a person who with knowledge that an action will promote or facilitate the commission of a crime or violation of an ordinance:

1. Solicits, commands, encourages or requests another person to commit it; or
  2. Aids or agrees to aid such other person in planning or committing it.
- B. "Compensation" means anything of economic value, however designated, which is paid, granted or transferred, or is to be paid, granted or transferred for, or in consideration of, personal services to any person.
- C. "County action" means any action on the part of the county, including, but not limited to:
1. Any decision, determination, finding, ruling or order; and
  2. Any grant, payment, award, license, contract, transaction, sanction or approval, or the denial thereof or the failure to act with respect thereto. "County action" shall not include actions of the county's judicial branch but shall include employees of the department of judicial administration.
- D. "County employee" or "employee" means any individual who is appointed as an employee by the appointing authority of a county agency, office, department, council, board, commission or other separate unit or division of county government, however designated, but does not include employees of the county's judicial branch. "County employee" also includes county elected officials and members of county boards, commissions, committees or other multimember bodies, but does not include officials or employees of the county's judicial branch but does include employees of the department of judicial administration.
- E. "Department" means:
1. In the executive branch, an executive department or administrative office that reports to the executive or the county administrative officer, as applicable;
  2. The department of assessments;
  3. The office of the prosecuting attorney;
  4. In the legislative branch, the council together with any subordinate legislative branch agency;
  5. The department of judicial administration; and
  6. The department of public safety.
- F. "Doing business with the county" or "transactions with the county" means to participate in any proceeding, application, submission, request for ruling or other determination, contract, claim, case or other such particular matter which the county employee or former county employee in question believes, or has reason to believe:
1. Is, or will be, the subject of county action;
  2. Is one to which the county is or will be a party; or
  3. Is one in which the county has a direct and substantial proprietary interest.

(King County 9-2003)

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#### 3.04.017 - 3.04.020 PERSONNEL

G. "Gift" means anything of economic value, but shall not include campaign contributions regulated by the provisions of chapter 42.17 RCW, the charter and ordinances implementing them, informational materials exclusively for official or office use, memorials, trophies and plaques of no commercial value, gifts of twenty dollars or less for bona fide, nonrecurring, ceremonial occasions or any gifts which are not used and which within thirty days after receipt are returned to the donor, or donated to a charitable organization without seeking a tax deduction.

H. "Immediate family" means a county employee's spouse, domestic partner, employee's child or the child of an employee's domestic partner, and other dependent relatives if living in his or her household.

I. "Ombudsman" means the director of the office of citizen complaints established pursuant to Section 260 of the King County Charter and K.C.C. chapter 2.52, or his or her designee.

J. "Participate" means, in connection with a transaction involving the county, to be involved in a county action personally and substantially as a county employee either directly, or through others through approval, disapproval, decision, recommendation, the rendering of advice, investigation or otherwise. However, for the purposes of K.C.C. 3.04.035, "participate" does not include the provision of legal advice or other activities involving the practice of law and does not include, as an elected official, preparation, consideration or enactment of legislation or the performance of legislative duties.

K. "Person" means any individual, partnership, association, corporation, firm, institution or other entity, whether or not operated for profit. The term does not include governmental units of the state of Washington or the United States unless so specified.

L. "Respondent" means the person against whom a complaint is filed or an investigation is conducted.

M. "Retaliatory action" means any action by a supervisor or other employee that is intended to embarrass or to harass any person as a result of the person having filed a written complaint with the office of citizen complaints or having raised privately or publicly any concern or question regarding an actual or apparent violation of this chapter.

N. "Thing of value" means anything of tangible worth which is not compensation or a gift. (Ord. 14689 § 3, 2003; Ord. 14199 § 25, 2001; Ord. 12014 § 2, 1995).

#### **3.04.020 Just and equitable treatment.**

A. Use of Public Property. No county employee shall request or permit the use of county-owned

vehicles, equipment, materials or property or the expenditure of county funds for personal convenience or profit. Use or expenditure is to be restricted to such services as are available to the public generally or for such employee in the conduct of official business.

B. Obligations to Citizens. No county employee shall grant any special consideration, treatment or advantage beyond that which is available to every other citizen.

C. Except as authorized by law and in the course of his or her official duties, no county employee shall use the power or authority of his or her office or position with the county in a manner intended to induce or coerce any other person to provide such county employee or any other person with any compensation, gift, or other thing of value directly or indirectly.

D. No county employee may ask for or receive, directly or indirectly, any compensation, gift, or thing of value, or promise thereof, for performing or for omitting or deferring the performance of any official duty, or action by the county other than the compensation, costs or fees provided by law.

E. Campaign activities. County employees are encouraged to participate in the political process on their own time and outside of the workplace by working on campaigns for the election of any person to any office or for the promotion of or opposition to any ballot proposition, but shall not use or authorize the use of the facilities of King County for such purposes except as authorized by the provisions of RCW 42.17.130.

(Ord. 9704 § 3, 1990; Ord. 1308 § 3, 1972).

(King County 9-2003)

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#### EMPLOYEE CODE OF ETHICS 3.04.030

##### **3.04.030 Conflict of interest.**

A. No county employee shall engage in any act which is in conflict with the performance of official duties. A county employee shall be deemed to have a conflict of interest if the employee directly or indirectly:<sup>(1)</sup>

1. Receives or has any financial interest in any purchase, sale or lease to or by the county of any service or property when such financial interest was received or obtained with the prior knowledge that the county intended to purchase, sell or lease such property or service;<sup>(2)</sup>

2. Is beneficially interested, directly or indirectly, in any contract, sale, lease, option or purchase that may be made by, through, or under the supervision of the employee, in whole or in part, or accepts, directly or indirectly, any compensation, gift or thing of value from any other person beneficially interested therein;<sup>(3)</sup>

3. Accepts or seeks for others, directly or indirectly, any employment, travel expense, service, information, compensation, gift or thing of value on more favorable terms than those granted to other county employees or the public generally, from any person, doing business, or seeking to do business with the county for which the employee has responsibility or with regard to which he or she may participate, provided that this subsection shall not apply to the receipt by elected officials, or by employees who are supervised directly by an elected official, of meals, refreshments or transportation within the boundaries of the county when given in connection with meetings with constituents or meetings which are informational or ceremonial in nature;<sup>(4)</sup>

4. Accepts, directly or indirectly, any gift, favor, loan, retainer, entertainment, travel expense, compensation or other thing of value from any person doing business or seeking to do business with the county when such acceptance may conflict with the performance of the employee's official duties. A conflict shall be deemed to exist where a reasonable and prudent person would believe that the gift, compensation, thing of value, or more favorable terms, was given for the purpose of obtaining special consideration or to influence county action. The financing of the conduct of county election campaigns shall continue to be governed by chapter 42.17 RCW and the provisions of the charter and ordinances;<sup>(5)</sup>

5. Participates in, influences or attempts to influence, directly or indirectly, the selection of, or the conduct of business or a transaction with a person doing or seeking to do business with the county if the employee has a financial interest in or with said person;<sup>(6)</sup>

6. Discusses or accepts an offer of future employment with any person doing or seeking to do business with the county if either:<sup>(7)</sup>

a. the employee knows or has reason to believe that the offer of employment was or is intended, in whole or in part, directly or indirectly, as compensation or reward for the performance or nonperformance of a duty by the employee during the course of county employment or to influence county action pertaining to the business; or<sup>(8)</sup>

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<sup>(1)</sup> Previously codified as the first paragraph of K.C.C. 3.04.030; renumbered by Ordinance 14218 § 1, 2001.

<sup>(2)</sup> Previously codified as K.C.C. 3.04.030A; renumbered by Ordinance 14218 § 1, 2001.

<sup>(3)</sup> Previously codified as K.C.C. 3.04.030B; renumbered by Ordinance 14218 § 1, 2001.

<sup>(4)</sup> Previously codified as K.C.C. 3.04.030C; renumbered by Ordinance 14218 § 1, 2001.

<sup>(5)</sup> Previously codified as K.C.C. 3.04.030D; renumbered by Ordinance 14218 § 1, 2001.

<sup>(6)</sup> Previously codified as K.C.C. 3.04.030E; renumbered by Ordinance 14218 § 1, 2001.

<sup>(7)</sup> Previously codified as K.C.C. 3.04.030F; renumbered by Ordinance 14218 § 1, 2001.

<sup>(8)</sup> Previously codified as K.C.C. 3.04.030F.1; renumbered by Ordinance 14218 § 1, 2001.

(King County 6-2003)

## 3.04.030 PERSONNEL

b. the employee has responsibility for a matter upon which the person is doing or seeking to do business with the county unless the employee has first disclosed in writing to his or her appointing authority that the employee intends to discuss future employment with a specific person and the appointing authority has designated, in a memorandum filed with the board of ethics and a copy of which is maintained by the appointing authority, a method of providing for an alternative decisionmaker with regard to matters involving such person for which the employee otherwise would have responsibility;<sup>(9)</sup>

7. Within one year of entering county employment awards a county contract or participates in a county action benefiting a person that formerly employed him or her, provided, that participation other than contract award may be authorized in a memorandum by the appointing authority following written disclosure by the affected employee and that such authorization shall be filed with the board of ethics and a copy maintained by the appointing authority;<sup>(10)</sup>

8. Is an employee, agent, officer, partner, director or consultant of any person doing or seeking to do business with the county, unless such relationship has been disclosed as provided by this chapter;<sup>(11)</sup>

9.a. Engages in or accepts compensation, employment or renders services for any person or a governmental entity other than the county when such employment or service is incompatible with the proper discharge of official duties or would impair independence of judgment or action in the performance of official duties. In addition, the following employees must obtain the prior written consent of their highest ranking supervisor authorizing either new or continued employment, or the acceptance of any compensation or any thing of value for services performed outside King County government:<sup>(12)</sup>

(1) the county administrative officer, the chief officer of each executive department or administrative office as defined by the provisions of the charter, the manager of each division of such department or office, and all persons who report directly to such individuals;<sup>(13)</sup>

(2) all nonelected council employees, provided that the personal staff of each individual councilmember shall obtain such consent from such councilmember;<sup>(14)</sup>

(3) all nonelected employees of the prosecuting attorney;<sup>(15)</sup>

(4) all nonelected employees of the department of judicial administration; and<sup>(16)</sup>

(5) all nonelected employees of the department of assessments.<sup>(17)</sup>

<sup>(9)</sup> Previously codified as K.C.C. 3.04.030F.2; renumbered by Ordinance 14218 § 1, 2001.

<sup>(10)</sup> Previously codified as K.C.C. 3.04.030G; renumbered by Ordinance 14218 § 1, 2001.

<sup>(11)</sup> Previously codified as K.C.C. 3.04.030H; renumbered by Ordinance 14218 § 1, 2001.

<sup>(12)</sup> Previously codified as K.C.C. 3.04.030I; renumbered by Ordinance 14218 § 1, 2001.

<sup>(13)</sup> Previously codified as K.C.C. 3.04.030I.1; renumbered by Ordinance 14218 § 1, 2001.

<sup>(14)</sup> Previously codified as K.C.C. 3.04.030I.2; renumbered by Ordinance 14218 § 1, 2001.

<sup>(15)</sup> Previously codified as K.C.C. 3.04.030I.3; renumbered by Ordinance 14218 § 1, 2001.

<sup>(16)</sup> Previously codified as K.C.C. 3.04.030I.4; renumbered by Ordinance 14218 § 1, 2001.

<sup>(17)</sup> Previously codified as K.C.C. 3.04.030I.5; renumbered by Ordinance 14218 § 1, 2001.

(King County 6-2003)

## EMPLOYEE CODE OF ETHICS 3.04.030

b. If such employment or service is deemed by the highest-ranking supervisor to pose a conflict of interest, the employee immediately shall divest such employment and failure to do so shall be grounds for dismissal;<sup>(18)</sup>

10. Enters into a business relationship outside county government with any other employee for whom he or she has any supervisory responsibility;<sup>(19)</sup>

11. Enters into a business relationship outside county government with any person with regard to a matter for which the employee has responsibility as a county employee;<sup>(20)</sup>

12. Appears on behalf of a person before any regulatory governmental agency, or represents a person in any action or proceeding against the interest of the county in any litigation to which the county is a party, unless the employee has a personal interest in the litigation and this personal interest has been disclosed to the regulatory governmental agency or adjudicating individual or body. A county council member may appear before regulatory governmental agencies on behalf of constituents in the course of his or her duties as a representative of the electorate or in the performance of public or civic obligations; however, no official or employee shall accept a retainer or compensation, or any gift or thing of value that is contingent upon a specific action by a county agency;<sup>(21)</sup>

13. Directly or indirectly possesses a substantial or controlling interest in any person which does or seeks to do business with the county, without disclosing such interest as provided by this chapter. A substantial interest is an interest that exceeds one-tenth of one percent of the outstanding securities of the person; or, if the interest is in an unincorporated business concern, exceeds one percent of the net worth of such concern; or the financial interest of a person exceeds five percent of the net worth of the employee and his or her immediate family;<sup>(22)</sup>

14. As a county council member has a financial or other private interest in any legislation or other matter coming before the council, and fails to disclose such an interest on the records of the county council.

This provision shall not apply if the county council member disqualifies himself or herself from voting by stating the nature and extent of such interest. Any other employee who has a financial or other private interest, and who participates in an action or proposed action of the county council and fails to disclose on the records of the county council the nature and extent of such interest, shall be deemed in violation of this chapter;<sup>(23)</sup>

15.a. Has an interest in any property being considered for revaluation by the county board of appeals and equalization or has a personal interest or connection with another person's petition for revaluation while:<sup>(24)</sup>

- (1) an elected county official;<sup>(25)</sup>
- (2) the executive's administrative assistants and office manager;<sup>(26)</sup>
- (3) county councilmembers' executive secretaries;<sup>(27)</sup>
- (4) county administrative officer, the county administrative officer's administrative assistants and the county administrative officer's confidential secretary;<sup>(28)</sup>
- (5) chief officer of each executive department, the chief officer's administrative assistants and confidential secretary;<sup>(29)</sup>
- (6) chief officer of each administrative office, the chief officer's administrative assistants and the chief officer's confidential secretary;<sup>(30)</sup>
- (7) council administrator, the council administrator's administrative assistants and the council administrator's secretary;<sup>(31)</sup>

<sup>(18)</sup> Previously codified as the last paragraph of K.C.C. 3.04.030I; renumbered by Ordinance 14218 § 1, 2001.

<sup>(19)</sup> Previously codified as K.C.C. 3.04.030J; renumbered by Ordinance 14218 § 1, 2001.

<sup>(20)</sup> Previously codified as K.C.C. 3.04.030K; renumbered by Ordinance 14218 § 1, 2001.

<sup>(21)</sup> Previously codified as K.C.C. 3.04.030L; renumbered by Ordinance 14218 § 1, 2001.

<sup>(22)</sup> Previously codified as K.C.C. 3.04.030M; renumbered by Ordinance 14218 § 1, 2001.

<sup>(23)</sup> Previously codified as K.C.C. 3.04.030N; renumbered by Ordinance 14218 § 1, 2001.

<sup>(24)</sup> Previously codified as the first paragraph of K.C.C. 3.04.030O; renumbered by Ordinance 14218 § 1, 2001.

<sup>(25)</sup> Previously codified as K.C.C. 3.04.030O.1; renumbered by Ordinance 14218 § 1, 2001.

<sup>(26)</sup> Previously codified as K.C.C. 3.04.030O.3; renumbered by Ordinance 14218 § 1, 2001.

<sup>(27)</sup> Previously codified as K.C.C. 3.04.030O.4; renumbered by Ordinance 14218 § 1, 2001.

<sup>(28)</sup> Previously codified as K.C.C. 3.04.030O.5; renumbered by Ordinance 14218 § 1, 2001.

<sup>(29)</sup> Previously codified as K.C.C. 3.04.030O.6; renumbered by Ordinance 14218 § 1, 2001.

<sup>(30)</sup> Previously codified as K.C.C. 3.04.030O.7; renumbered by Ordinance 14218 § 1, 2001.

<sup>(31)</sup> Previously codified as K.C.C. 3.04.030O.8; renumbered by Ordinance 14218 § 1, 2001.

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#### 3.04.030 PERSONNEL

(8) the ombudsman and the ombudsman's staff;<sup>(32)</sup>

(9) an employee of the department of assessments;<sup>(33)</sup>

(10) an employee assigned to either the board of equalization or the board of appeals, or both; and<sup>(34)</sup>

(11) any other county employee who has direct contact with the board of appeals and equalization in the carrying out of his or her duties;<sup>(35)</sup>

(12) a member of either the county board of appeals or the board of equalization, or both; and<sup>(36)</sup>

(13) clerk of the council and his or her secretaries.<sup>(37)</sup>

b. All persons listed in subsection A.15.a.(1). through (13). of this section, who wish to appeal to the county board of equalization on a matter of property revaluation shall be governed by the procedure in K.C.C. 3.04.040;<sup>(38)</sup>

16. As an appointive member of a board or commission, has a close relative serving on the same board or commission. For the purposes of this subsection, close relative is defined as:

Husband Wife

Father Father-in-law

Mother Mother-in-law

Brother Brother-in-law

Sister Sister-in-law

Son-in-law Daughter-in-law

Niece Nephew

Grandparent Grandchild

Uncle Aunt

Child Child of domestic partner

Domestic partner

In addition, the relatives of a domestic partner shall be considered close relatives to the same extent such relatives would be included in this subsection if the employee and the domestic partner were married;<sup>(39)</sup>

17. Discloses or uses for the personal benefit of the employee or his or her immediate family any information acquired in the course of official duties which is not available as a matter of public knowledge or

public record; or<sup>(40)</sup>

18. Acts as an accomplice in any act by an immediate family member which, if such act were performed by the employee would be prohibited by 1., 2., 3., 4., 5., 6., 7., 8., 10., 11., 13., 14., 15. or 17. of this subsection. However, it shall not be a conflict of interest for such family member to enter into a bona fide contract of employment which is not intended to influence the action of the county employee.<sup>(41)</sup>

B. Subsection of A.2, 5, and 14 of this section is not violated by the possession by an employee of a financial interest in a person or other entity which is not a substantial interest as defined by subsection A.13 of this section.<sup>(42)</sup> (Ord. 14218 § 1, 2001: Ord. 14199 § 26, 2001: Ord. 12014 § 3, 1995).

**Reviser's note:** This section was amended by Ordinance 14199 § 26 and Ordinance 14218 § 1, each without reference to the other. Both amendments are incorporated in the publication of this section under K.C.C. 1.02.090.

<sup>(32)</sup> Previously codified as K.C.C. 3.04.0300.9; renumbered by Ordinance 14218 § 1, 2001.

<sup>(33)</sup> Previously codified as K.C.C. 3.04.0300.10; renumbered by Ordinance 14218 § 1, 2001.

<sup>(34)</sup> Previously codified as K.C.C. 3.04.0300.11; renumbered by Ordinance 14218 § 1, 2001.

<sup>(35)</sup> Previously codified as K.C.C. 3.04.0300.12; renumbered by Ordinance 14218 § 1, 2001.

<sup>(36)</sup> Previously codified as K.C.C. 3.04.0300.13; renumbered by Ordinance 14218 § 1, 2001.

<sup>(37)</sup> Previously codified as K.C.C. 3.04.0300.14 renumbered by Ordinance 14218 § 1, 2001.

<sup>(38)</sup> Previously codified as the last paragraph of K.C.C. 3.04.0300; renumbered by Ordinance 14218 § 1, 2001.

<sup>(39)</sup> Previously codified as K.C.C. 3.04.030P; renumbered by Ordinance 14218 § 1, 2001.

<sup>(40)</sup> Previously codified as K.C.C. 3.04.030Q; renumbered by Ordinance 14218 § 1, 2001.

<sup>(41)</sup> Previously codified as K.C.C. 3.04.030R; renumbered by Ordinance 14218 § 1, 2001.

<sup>(42)</sup> Previously codified as K.C.C. 3.04.030S; renumbered by Ordinance 14218 § 1, 2001.

(King County 6-2003)

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#### EMPLOYEE CODE OF ETHICS 3.04.035

##### **3.04.035 Conflict of interest - former employees and members of county boards and commissions.**

A. For one year after terminating service to the county, a former member of a county board, commission, committee or other multimember body may not appear before that board, commission, committee or other multimember body, or receive compensation for any services rendered on behalf of or for assistance to any person, in relation to any county action in which the former member participated during the period of his or her service. This prohibition also applies during the same period of time to any person who is a partner, associate or member of a partnership, association, corporation, firm, institution or other entity, whether or not operated for profit, in which the former member has a financial or beneficial interest. However, this prohibition does not apply if the former member's financial or beneficial interest in any entity listed in this subsection is limited to investments and does not include managerial or other influential authority, including holding controlling interest in any classes of stock.

B. For one year after leaving county employment, a former county employee may not have a financial or beneficial interest in a contract or grant that was planned, authorized or funded by a county action in which the former county employee participated during county employment.

C. For one year after leaving county employment, a former county employee may not assist a person, whether or not for compensation, in any county action in which the former county employee participated during county employment. This subsection does not prohibit a former county employee from rendering assistance to county employees in the course of employee organization business.

D. For one year after leaving county employment, a former employee must disclose his or her past county employment before participation in any county action. The disclosure shall be made in writing to the department considering or taking the county action on which the former employee is or would be participating.

E. A former county employee may not, for the personal benefit of the former employee or a member of the former employee's immediate family, disclose or use any privileged or proprietary information gained by reason of the former employee's county employment unless the information is a matter of public knowledge or is available to the public on request.

F. A former county employee may not assist any person for compensation on matters in which the former employee is personally prohibited from participating.

G. It is not a violation of this chapter for a former county employee to render assistance to a person if the assistance is provided without compensation in any form and is limited to one or more of the following:

1. Providing names, work addresses and work telephone numbers of county agencies or county employees, to the extent the information is available as a matter of public record under state law;
2. Providing free transportation to another for the purpose of conducting business with a county agency;
3. Assisting oneself or another person in obtaining or completing forms required by a county agency for the conduct of a county business;
4. Providing assistance to the poor or infirm; or
5. Engaging in conduct that is authorized or protected by the constitutions or laws of Washington state or the United States.

H.1. This section does not prohibit a former county employee from accepting future employment with the county at any time, including employment with his or her former department.

2. Except as otherwise provided in this section, a former county employee is not prohibited from appearing before the county or seeking a county action on his or her own behalf to the same extent other persons may appear before or seek actions by the county.

I. Except as otherwise limited by this chapter, a former county employee may contract with the county, or participate in a contract with the county, to provide materials, equipment, supplies or services. However, any such a contract must comply with applicable requirements and procedures related to procurement. (Ord. 14689 § 2, 2003: Ord. 10841 § 1, 1993: Ord. 9704 § 5, 1990: Ord. 6144 § 2, 1982). (King County 6-2005)

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#### 3.04.037 - 3.04.050 PERSONNEL

**3.04.037 Duty to notify supervisor.** Any employee who becomes aware that he or she may have a potential conflict of interest which arises in the course of his or her official duties shall notify in writing his or her supervisor or appointing authority of such potential conflict.

Upon receipt of such notification the supervisor or appointing authority shall take action to resolve the potential conflict of interest, including but not limited to designating within a reasonable time an alternative employee to perform the duty which is involved in the potential conflict. The disposition of the potential conflict shall be stated in writing in files maintained by the supervisor or official. The supervisor or official may request an advisory opinion from the board of ethics before disposing of such potential conflict. (Ord. 11185 § 3, 1993: Ord. 9704 § 8, 1990).

**3.04.040 Board of Equalization Appeals.** All persons deemed to have a conflict of interest, pursuant to Section 3.04.030(O), and wishing to appeal to the county board of equalization shall be governed by the following procedure;

The appeal shall be automatically denied by the county board of equalization without hearing and a minute entry shall be made. The petitioner may then take action to appeal the decision of the county board of equalization to the State Board of Appeals in accordance with RCW 84.08.130.

However, the Board of Equalization may grant a change of venue to a Board of Equalization of another county, as provided in Title 2, K.C.C., in lieu of automatic denial, when:

A. A quorum cannot be achieved due to members of the board disqualifying themselves because of conflicts of interest or the appearance of fairness doctrine; or

B. When equalization is the basis for an appeal by a member of the board, assistants to the board, or any member of the county governmental authority or his or her own property or on property in which that person has an interest. (Ord. 11185 § 4, 1993: Ord. 6411, 1983: Ord. 1308 § 5, 1972).

#### **3.04.050 Statement of financial and other interests.**

A. All candidates for county elective office, and nominees for appointment to any county elective office except for judicial candidates, within two weeks of becoming a candidate or nominee, and all elected officials who are defined as county employees under K.C.C. 3.04.017, paid in whole or in part by county funds, shall file with the board of ethics a statement of financial and other interests as defined in this section. These requirements may be satisfied by filing with the board of ethics a copy of the report required to be filed by RCW 42.17.240, if this report contains an original signature of the person filing the report. The board of ethics shall forward a copy of such statements, reports and forms to the division of records and elections, or its successor agency, within ten days of their receipt.

B. Within ten days of employment or appointment and on or before April 15 of each year thereafter, the following employees shall file a written statement of financial and other interests, as defined in this section, with the board of ethics: all employees appointed by the county executive; all employees appointed by the county administrative officer or department directors and who are subject to the approval of the county executive; all employees of the council; and such additional employees as may be determined in accordance with criteria adopted by the board of ethics under subsection C. of this section. Within two weeks of becoming a nominee for appointment to county boards and commissions, the nominee shall file a written statement of financial and other interests, as defined in this section, with the board of ethics.

C. The board of ethics shall adopt by rule criteria for determining which employees, in addition to those designated in subsection B of this section, are required to complete and file statements of financial and other interests. The criteria must consider the association between the duties and responsibilities of employees and the conflict of interest provisions in K.C.C. 3.04.030.

D.1. The statement of financial and other interests required to be filed under this section must include the following information of which the employee has, or reasonably should have, knowledge for the reporting year:

a. compensation, gifts and things of value:

(1) the name of each person engaged in a transaction, as defined by K.C.C. 3.04.017.F, with King County in which the employee may participate or has responsibility for, from whom the employee or a member of the employee's immediate family received any compensation, gift or thing of value; and (King County 6-2005)

## EMPLOYEE CODE OF ETHICS 3.04.050

(2) the name of the individual who received the compensation, gift or thing of value and the individual's relationship to the employee;

## b. financial interests:

(1) the name of each person engaged in a transaction, as defined by K.C.C. 3.04.017.F, with King County in which the employee may participate or has responsibility for, in whom the employee or a member of the employee's immediate family possessed a financial interest; and

(2) the name of the individual who possessed the financial interest and the individual's relationship to the employee;

## c. positions:

(1) the name of each person engaged in a transaction, as defined by K.C.C. 3.04.017.F, with King County in which the employee may participate or has responsibility for, with whom the employee or a member of the employee's immediate family held a position;

(2) the name of the individual who held the position and the individual's relationship to the employee; and

(3) the title of the position; and

## d. real property:

(1) real property, listed by street address, assessor parcel number or legal description that was either involved in or the subject of an action by King County, in which the employee or a member of the employee's immediate family possessed a financial interest;

(2) the name of the individual who possessed the financial interest and the individual's relationship to the employee; and

(3) the name of the King County department involved in the transaction.

2. Property for which the only county action was valuation for tax purposes does not have to be reported except by those employees of the department of assessments and the board of appeals who are required to file a report. The use of the individual made of the real property, such as recreation, personal residence or income, does not have to be reported.

E. For purposes of the statements of financial and other interests required to be filed annually, the "reporting year" means the preceding calendar year. For purposes of the statements of financial and other interests to be filed within ten days of employment or appointment, the "reporting year" means the preceding twelve calendar months.

F. An individual filing a statement of financial affairs in accordance with subsections A. and B. of this section shall execute a written declaration that:

1. Recites that the statement is declared by the person to be true, complete and correct under penalty of perjury;

2. Is signed by the person;

3. States the date and place of the declaration's execution; and

4. States that the declaration is so declared under the laws of the state of Washington.

G. The financing of election campaigns shall continue to be governed by other applicable local, state and federal laws, and not by the provisions of this chapter.

H. Filing of the written statement of financial and other interests, as defined in this section, does not relieve the employee of the duty to notify his or her supervisor of a potential conflict of interest as required by K.C.C. 3.04.037.

I. The board may adopt rules and regulations by which affected employees may request suspension or modification of the requirements to disclose financial and other interests set forth in this section if the literal application of the requirements would cause a manifestly unreasonable hardship and the suspension or modification would not frustrate the purposes of this chapter.

J. The board of ethics may adopt necessary and appropriate rules, regulations and forms related to completing, filing, maintaining and disclosing statements of financial and other interests under this section. The board, if adopting the rules, regulations and forms, shall adopt them as provided in K.C.C. chapter 2.98. (Ord. 15148 § 1, 2005: Ord. 14218 § 2, 2001: Ord. 14199 § 27, 2001: Ord. 13657 § 1999: Ord. 9704 § 6, 1990: Ord. 4808 § 1, 1980: Ord. 2294 § 1, 1975: Ord. 2184 § 2, 1974: Ord. 1308 § 6, 1972).

(King County 6-2005)

## 3.04.055 - 3.04.057 PERSONNEL

**3.04.055 Complaints - investigations.**

A. It shall be the responsibility of the ombudsman to investigate and report apparent criminal violations of this chapter to the appropriate law enforcement authorities and to enforce this ordinance according to the powers granted herein.

B. Complaints alleging a violation of any of the provisions of this chapter shall be filed with the ombudsman. Any such complaint shall be in writing, verified and signed by the complainant. The complainant may state in writing whether the complainant wishes his or her name not to be disclosed

pursuant to the provisions of RCW 42.17.310(1)(e). The complaint shall describe the basis for the complainant's belief that this chapter has been violated.

C. Upon receipt of a complaint meeting the requirements of subsection B of this section, the ombudsman shall cause to be served or mailed, by certified mail, return receipt requested, a copy of the complaint to the person alleged to have violated this chapter within twenty days after the filing of said complaint, and shall promptly make an investigation thereof.

D. The investigation by the ombudsman shall be directed to ascertain the facts concerning the violation or violations of this chapter alleged in the complaint and shall be conducted in an objective and impartial manner and in furtherance of such investigation the ombudsman is authorized to use the subpoena power to compel sworn testimony from any person and require the production of any records relevant or material to the investigation except information which is legally privileged or otherwise required by law not to be disclosed.

E. During the investigation, the ombudsman shall consider any statement of position or evidence with respect to the allegations of the complaint which the complainant or respondent, wishes to submit.

F. The results of the investigation shall be reduced to written findings of fact and the finding shall be made that there either is or is not reasonable cause for believing that the respondent has violated one or more of the provisions of this chapter.

G. If a finding is made that there is no reasonable cause, said finding shall be served or mailed, by certified mail, return receipt requested, to the complainant and the respondent, and a copy shall be provided to the board of ethics.

H.1. If the finding is made that reasonable cause exists to believe that the respondent has violated one or more of the provisions of this chapter, the ombudsman shall prepare an order to that effect, a copy of which shall be served or mailed, by certified mail, return receipt requested, to the respondent, and the original thereof filed with the board of ethics. The ombudsman shall provide a copy of the order to the office of the prosecuting attorney. Such reasonable cause order shall include:

- a. a finding that one or more violations of the chapter has occurred;
- b. the factual basis for such finding; and
- c. a notice informing the respondent that the respondent has the right to request a hearing before the board of ethics as set forth in K.C.C. 3.04.057.

2. If the respondent does not request an appeal hearing in a timely manner under K.C.C.

3.04.057, the ombudsman shall provide a copy of the reasonable cause order to the complainant and the respondent's appointing authority. (Ord. 14218 § 3, 2001; Ord. 11185 § 5, 1993; Ord. 9704 § 9, 1990).

### **3.04.057 Appeal.**

A. Any respondent aggrieved by an order of the ombudsman may request in writing within twenty days of the service of the order upon the respondent an appeal hearing before the board of ethics. The request shall cite the order appealed from and specify with particularity the findings being contested. The request shall be filed with the board of ethics, with a copy provided to the ombudsman;

B. Any order issued by the ombudsman pursuant to K.C.C. 3.04.055 shall become final twenty days after service of the order unless a written request for an appeal hearing as set forth above is received by the board of ethics within the twenty-day period;

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### **EMPLOYEE CODE OF ETHICS 3.04.057 - 3.04.060**

C. If an order of the ombudsman has been timely appealed, a hearing shall be conducted by the board of ethics for the purpose of affirming, denying or modifying the order. The parties to the hearing shall be the respondent and the ombudsman or his or her designee. There shall be a verbatim record kept of the hearing and the board of ethics shall have the power to administer oaths and affirmations, issue subpoenas and compel attendance, take evidence and require the production of any books, papers, correspondence, memoranda or other records relevant or material to the hearing. The burden of proving that a violation occurred shall at all times be upon the ombudsman. The board of ethics's decision shall be based upon a preponderance of the evidence. Such hearing shall be conducted within a reasonable time after receipt of the request for appeal. Written notice of the time and place of the hearing shall be given at least ten days prior to the date of the hearing to the parties;

D. At the hearing, each party shall have the following rights:

1. To call and examine witnesses on any matter relevant to the issues raised by the order of the ombudsman or his or her designee;
2. To introduce documentary and physical evidence;
3. To cross-examine opposing witnesses on any relevant matter;
4. To impeach any witness regardless of which party first called the witness to testify;
5. To rebut evidence against him or her; and
6. To represent himself or herself or to be represented by anyone of his or her choice who is lawfully permitted to do so;

E. Following review of the evidence submitted, the board shall within a reasonable time enter

written findings and conclusions and shall affirm or modify the order previously issued if the board finds that one or more violations of this chapter has occurred. The board shall reverse the order if it finds no violations of this chapter have occurred. A copy of the board's decision shall be served or mailed, by certified mail, return receipt requested, to the respondent, and the original thereof retained by the board. The board shall provide a copy of its decision to the ombudsman, the respondent's appointing authority, the office of the prosecuting attorney and the complainant. (Ord. 14218 § 4, 2001: Ord. 11185 § 6, 1993: Ord. 9704 § 10, 1990).

#### **3.04.060 Penalties.**

A. Criminal Penalties. Any negligent or willful violation of the provisions of this chapter shall constitute a misdemeanor and upon conviction be punishable by a fine not to exceed \$1,000 or imprisonment in the county jail not to exceed ninety days; or both;

B. Civil Penalties and Disciplinary Action.

1. Any elected official who commits a violation of this chapter shall be subject to penalties as provided by RCW 42.12.010 and King County Charter and shall be subject to a civil penalty of an amount not to exceed the lesser of one month of the respondent's county pay or the amount authorized by law. Any person having an existing contract with King County or seeking to obtain a contract who willfully attempts to secure preferential treatment in his/her dealings with the county by offering any valuable consideration, thing of value or gift, whether in the form of services, loan, thing or promise, in any form to any county official or employee, shall have his/her current contracts with the county canceled and shall not be able to bid on any other county contract for a period of two years.

2. An employee of the county who commits a violation of this chapter shall be subject to disciplinary action, up to and including termination from employment; provided that such disciplinary action is consistent with Career Service Guidelines and collective bargaining agreements. An employee of the county who commits a violation of this chapter shall also be subject to a civil penalty; provided that such penalty shall not exceed the lesser of one month of the respondent's county pay or the amount authorized by law.

3. Members of boards and commissions who commit a violation of this chapter shall be subject to immediate removal from such appointment.

C. Civil and criminal liability under the provisions of this section shall be imposed on any person who either directly or as an accomplice commits a violation of this chapter.

D. A county employee who engages in retaliatory action as defined herein shall be subject to civil and criminal penalties as set forth in this section. (Ord. 11185 § 7, 1993: Ord. 9704 § 7, 1990: Ord. 1308 § 7, 1972).

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3.04.070 - 3.04.120 PERSONNEL

**3.04.070 Constitutionality.** Should any section, subsection, paragraph, sentence, clause or phrase of Sections 3.04.010 through 3.04.060 be declared unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of Sections 3.04.010 through 3.04.060. (Ord. 1308 § 8, 1972).

**3.04.080 Board of ethics - Membership and terms.** There is created a board of ethics, composed of five members, two to be appointed by the county executive, two to be appointed by the county executive from a list of nominees submitted by the county council, and the fifth, who shall be chairman, to be appointed by the county executive from a list of nominees submitted by the other four members. All appointments are to be confirmed by the county council. The terms of the board members shall be three years. The first three members shall be appointed for one, two and three-year terms respectively. The chairman shall have a three-year term; the other terms are to be determined by lot. A member of the board of ethics may be removed for just cause by a two-thirds vote of the county council, after written charges have been served on the member and a public hearing has been held by the county council. The board shall be advisory and shall meet as frequently as it deems necessary. A majority of the board shall constitute a quorum. (Ord. 11185 § 8, 1993: Ord. 1321 § 2, 1972).

**3.04.090 Board of ethics - Purpose.** The purpose of the board of ethics shall be to insure proper implementation of the code of ethics and to investigate and report on conflicts of interest. (Ord. 1321 § 3, 1972).

#### **3.04.100 Board of ethics - Authority.**

A. Whenever requested by a county officer or employee, or whenever it deems it in the public interest, the board of ethics shall render advisory opinions, in writing, concerning questions of ethics, conflicts of interest, and the applicability of the code of ethics. Copies of the opinion shall be delivered to the ombudsman, the county executive and all members of the King County council. Such opinion may also be released to the public at the discretion of the board with such omissions as may be necessary to protect the confidence and privacy of county officers or employees. A written copy of the board's opinion shall be delivered to the officer or employee requesting the opinion.

B. The board shall hear appeals from orders of the ombudsman as provided in this chapter. (Ord. 9704 § 12, 1990: Ord. 1321 § 4, 1972).

**3.04.110 Board of ethics - Income disclosure.** The board of ethics shall adopt and promulgate rules and regulations delineating personnel employed by the county, not included in the county code of ethics, who shall be required to complete and file statements of disclosure of income and investments. The statements of elected officials, candidates, department directors, division managers, the county administrative officer, chief officers of administrative offices and the county executive's administrative assistants shall be public record. All other statements shall not be made public without written approval of the board of ethics. (Ord. 14199 § 28, 2001: Ord. 3434 § 1, 1977: Ord. 1321 § 5, 1972).

**3.04.120 Disclosure of interests by consultants.**

A.1. Each consultant entering into a contract to provide professional or technical services to the county costing in excess of two thousand five hundred dollars shall file both with the King County board of ethics and the executive a sworn written statement disclosing the following information:

a. any office or directorship in the consultant held by any county employee or any member of his or her immediate family;

b. any financial interest in the consultant held or received by any county employee or any member of his or her immediate family as follows:

(1) ownership of over five percent of the stock or other form of interest in the consultant; and

(2) receipt of any compensation, gift or thing of value from the consultant;

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EMPLOYEE CODE OF ETHICS 3.04.120 - 3.04.160

c. a list of all contracts between the consultant and the county in the five years immediately preceding the presently contemplated contract including the amount of money paid by the county to the consultant pursuant to each contract;

d. any position or positions on any county board or commission, whether salaried or unsalaried, held by any officer or director of the consultant in the five years immediately preceding the presently contemplated contract; and

e. any other information known to the consultant about any interest or relationship whatsoever between any county employee, including any member of his or her immediate family, and the consultant, other than that disclosed pursuant to subsection A.1.a. through d. of this section.

2. Unless otherwise specified in this section, the information disclosed shall cover the period twenty-four months before and including the date of filing the sworn statement.

3. A consultant filing a King County consultant disclosure form in accordance with this section shall execute a written declaration that:

a. recites that the information in the disclosure form is declared by the consultant to be true, complete and correct under penalty of perjury;

b. is signed by the consultant;

c. states the date and place of the declaration's execution; and

d. states that the declaration is so declared under the laws of the state of Washington.

B. No payment shall be made on any contract with any consultant until five days after receipt by the board of ethics and the executive of the information required to be disclosed by this section.

C. For purposes of this section, "consultant" means a person, as defined in K.C.C. 3.04.017, who by experience, training and education has established a reputation or ability to provide professional or technical services, as defined in K.C.C. 4.16.010, on a discrete, nonrecurring basis over a limited and preestablished term as an independent contractor to the county. (Ord. 15148 § 2, 2005: Ord. 13710 § 1, 2000: Ord. 12138 § 4, 1996).

**3.04.130 Authorization to Implement Procedures.** The ombudsman and the board of ethics are each authorized to implement such forms, administrative processes, and operational procedures as are necessary to comply with the provisions of this chapter; provided that any rules governing the conduct of contested hearings shall be promulgated in compliance with K.C.C. 2.98, Rules of County Agencies. The executive is directed to prepare, with the assistance of council staff, the office of the prosecuting attorney, the ombudsman and the board of ethics, information regarding the provisions of this chapter to be made available to employees and members of boards and commissions the availability of these materials and of copies of this chapter shall be described in a summary form which shall be distributed to all county employees on or before April 20, 1994 and an acknowledgment of receipt of such form shall be signed and returned by each employee to the office of human resource management on or before May 20, 1994. Each new employee shall sign and return such form prior to commencing work for King County. (Ord. 11185 § 9, 1993: Ord. 9704 § 13, 1990).

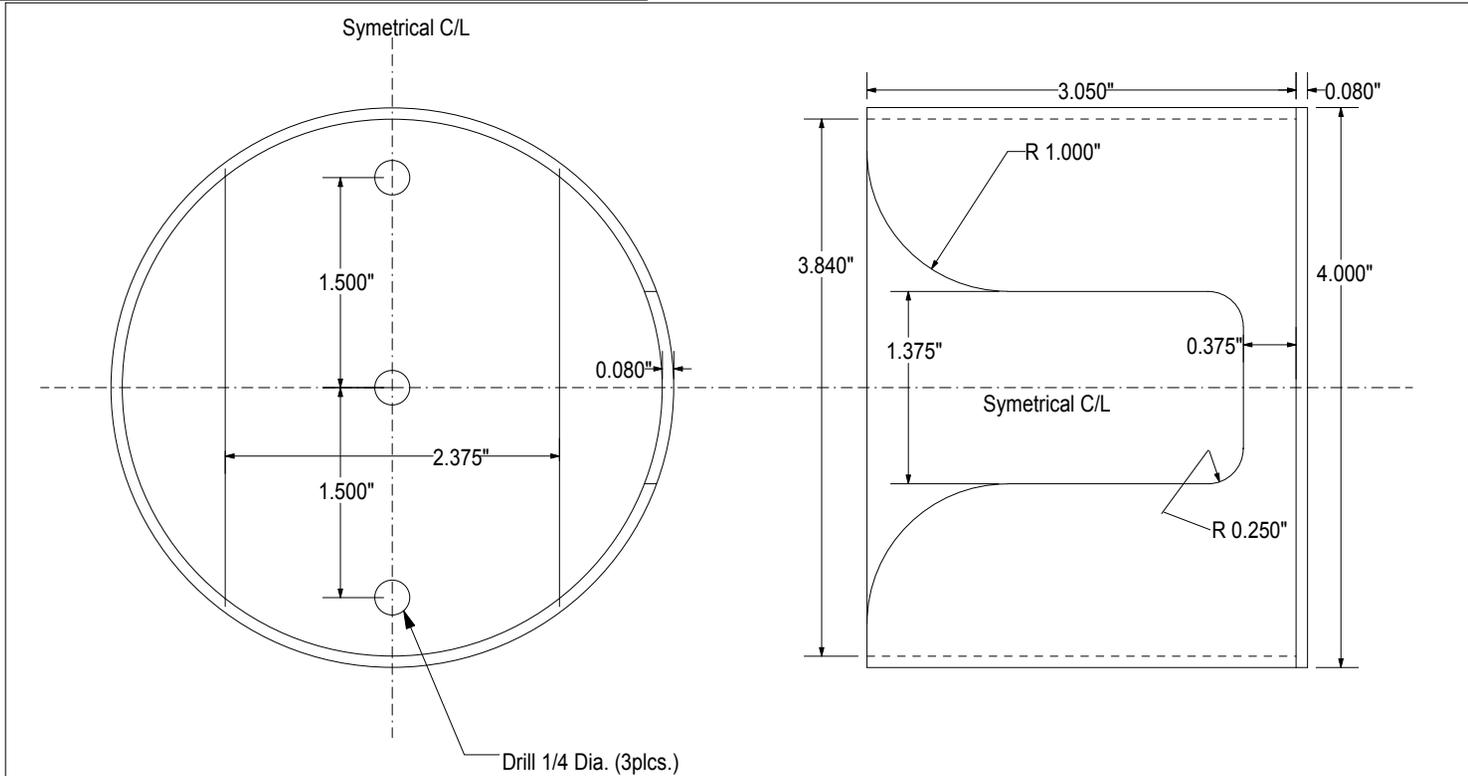
**3.04.140 Forwarding to District and Superior Courts.** The executive is directed to forward a copy of Ordinance 9704 to the presiding judges of the district and superior courts for consideration by the courts in their evaluation of possible future amendments to existing codes of judicial conduct and personnel administration. (Ord. 9704 § 14, 1990).

**3.04.150 Severability.** The provisions of this chapter are declared to be separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section or portion of this chapter, or the

invalidity of the application thereof to any person or circumstances shall not affect the validity of the remainder of this chapter, or the validity of its application to other persons or circumstances. (Ord. 9704 § 15, 1990).

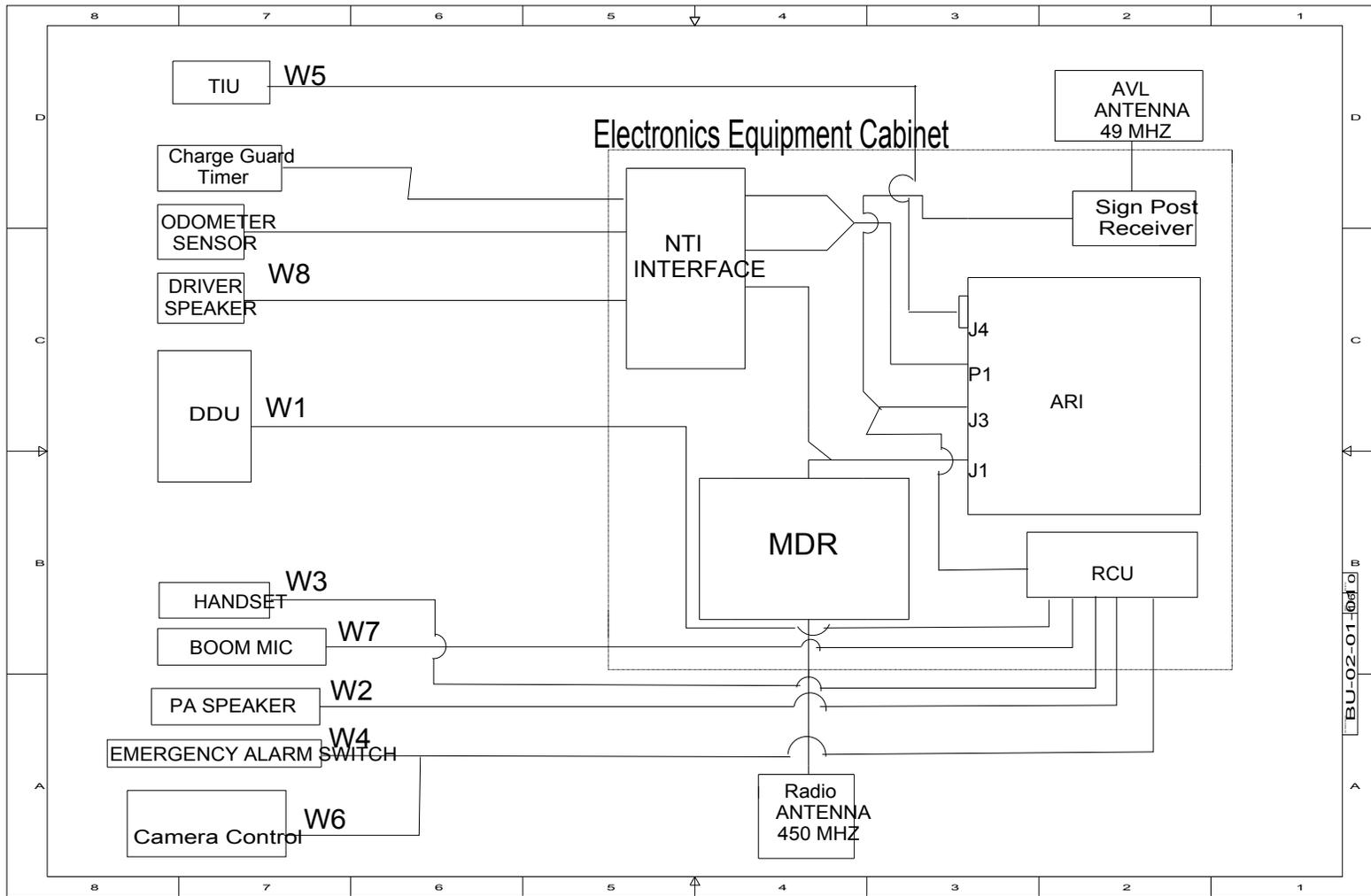
**3.04.160 Effective date.** Ordinance 9704 shall take effect on March 31, 1991; provided, that in the event that any provision herein is in conflict with the provisions of a collective bargaining agreement in effect upon such date, the agreement shall control as to employees in such bargaining unit during the term of such agreement. (Ord. 9704 § 16, 1990).

**ATTACHMENT 26: OPERATOR'S CUP RECEPTACLE**



					<b>King County-Metro Machine Shop</b>
					<b>Operator Cup Receptacle</b>
				Drawn By: J.F.King	Date: 03-28-96
				Approved:	Date:
					Material: M/S
				Scale: Full	Part Number:
				File Name: CupHoldr.Cad	
				<small>Unless Otherwise Specified Dimensions Will Be In Inches</small> Fractional x/x ±1/16 Three Place .xxx ±.010 Two Place .xx ±.020 Angles ±0° 30'	

ATTACHMENT 27: RADIO BLOCK DIAGRAM



ATTACHMENT 28:  
OUT OF STATE VEHICLE CONTRACT BIDDER TIP SHEET

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# OUT-OF-STATE VEHICLE CONTRACT BIDDER TIP SHEET



Your firm recently inquired about bidding on a vehicle contract in Washington. The Washington State Department of Revenue would like to provide you with information concerning our tax structure and business registration requirements.

If your out-of-state business is making bids for vehicle contracts with a Washington state, county, or city agency, transit authority, or school district, your firm may owe tax in Washington.

Listed below are some common questions asked by out-of-state businesses regarding Washington's taxes:

**Q:** When do we need to register with the Washington State Department of Revenue?

**A:** If your out-of-state business is making bids for vehicle contracts in this state, it is required to obtain a vehicle manufacturer/dealer license from the Department of Licensing. In addition, Washington tax rules require you to register with the Department of Revenue, whether you are awarded the contract or not.

Your firm may obtain a Washington tax registration number by filling out a Master Application. Completing and submitting a Master Application will register your firm with all appropriate Washington State agencies.

For more information on Washington taxation, or to request a Master Application, please contact the Department of Revenue's Telephone Information Center at 1-800-647-7706.

**Q:** How do I report to the Department of Revenue?

**A:** Once your firm has registered with the Department, tax returns with reporting instructions will be automatically mailed to your firm. Every registered business must report its income from Washington sales, and remit any tax owed to the Department of Revenue. If your firm has not had any business activity in Washington, it still must submit a tax return to the Department of Revenue, so we can record that information.



**Q: When does an out-of-state business owe Washington taxes?**

**A:** An out-of-state company becomes subject to Washington taxes if it sells goods to customers and delivers those goods to the purchaser in Washington AND if the out-of-state firm has a physical presence, or *nexus* in this state.

*Nexus* can be established in Washington by a number of activities, including:

- soliciting sales through employees or agents working for the firm;
- maintaining an office or stock of goods in Washington; or
- performing significant services in relation to establishing or maintaining a market for sales into Washington.

**Q: What taxes apply to out-of-state businesses doing business in Washington?**

**A:** Businesses which sell tangible personal property to consumers in this state must collect Washington's retail sales tax from their customers on the gross contract price of the goods sold, including freight, delivery and installation costs. The applicable combined state and local sales tax rate varies from 7% to 8.2%, depending on the location where delivery is made in the state.

In addition, if the business has established *nexus*, it is subject to **business and occupation (B&O) tax** under the retailing classification, at a rate of .471 percent on its gross receipts. The B&O tax is levied on all persons conducting business in Washington.

Specific information of the taxability of out-of-state businesses is contained in Washington Administrative Code (WAC) 458-20-193. You may request a copy of the code, as well as other information on the B&O tax, the retail sales tax or registering your business by calling our Telephone Information Center at 1-800-647-7706.





**ATTACHMENT 29:  
60 FT HYBRID AND STANDARD BUS ANTICIPATED PROCUREMENT SCHEDULE  
King County Contract MB06-2**

Fax ad to Passenger Transport.	Aug 28, 2006
*Advertise request for proposals (RFP).	Sep 4
*Requests for deviation and requests for clarification (RFD) due on or before 3PM local time.	Oct 6
RFD responses out.	Nov 8
BPT meets with proposers.	Nov 14-15
Final addenda out.	Dec 15
*Proposals due on or before 3PM local time.	Feb 9, 2007
Cost Analysis/Price Negotiations	Feb 21 – Mar 2
Director of Transportation authorizes award.	Mar 2
Pre-award audit (FTA requirement).	Mar 12 – 16
Notice of award.	Mar 19
Notice to proceed.	Mar 26

\*Advertisement, RFD due date and Proposal due date are contractual dates. All other dates are estimated.

**ATTACHMENT 30:**  
**VEHICLE DEALER LICENSING**



**STATE OF WASHINGTON**  
**DEPARTMENT OF LICENSING**

A vehicle dealer license is required if you engage in the business of buying, selling, listing, exchanging, offering, brokering, leasing with the option to purchase, auctioning, soliciting, or advertising the sale of new or used vehicles, or arranging or offering or attempting to solicit or negotiate on behalf of others a sale, purchase or exchange of an interest in new or used motor vehicles, or if you distribute or transfer for resale vehicles, or if you are in any other way engaged in dealer activity, irrespective of whether you own the motor vehicles.

A vehicle dealer license is required if you display a vehicle for sale, unless you are the registered owner or legal owner of the vehicle, or hold a notarized Power of Attorney for the vehicle owner. RCW 46.70.021.

Buying and offering for sale, or buying and selling five or more vehicles in a twelve-month period without holding a vehicle dealer license constitutes a gross misdemeanor which can result in a criminal fine of up to five thousand dollars for each violation and up to one year in jail. A second offense is a class C felony punishable under chapter 9A.20 RCW. RCW 46.70.021.

Violation of RCW 46.70.021 is a per se violation of the Consumer Protection Act, chapter 19.86 RCW, and is considered a deceptive practice.

**VEHICLE MANUFACTURERS**

Vehicle manufacturers build or assemble new and unused vehicles.

**LICENSE FEES:**

\$750 for the original license.  
\$250 for annual renewal.

**PLATES**

\$33.00

These plates may be used:

To move a vehicle to or from the place of business of a Washington Dealer.  
To test a vehicle for repair (if there is a preexisting, identifiable problem known to the manufacturer before the testing is begun).

**CONTACT**

Write: Department of Licensing, Dealer Services, PO Box 9039, Olympia, WA 98507-9039

Phone: 360-664-6466

Fax: 360-586-0479

Office Hours 8 a.m. to 5 p.m. (Pacific Time), Monday through Friday

Web: <http://www.dol.wa.gov/vs/dl-lic.htm>

E-mail: [dealers@dol.wa.gov](mailto:dealers@dol.wa.gov)

**ATTACHMENT 31**  
**A INSPECTION**  
**6,000 MILES**

**AIR & BRAKE**

- Verify Hill Holder Operation
- Test Parking Brake
- Drain the Wet Tank and Insure the Brake Reservoirs Hold Pressure
- Drain all Air Tanks (including Ping Tank)
- Check Air Pressure Supply Time (85-100 psi in Less than 30 Seconds at Full Throttle)
- Measure and Record Governor Cut-out Pressure \_\_\_\_\_psi
- Check for Air Leaks
- Check Brakes
- Check Slack Adjuster Angle
- Measure and Record Push Rod Travel  
RF\_\_\_\_\_ LF\_\_\_\_\_ RC\_\_\_\_\_ LC\_\_\_\_\_ RR\_\_\_\_\_ LR\_\_\_\_\_

**CHAIRLIFT/RAMP**

- Clean Lift/Ramp Platform
- Check Lift/Ramp Operation

**ENGINE**

- Change Engine Oil and Filter
- Check Belts and Idler Pulley
- Check Cooling System (Hoses, Clamps, Rad., etc)
- Check Exhaust System (Leaks, Hardware, etc)
- Drain the Water from the Fuel Filter

**EXTERIOR**

- Check Lights (Head, Marker, Tail, Turn, Back-up, Brake, Boarding, Destination Signs, etc)
- Check Tires, Wheels and Lug Nuts
- Visual Check for Body Damage

**FIRE SUPPRESSION & ALARM SYSTEMS**

- Check Circuit Monitor for Green Status Light
- Check Activation Switch for Secure Mounting, Safety Pin/Tie Rap and that Area is Free of Obstructions

- Check Agent Cylinder for Secure Mounting and Proper Pressure
- Check all Sensors, Hoses, Wiring and Nozzles for Secure Mounting, Damage and Obstructions
- Check that Operating Labels are Clean, Legible and Unobstructed

**GENERAL**

- Check for Excessive Fluid Leaks
- Lube all Fittings
- Correct all Fluid Levels
- Check Batteries (Corrosion, Chafing, Cleanliness)
- Check Battery Cables for Corrosion and Chafing
- Check for Rubbing Hoses and Lines
- Inspect Undercarriage (Broken, Worn, Loose Parts)
- Inspect Bike Rack for Damage and Operation
- Test Wipers-Washers (Service Washers)
- Check Doors (Alignment, Seal, Hinges, Sensitive Edge, Interlock, etc)

**INTERIOR**

- Check Alarms, Lights, Gauges (Gen, Oil, Low Air, Back-up, Engine Fire, etc)
- Check Reflectors and Wheel Blocks
- Check Lights (Dome, Map, Farebox, Entry Way, etc)
- Check Drivers Seat Operation (Pneumatic, Mechanical and Cushion)
- Check Fire Extinguisher Mount, Pressure and Date.
- Replace Fire Extinguisher if Over 11 Months Old (Use Code 35-SJ-S05)
- Test Horn
- Check Roof Escape Hatch
- Check Stop Request (Operation, Chime, Cord, etc)
- Check Interior for Loose or Broken Parts
- Test PA System Including ALL Speakers

**STEERING & SUSPENSION**

- Inspect Steering System for Damaged or Loose Parts
- Check Air Bags for Excessive Wear or Damage
- Check Shocks for Leaks, Damage or Bad Bushings
- Check for Loose or Damaged Suspension, Mounting Bolts or Parts

**TRANSMISSION & AXLE**

- Check Propeller Shaft and U-Joints
- Use the Key Pad to Check Electric Drive Fluid Level

## B INSPECTION

12,000 Miles

### AIR & BRAKE

- Lube Slack Adjuster and S-Cams
- Verify Hill Holder Operation
- Test Parking Brake
- Drain the Wet Tank and Insure the Brake Reservoirs Hold Pressure
- Drain all Air Tanks (including Ping Tank)
- Check Air Pressure Supply Time (85-100 psi in Less than 30 Seconds at Full Throttle)
- Measure and Record Governor Cut-out Pressure \_\_\_\_\_psi
- Check for Air Leaks
- Check Brakes
- Check Slack Adjuster Angle
- Measure and Record Push Rod Travel
- RF \_\_\_\_\_ LF \_\_\_\_\_ RC \_\_\_\_\_ LC \_\_\_\_\_ RR \_\_\_\_\_ LR \_\_\_\_\_

### ENGINE

- Check Coolant Condition (Freeze Point, PH, etc)
- Change Primary and Secondary Fuel Filters
- Test Nalcol Concentration and Add if Necessary
- Check Engine Mounts for Cracks, Damage and Proper Bolt Tightness
- Check Engine Air Filter (if Air Filter is Replaced Use Code 35-SJ-S03)
- Take Engine Oil Sample Before Changing Oil
- Change Engine Oil and Filter
- Check Belts and Idler Pulley
- Check Cooling System (Hoses, Clamps, Rad., etc)
- Check Exhaust System (Leaks, Hardware, etc)

### EXTERIOR

- Check Headlight Alignment
- Check Tail Lights for Cloudiness and Moisture
- Check Destination Signs, Operation and Legibility
- Check Lights (Head, Marker, Tail, Turn, Back-up, Brake, Boarding, Destination Signs, etc)
- Check Tires, Wheels and Lug Nuts
- Visual Check for Body Damage

### GENERAL

- Measure and Record Charge Rate, \_\_\_\_\_ Volts
- Check for Excessive Fluid Leaks
- Lube all Fittings
- Correct all Fluid Levels
- Check Batteries (Corrosion, Chafing, Cleanliness, Lube Track)
- Check for Rubbing Hoses and Lines
- Inspect Undercarriage (Broken, Worn, Loose Parts)
- Inspect Bike Rack for Damage and Operation
- Test Wipers-Washers (Service Washers)
- Check Doors (Alignment, Seal, Hinges, Sensitive Edge, Interlock, etc)
- Check Battery Cables for Corrosion and Chafing

### INTERIOR

- Inspect Wheelchair Securing System, (Belts, Retractors, Personal Seat Belt)
- Check Alarms, Lights, Gauges (Gen, Oil, Low Air, Back-up, Engine Fire, etc)
- Check Reflectors and Wheel Blocks
- Check Lights (Dome, Map, Farebox, Entry Way, etc)
- Check Drivers Seat Operation (Pneumatic, Mechanical and Cushion)
- Check Fire Extinguisher Mount, Pressure and Date.
- Replace Fire Extinguisher if Over 11 Months Old (Use Code 35-SJ-S05)
- Test Horn
- Check Roof Escape Hatch
- Check Stop Request (Operation, Chime, Cord, etc)
- Check Interior for Loose or Broken Parts
- Test PA System Including ALL Speakers
- Check Treadle Peddles (Pads, Free Movement Obstructions)

### STEERING & SUSPENSION

- Check Brace Rods
- Check Air Suspension (Adjust Height as Required)
- Inspect Steering System for Damaged or Loose Parts
- Check Air Bags for Excessive Wear or Damage
- Check Shocks for Leaks, Damage or Bad Bushings
- Check for Loose or Damaged Suspension, Mounting Bolts or Parts
- Check Kneeling Operation
- Replace Hydraulic Filter

### TRANSMISSION & AXLE

- Check Differential Fluid Level
- Use Key Pad to Check Electric Drive Fluid Level
- Check Propeller Shaft and U-Joints
- Clean Breather

### TURNTABLE & ARTICULATION JOINT

- Inspect for Damage and Leaks
- Inspect Bellows and Skirts for Damage

### CHAIRLIFT/RAMP

- Clean Lift/Ramp Platform
- Check Lift/Ramp Operation
- Check for Leaks and Fluid Level

### FIRE SUPPRESSION & ALARM SYSTEMS

- Check Circuit Monitor for Green Status Light
- Check Activation Switch for Secure Mounting, Safety Ties, Pull-pins and Obstructions
- Check Agent Cylinder for Secure Mounting and Proper Pressure
- Check all Sensors, Hoses, Wiring and Nozzles for Secure Mounting, Damage and Obstructions
- Check that Operating Labels are Clean, Legible and Unobstructed

HEATING AND AIR CONDITIONING

- Check Heater and Defroster Filter (Replace if Necessary)
- Check Refrigerant lines for Signs of Deterioration, Leaks or Chafing
- Check Boost Pump for Leaks and Operation
- Check Driver's Heater/Defroster Fans Operation
- Check the Evaporator/Condenser Fans Operation
- Replace Evaporator Filter

**C INSPECTION**  
**18,000 Miles**

REPEAT THE "A INSPECTION - 6,000 MILES"

## D INSPECTION

24,000 Miles

### AIR & BRAKE

- Measure & Record Hill Holder Pressure, Center\_\_\_ Drive\_\_\_
- Verify Hill Holder Operation
- Test Parking Brake
- Drain the Wet Tank and Insure the Brake Reservoirs Hold Pressure
- Drain all Air Tanks (including Ping Tank)
- Check Air Pressure Supply Time (85-100 psi in Less than 30 Seconds at Full Throttle)
- Measure and Record Governor Cut-out Pressure \_\_\_psi
- Check Air Dryer
- Check for Air Leaks
- Check Brakes
- Check Slack Adjuster Angle
- Measure and Record Push Rod Travel
- RF\_\_\_ LF\_\_\_ RC\_\_\_ LC\_\_\_ RR\_\_\_ LR\_\_\_
- Lube Slack Adjusters and S-Cams

### CHAIRLIFT/RAMP

- Check for Leaks and Fluid Level
- Clean Lift/Ramp Platform
- Check Lift/Ramp Operation

### ENGINE

- Replace Primary and Secondary Fuel Filter
- Check Coolant Condition (Freeze Point, PH, etc)
- Change Coolant Filter
- Test Nalcol Concentration and Add if Necessary
- Check Engine Mounts for Cracks, Damage and Proper Bolt Tightness
- Check Engine Air Filter (if Air Filter is Replaced use Code 35-SJ-S03)
- Test Restriction Indicator Condition
- Take Engine Oil Sample Before Changing Oil
- Change Engine Oil and Filter
- Check Belts and Idler Pulley
- Check Cooling System (Hoses, Clamps, Rad., etc)
- Check Exhaust System (Leaks, Hardware, etc)
- Lube Exhaust Brake Linkage (Special PACBRAKE Lube #C18037)
- Inspect Exhaust Brake Linkage

### EXTERIOR

- Torque Lug Nuts
- Check Headlight Alignment
- Check Tail Lights for Cloudiness and Moisture
- Check Destination Signs, Operation and Legibility
- Check Lights (Head, Marker, Tail, Turn, Back-up, Brake, Boarding, Destination Signs, etc)
- Check Tires, Wheels and Lug Nuts
- Visual Check for Body Damage

### STEERING & SUSPENSION

- Check Fluid Level of Angle Drive
- Check Brace Rods
- Check Steering Wheel Free Play
- Replace Hydraulic Fluid and Filter

- Check Air Suspension (Adjust Height as Required)
- Inspect Steering System for Damaged or Loose Parts
- Check Air Bags for Excessive Wear or Damage
- Check Shocks for Leaks, Damage or Worn Bushings
- Check for Loose or Damaged Suspension, Mounting Bolts or Parts

### TURNTABLE & ARTICULATION JOINT

- Inspect for Damage and Leaks
- Inspect Bellows and Skirt for Damage

### TRANSMISSION & AXLE

- Check Differential Fluid Level
- Take Transmission Oil Sample
- Clean Breather
- Use Key Pad to Check Electric Drive Fluid Level
- Check Propeller Shaft and U-Joints

### FIRE SUPPRESSION & ALARM SYSTEMS

- Check Circuit Monitor for Green Status Light
- Check Manual Activation Switch for Secure Mounting, Safety Pin/Tie Rap and that Area is Free of Obstructions
- Check Agent Cylinder for Secure Mounting and Proper Pressure
- Check all Sensors, Hoses, Wiring and Nozzles for Secure Mounting, Damage and Obstructions
- Check that Operating Labels are Clean, Legible and Unobstructed

### GENERAL

- Check for Excessive Fluid Leaks
- Lube all Fittings
- Correct all Fluid Levels
- Check Batteries (Corrosion, Chafing, Cleanliness, Lube Track)
- Check for Rubbing Hoses and Lines
- Inspect Undercarriage (Broken, Worn, Loose Parts)
- Inspect Bike Rack for Damage and Operation
- Test Wipers-Washers (Service Washers)
- Check Doors (Alignment, Seal, Hinges, Sensitive Edge, Interlock, etc)
- Measure and Record Charge Rate,\_\_\_ Volts
- Check Battery Cables for Corrosion and Chafing

- Check Kneeling Operation

**D INSPECTION**  
**24,000 Miles**  
**Continued**

**INTERIOR**

- Check Lights (Dome, Map, Farebox, Entry Way, etc)
- Check Drivers Seat Operation (Pneumatic, Mechanical and Cushion)
- Check Fire Extinguisher Mount, Pressure and Date.
- Replace Fire Extinguisher if Over 11 Months Old (Use Code 35-SJ-S05)
- Test Horn
- Check Roof Escape Hatch
- Check Stop Request (Operation, Chime, Cord, etc)
- Check Interior for Loose or Broken Parts
- Test PA System Including ALL Speakers
- Inspect Wheelchair Securing System, (Belts, Retractors, Personal Seat Belt)
- Check and Lube Emergency Exit Windows
- Check Driver's Window and Felts
- Check Alarms, Lights, Gauges (Gen, Oil, Low Air, Back-up, Engine Fire,etc)
- Check Reflectors and Wheel Blocks
- Check Treadle Peddles (Pads, Free Movement, Obstructions)

**HEATING AND AIR CONDITIONING**

- Check Heater and Defroster Filter (Replace if Necessary)
- Check Refrigerant Lines for Signs of Detrioration, Leaks or Chafing
- Check Boost Pump for Leaks & Operation
- Check Driver's Heater/Defroster Fans Operation
- Check the Evaporator/Condenser Fans Operation
- Replace Evaporator Filter
- Lube Evaporator Blower Bearings

**ATTACHMENT 32 King County Metro Transit Addresses Related to Bus Contracts**

<b>Invoicing for buses</b>	
Invoice To:	King County Department of Transportation
Address:	Transit Fleet Group MS: KSC-TR-0342 201 S. Jackson St. Seattle, WA 98104-3856
Contact Name:	Michael Voris
Contact Telephone:	(206) 684-1629
<b>ADDRESS FOR OVERNIGHT DELIVERY SERVICES ONLY</b>	King County Dept. of Transportation Transit Fleet Group 3 <sup>rd</sup> Floor, West side 201 S. Jackson St. Seattle, WA 98104-3856
<b>Delivery (BUSES Only)</b>	
Address:	King County Road Maintenance Star Lake Facility 26701 28 <sup>th</sup> Ave. S. Kent, WA 98031
Contact Name:	Jack Woodworth, Body Shop Chief
Contact Telephone:	(206) 684-2217 or 2219
• Special Instructions: Days, Time, etc.	Mon. – Fri. 8 am - 3 pm except KC Metro holidays
<b>Delivery (Manuals, Special Tools, Test Equipment)</b>	
Address:	KC Metro Training & Safety 11911 East Marginal Way South Bldg. A Seattle, WA 98168
Contact Name:	George Stites, Supervisor, Fleet Engineering
Contact Telephone:	(206) 684-2802
• Special Instructions: Days, Time, etc.	Mon. – Fri. 8 am - 3 pm except KC Metro holidays
<b>Manufacturer's Statement of Origin</b>	
Registered Owner: Legal Name	King County Department of Transportation, Transit Division
Address:	201 S. Jackson St. Seattle, WA 98104-3856
Contact Name:	Michael Voris
Contact Address:	Transit Fleet Group MS: KSC-TR-0342 201 S. Jackson St. Seattle, WA 98104-3856
Contact Telephone:	(206) 684-1629
Special Instructions:	Print "Washington State Sales Tax Is Being Collected By (bus builder)" on each Statement of Origin
<b>Spare Wheels</b>	
Address:	KC Metro South Facilities 11911 East Marginal Way South Bldg. C Seattle, WA 98168
Contact Name:	Chief, Inventory Management
Contact Telephone:	(206) 684-2201

**Ship-Loose Bus Contract Parts & Manufacturer Service Representative Parts**

Address:	KC Metro Component Supply Center 12200 East Marginal Way South Seattle, WA 98168
Contact Name:	Lynn Matteoni, Warranty Administrator
Contact Telephone:	(206) 684-2233
• Special Instructions: Days, Time, etc.	Mon. – Fri. 8 am – 3 pm except KC Metro holidays

**PART E  
FORMS USE TABLE**

Proposal	BAFO	Contract Execution	Post Contract	Forms
				EA1.08- Request for Deviation - Clarification (RFD)
X	X			E2A - Proposer Information Statement
X				E2B - Proposer Financial Information
	X			E2C - Changes To Proposer Financial Information
X	X			EA2.02A - Buy America Certificate
X	X			EA2.02B – Buy America Certificate – Steel and Mfg. Products
X	X			EA2.04 - Cargo Preference Certificate
X	X			EA2.08 – Bus Testing
X	X			EA2.09 – Pre-Award and Post-Delivery Audit Certificate
X	X			EA2.10 - Certification Regarding Lobbying
X	X			EA2.22 – Certification Regarding Debarment and Suspension,
X	X			EA2.28 –Transit Vehicle Manufacturer Certificate of Compliance with the Disadvantaged Business Regulations
X	X			EA2.32 - Americans with Disabilities Act
		X		EA2.36.03 – Equal Benefit Worksheet and Declaration Form
		X		EA2.36.04 – Personnel Inventory Report
		X		EA2.36.05 – Affidavit and Certificate of Compliance Regarding Equal Employment Opportunity
		X		EA2.36.06 – Statement of Compliance - Union or Employees Agency Statement
		X		EA2.36.07 – 504/ADA Assurance of Compliance
X	X			EA3.01 – Proposer Vehicle Technical Information
	X			Price Proposal - Part I
X	X			Base Quantity Price Proposal - Part II
X	X			Base Quantity Option and Optional Equipment Price Proposal (Mandatory Options) - Part III
X	X			Optional Equipment Price Proposal (Non-Mandatory Options) - Part IV
X	X			Price Proposal Delivery Schedule - Part V
	X			EA6.04 - Proposal Guaranty Bond
		X		EA6.08.03 – Certificate of Current Cost and Pricing Data

		X		EB5.01 Contract Agreement
		X		EB5.02 Performance and Payment Bond
			X	E4 - Contract Change Order Proposal Pricing Form
			X	E5 - Escrow Agreement

**FORM EA1.08  
REQUEST FOR DEVIATION - CLARIFICATION (RFD)**

**Note:** This form is informational and does not modify the RFP, which can be changed only by addendum. Proposer shall fill in the shaded portions of the form.

**IDENTIFICATION**

RFD NUMBER: _____	FIRM: _____
-------------------	-------------

**REQUEST IS FOR:**

<input type="checkbox"/> APPROVAL WHERE REQUIRED	<input type="checkbox"/> MORE INFORMATION REQUIRED
<input type="checkbox"/> DEVIATION OR EQUAL	<input type="checkbox"/> CLARIFICATION

**SPECIFICATION REQUIREMENT**

**PROPOSER'S REQUEST AND JUSTIFICATIONS (LIST ANY ATTACHMENTS)**

**COUNTY USE**

DATE RECEIVED: _____	DATE OF REPLY: _____
<input type="checkbox"/> APPROVED	<input type="checkbox"/> MORE INFO REQUIRED
<input type="checkbox"/> APPROVED WITH CONDITIONS	<input type="checkbox"/> CLARIFICATION
<input type="checkbox"/> DENIED	

**REASON FOR COUNTY ACTION OR APPROVAL CONDITIONS**

**SAMPLE REQUEST FOR DEVIATION / CLARIFICATION (RFD)**

Note: This form is informational and does not modify the RFP, which can be changed only by addendum. Proposer shall fill in the shaded portions of the form.

IDENTIFICATION

RFD NUMBER: _____ ABC-4 _____	FIRM: <b>ABC Bus Builders Inc.</b> 123 Elm Street Anytown, Anystate 12345 Attn.: Mr. Bob Smith
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REQUEST IS FOR:

_____ APPROVAL WHERE REQUIRED	_____ MORE INFORMATION REQUIRED
<b>XXXX</b> DEVIATION OR EQUAL	_____ CLARIFICATION

SPECIFICATION REQUIREMENT

**C2.19 The exterior of the bus shall be finished with DuPont Imron or approved equal polyurethane enamel.....**

PROPOSER'S REQUEST AND JUSTIFICATIONS (LIST ATTACHMENTS)

**ABC requests for the use of Wondernamel paint for the exterior of the bus. Attached are copies of the paint manufacturer's specification sheets, a list of other transit properties which are using this paint, 5 year test result reports and letters from transit users**

COUNTY USE

DATE RECEIVED: _____	DATE OF REPLY: _____
_____ APPROVED	_____ MORE INFO REQUIRED
_____ APPROVED WITH CONDITIONS	_____ CLARIFICATION
_____ DENIED	
<u>REASON FOR COUNTY ACTION OR APPROVAL CONDITIONS</u>	

**FORM E2A**  
**PROPOSER INFORMATION STATEMENT**  
Page 1 of 4

1. Proposer's full name.
2. Proposer's principal business address and the business address through which most contract work will be performed. Include the name of the contact person for all correspondence concerning the proposal plus their phone number and fax number.
3. How many years has your organization been in the business of manufacturing transit buses?
4. How many years has your organization been in business under its present name?
5. Under what other or former names has your organization operated while manufacturing transit buses?
6. If your organization is a corporation, answer the following:
  - a. Date of incorporation;
  - b. State of incorporation;
  - c. President's name;
  - d. Vice President(s) name(s);
  - e. Secretary's name;
  - f. Treasurer's name;
  - g. Registered Agent name;
  - h. Address; and
  - i. Phone number.
7. If your organization is a partnership, answer the following:
  - a. Date of organization;
  - b. Type of partnership (if applicable); and
  - c. Name(s) of general partner(s).
8. If your organization is individually owned, answer the following:
  - a. Date of organization; and
  - b. Name of owner.
9. If the form of your organization is other than those listed above, describe it and name the principals.

**FORM E2A**  
**PROPOSER INFORMATION STATEMENT**

10. If the proposing organization is a joint venture and/or consortium of two or more parties, supply a copy of the joint venture agreement. All parties must complete Forms E2A, E2B and E2C unless the joint venture agreement allows one party to bind the venture.
  
11. Has your organization ever failed to complete, or been declared in default on, a contract for the manufacture of transit buses or other mass transit equipment? If so, identify the contract and the name of the other contracting party and describe the circumstances resulting in the notice of default or failure to complete.
  
12. In the last five years, has your organization been a party to bankruptcy or a reorganization proceeding? If the answer is "Yes", explain on a separate sheet.
  
13. On a separate sheet, list major transit bus manufacturing contracts your organization has in progress, giving the name of the project, owner, contract amount, percent complete and scheduled completion.
  
- 14a. List three trade references:
  
- 14b. List bank references:
  
15. Identify the surety for this contract proposal:
  - a. Name of bonding company;
  
  - b. Name and address of agent;
  
16. Describe any litigation in which the proposer is or has been involved in the past three years, which has or may have an impact on the proposer's ability to perform any work called for by this RFP or any litigation where the demand is for more than \$250,000, exclusive of personal injury litigation where the liability is covered by insurance. If none, state "None."

**FORM E2A**  
**PROPOSER INFORMATION STATEMENT**  
Page 3 of 4

17. The following questions pertaining to criminal activity must be answered by the proposer. In the event of a "Yes" answer to any of the questions, the County reserves the right to inquire further with respect thereto. The proposer shall furnish to the County all relevant documents or information as requested by the county. Failure to answer any of these questions may result in a follow-up investigation by the County to determine why the question was not answered. While a "Yes" answer to any such question will not automatically result in a negative finding or disqualification on the question of the proposer's responsibility, it may merit further inquiry by the County.

- (a) During the past ten (10) years, has your firm, or any principal, director, officer, managerial employee thereof, or shareholder owning ten percent (10%) or more of the stock of the corporation been convicted of any crime or entered a guilty plea for any crime or misdemeanor in connection with the business of the firm or any other firm which is related by common ownership, control or otherwise? If "Yes", describe the circumstances.

(Check "Yes" or "No", as appropriate)

YES \_\_\_\_\_ NO \_\_\_\_\_

- (b) Does your firm, or any principal, director, officer, managerial employee thereof, or shareholder owning ten percent (10%) or more of the stock of the corporation in connection with the business of the firm or any other firm which is related by common ownership, control or otherwise, have pending any criminal charges in any jurisdiction, for the commission of a crime which has not been terminated in favor of the firm, principal, director, officer, shareholder or managerial employee? If "Yes", describe the circumstances.

(Check "Yes" or "No", as appropriate)

YES \_\_\_\_\_ NO \_\_\_\_\_

- (c) To the best of your knowledge, is your firm or any principal, director, officer, or shareholder owning ten percent (10%) or more of the stock of the corporation, or managerial employee thereof, in connection with the business of the firm or any other firm which is related by common ownership, control or otherwise, the subject of any pending investigation by any grand jury, commission, committee or other entity or agency or authority in any jurisdiction, in connection with the commission of a crime? If "Yes", describe the circumstances.

(Check "Yes" or "No", as appropriate)

YES \_\_\_\_\_ NO \_\_\_\_\_

- (d) Is your firm currently disqualified from selling to or submitting bids to or receiving awards from or entering into any contracts with any public authority for goods, work or services, or have any contracts made with any public authority during the preceding five (5) years been canceled or terminated by such authority by reason of any member, partner, director or officer of your firm refusing to testify or to answer any relevant question concerning a transaction or contract with a public authority when called before a grand jury or other agency which is empowered to compel the attendance of witnesses and examine them under oath, upon being advised that neither his nor her statement nor any information or evidence derived from such statement will be used against that person in any subsequent criminal proceeding? If "Yes", describe the circumstances.

(Check "Yes" or "No", as appropriate)

YES \_\_\_\_\_ NO \_\_\_\_\_

**FORM E2A  
PROPOSER INFORMATION STATEMENT  
Page 4 of 4**

18. Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

Name of Organization:

By:

Title:

M \_\_\_\_\_ being duly sworn  
deposes and says that the information provided herein is true and sufficiently complete so as not to be  
misleading

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

Notary Public:

My Commission Expires:

**FORM E2B**  
**PROPOSER FINANCIAL INFORMATION**  
**Page 1 OF 2**

The Proposer shall submit proof of adequate financial resources that would be available to the Proposer for the prosecution and completion of the Work as required. Required financial information shall include, but not be limited to the following:

1. Audited financial statements (balance sheets, statements of income and stockholders' equity, and statements of cash flows) for each of the most recently completed five (5) fiscal years, including notes to financial statements, independent auditors' reports, and annual reports to stockholders, and SEC Form 10K reports (for publicly held corporations),
2. Documentation of an open line of credit, letter of credit or other credit arrangement with an established bank or financial institution under which adequate financing would be available for prosecution and completion of the Work called for hereunder,
3. Certification by the chief financial officer or the proposer's independent auditor stating that the Proposer has adequate financial resources for the prosecution and completion of the Work called for hereunder, and
4. The names, addresses, telephone and fax numbers of at least one contact person from the Proposer's principal financial or banking organization and the Proposer's independent auditor. The contact persons shall be duly authorized by the Proposer to provide information and discuss the adequacy of the proposer's financial resources. Upon the County's request, the Propser shall provide written authorization permitting the County or its designee access to information documenting the adequacy of the Proposer's financial resources.
5. Name(s) and address(es) of firm(s) preparing attached financial statement(s) and date(s) thereof:
6. Are the attached financial statement(s) for the identical organization submitting this proposal or BAFO?
7. If not, explain the relationship and financial responsibility of the organization whose financial statement is provided (e.g., parent-subsiary).
8. Will the organization whose financial statement(s) is(are) attached act as guarantor of the contract for the manufacture of the buses?
9. Trade payables - for the last three (3) years, list all sub-supplies who have not routinely shipped parts to the Proposer on standard industry payment terms (net 60 to 90 days).

Provide an explanation for any use of non-standard payment terms.

**FORM E2B**  
**PROPOSER FINANCIAL INFORMATION**  
Page 2 of 2

10. Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

Name of Organization:

By:

Title:

M \_\_\_\_\_ being duly sworn  
deposes and says that the information provided herein is true and sufficiently complete so as not to be  
misleading

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

Notary Public:

My Commission Expires:

**FORM E2C  
CHANGES TO PROPOSER FINANCIAL INFORMATION**

Please answer the following questions (BAFO only):

- |    |     |    |  |
|----|-----|----|--|
| 1. | Yes | No | Have any changes occurred since your submittal of Form E2B regarding your financial condition?   |
| 2. | Yes | No | Have any actions been taken by you since your submittal of Form E2B which could affect your financial condition?   |
| 3. | Yes | No | Have any actions been taken by another party, person or government agency since your submittal of Form E2B which would have an impact on your financial condition? |

If your answer is yes to any of the aforementioned questions, you must resubmit form E2B or alternatively, schedule a new meeting with the County's financial analyst.

**EA2.02A**  
**BUY AMERICA CERTIFICATE**

Certificate of Compliance with 49 U.S.C. 5323(j)(2)(C).

The bidder or offeror hereby certifies that it will comply with the requirements of 49 U.S.C. 5323(j)(2)(C) and the regulations at 49 CFR Part 661.11

Date \_\_\_\_\_

Signature \_\_\_\_\_

Company Name \_\_\_\_\_

Title \_\_\_\_\_

OR

Certificate of Non-Compliance with 49 U.S.C. 5323(j)(2)(C)

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(2)(C) and 49 CFR 661.11, but may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B) or 5323(j)(2)(D) and 49 CFR 661.7.

Date \_\_\_\_\_

Signature \_\_\_\_\_

Company Name \_\_\_\_\_

Title \_\_\_\_\_

**EA2.02B**  
**BUY AMERICA CERTIFICATE**  
**Steel and Manufactured Products**

**Certificate of Compliance With Section 165(a)**

The bidder hereby certifies that it will comply with the requirements of Section 165(a) of the Surface Transportation Assistance Act of 1982, as amended, and the applicable regulations in 49 CFR part 661.

Date \_\_\_\_\_

Signature \_\_\_\_\_

Company Name \_\_\_\_\_

Title \_\_\_\_\_

**Certificate for Non-Compliance With Section 165(a)**

The bidder hereby certifies that it cannot comply with the requirements of Section 165(a) of the Surface Transportation Assistance Act of 1982, as amended, but it may qualify for an exception to the requirement pursuant to Section 165(b)(2) or (b)(4) of the Surface Transportation Assistance Act of 1982 and regulations in 49 CFR 661.7.

Date \_\_\_\_\_

Signature \_\_\_\_\_

Company Name \_\_\_\_\_

Title \_\_\_\_\_

**EA2.04  
CARGO PREFERENCE CERTIFICATE**

The Proposer hereby certifies that it has reviewed the requirements set forth in Paragraph A2.04 of the RFP, 46 CFR Part 381, and 46 U.S.C. Section 1241 et. seq., and that it will comply with all such Cargo Preference requirements if awarded the Contract.

Date: \_\_\_\_\_ 20 \_\_\_\_\_

Name of Proposer: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EA2.08  
BUS TESTING PROGRAM**

**CERTIFICATION OF COMPLIANCE WITH FTA'S BUS TESTING REQUIREMENTS**

The undersigned [Contractor/Manufacturer] certifies that the vehicle offered in this procurement complies with 49 U.S.C. A 5323(c) and FTA's implementing regulation at 49 CFR Part 665.

The undersigned understands that misrepresenting the testing status of a vehicle acquired with Federal financial assistance may subject the undersigned to civil penalties as outlined in the Department of Transportation's regulation on Program Fraud Civil Remedies, 49 CFR Part 31. In addition, the undersigned understands that FTA may suspend or debar a manufacturer under the procedures in 49 CFR Part 29.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Company Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EA2.09  
PRE-AWARD AND POST-DELIVERY AUDIT CERTIFICATE**

**BUY AMERICA CERTIFICATE OF COMPLIANCE WITH FTA REQUIREMENTS  
FOR BUSES, OTHER ROLLING STOCK, OR ASSOCIATED EQUIPMENT**

*(To be submitted with a bid or offer exceeding the small purchase threshold for Federal assistance programs, currently set at \$100,000.)*

Certificate of Compliance

The bidder hereby certifies that it will comply with the requirements of 49 U.S.C. Section 5323(j)(2)(C), Section 165(b)(3) of the Surface Transportation Assistance Act of 1982, as amended, and the regulations of 49 C.F.R. 661.11:

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Company Name: \_\_\_\_\_

Title: \_\_\_\_\_

OR

Certificate of Non-Compliance

The bidder hereby certifies that it cannot comply with the requirements of 49 U.S.C. Section 5323(j)(2)(C) and Section 165(b)(3) of the Surface Transportation Assistance Act of 1982, as amended, but may qualify for an exception to the requirements consistent with 49 U.S.C. Sections 5323(j)(2)(B) or (j)(2)(D), Sections 165(b)(2) or (b)(4) of the Surface Transportation Assistance Act, as amended, and regulations in 49 C.F.R. 661.7.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Company Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EA2.10  
CERTIFICATION REGARDING LOBBYING**

The undersigned [Contractor] certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

The Contractor, \_\_\_\_\_, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, apply to this certification and disclosure, if any.

\_\_\_\_\_ Signature of Contractor's Authorized Official

\_\_\_\_\_ Name and Title of Contractor's Authorized Official

\_\_\_\_\_ Date

**EA2.22**

**CERTIFICATION REGARDING DEBARMENT AND SUSPENSION**

By signing and submitting its bid or proposal, the bidder or proposer certifies as follows:

The certification in this clause is a material representation of fact relied upon by the County. If it is later determined that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to the County, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Company Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EA2.28**  
**TRANSIT VEHICLE MANUFACTURER'S CERTIFICATE OF COMPLIANCE**  
**WITH THE DISADVANTAGED BUSINESS REGULATIONS**

The Proposer, if a transit vehicle manufacturer, hereby certifies that it has complied with the requirements of 49CFR Section 23.67 by submitting an annual DBE goal to the FTA and that the goal has either been approved or not disapproved by the FTA Administrator.

The Proposer, if a non-manufacturing supplier, hereby certifies that the manufacturer of the transit vehicle to be supplied has complied with the above-referenced requirement of 49CFR Section 23.67.

As the Contractor, the Proposer agrees to submit additional certification annually, during the term of the contract.

Date: \_\_\_\_\_

Name of Proposer: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EA2.32**  
**AMERICANS WITH DISABILITIES ACT**

The Proposer certifies that the vehicles to be supplied under this contract will conform to the accessibility guidelines for transportation vehicles as issued by the Architectural and Transportation Barriers Compliance Board as 36 CFR Part 1192 and by the Department of Transportation as 49 CFR Part 38 which implement the Americans with Disabilities Act of 1990.

Date: \_\_\_\_\_

Name of Proposer: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EA2.36.03**

Equal Benefit Worksheet and Declaration Form

[http://www.metrokc.gov/procurement/documents/U\\_042\\_EB\\_Worksheet\\_Declaration.pdf](http://www.metrokc.gov/procurement/documents/U_042_EB_Worksheet_Declaration.pdf)

**EA2.36.04**

Personnel Inventory Report – Complete, sign and submit.

[http://www.metrokc.gov/procurement/documents/IBIS\\_Attachments/ATTA\\_CHMENTD\\_Personnel\\_Inventory.doc](http://www.metrokc.gov/procurement/documents/IBIS_Attachments/ATTA_CHMENTD_Personnel_Inventory.doc)

**EA2.36.05**

Affidavit and Certificate of Compliance Regarding Equal Employment Opportunity – Complete, sign and submit.

[http://www.metrokc.gov/procurement/documents/IBIS\\_Attachments/ATTACHMENTE\\_CertificateOfCompliance.doc](http://www.metrokc.gov/procurement/documents/IBIS_Attachments/ATTACHMENTE_CertificateOfCompliance.doc)

Statement of Compliance – Union or Employees Agency Statement

[http://www.metrokc.gov/procurement/documents/U\\_025\\_Union\\_or\\_Employee\\_Referral\\_Agency.doc](http://www.metrokc.gov/procurement/documents/U_025_Union_or_Employee_Referral_Agency.doc)

**EA2.36.07**

504/ADA Assurance of Compliance – Complete and submit.

[http://www.metrokc.gov/procurement/documents/U\\_027\\_504\\_ADA\\_Compliance.doc](http://www.metrokc.gov/procurement/documents/U_027_504_ADA_Compliance.doc)

FORM EA3.01

**PROPOSER VEHICLE TECHNICAL INFORMATION**

For each type of vehicle offered, the Proposer shall submit for the County's review a completely filled-in Vehicle Technical Information form below to confirm its proposed vehicle and components are in compliance with the requirements of Section C.

A. BUS MANUFACTURER \_\_\_\_\_  
 Bus Model \_\_\_\_\_

B. UNDERSTRUCTURE MANUFACTURER \_\_\_\_\_  
 Model Number \_\_\_\_\_

C. BASIC BODY CONSTRUCTION

1. Type \_\_\_\_\_
2. Tubing or frame member Thickness & Dimensions
  - a. Overstructure \_\_\_\_\_
  - b. Understructure \_\_\_\_\_
3. Skin Thickness and Material
  - a. Roof \_\_\_\_\_
  - b. Sidewall \_\_\_\_\_
  - c. Skirt Panel \_\_\_\_\_
  - d. Front End \_\_\_\_\_
  - e. Rear End \_\_\_\_\_

D. DIMENSIONS

1. Overall Length
  - a. Over Bumpers \_\_\_\_\_ Ft. \_\_\_\_\_ In.
  - b. Over Body \_\_\_\_\_ Ft. \_\_\_\_\_ In.

2. Overall Width
  - a. Over Body excluding Mirrors \_\_\_\_\_ In.
  - b. Over Body including Mirrors - driving position \_\_\_\_\_ In.
  - c. Over Tires Front Axle \_\_\_\_\_ In.
  - d. Over Tires Center Axle \_\_\_\_\_ In.
  - e. Over Tires Rear Axle \_\_\_\_\_ In.

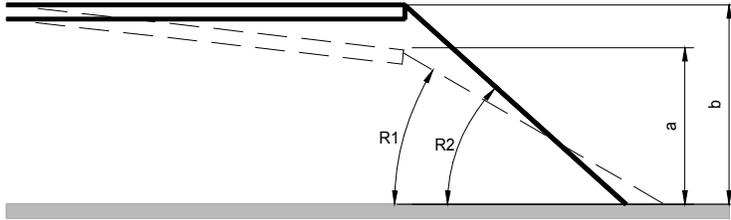
3. a. Overall Height (maximum) \_\_\_\_\_ In.
- b. Overall Height (main roof line) \_\_\_\_\_ In.

Deleted: \_\_\_\_\_

4. Angle of Approach \_\_\_\_\_ Deg.
5. Breakover Angle \_\_\_\_\_ Deg.
6. Angle of Departure \_\_\_\_\_ Deg.

7. Doorway Dimensions	<u>Front</u>	<u>Rear</u>
A. Width Between Door Posts	_____ in	_____ in
B. Door Width Between Panels	_____ in	_____ in
C. Clear Door Width	_____ in	_____ in
D. Doorway Height	_____ in	_____ in
E. Knuckle Clearance	_____ in	_____ in

8. Step Height from Ground(measured at center of doorway)



	<u>Front Doorway, Empty</u>	<u>Ramp Angle</u>	<u>Rear Doorway, Empty</u>
(Kneeled)	a. _____ inches	R1 _____ deg.	a. _____ inches
(Unkneeled)	b. _____ inches	R2 _____ deg.	b. _____ inches

9. Interior Head Room (center of aisle)

a. Front Axle Location	_____ In.
b. Center Axle Location	_____ In.
c. Rear Axle Location	_____ In.

10. Aisle Width Between Transverse Seats (minimum) \_\_\_\_\_ In.

11. Floor Height Above Ground (centerline of bus)

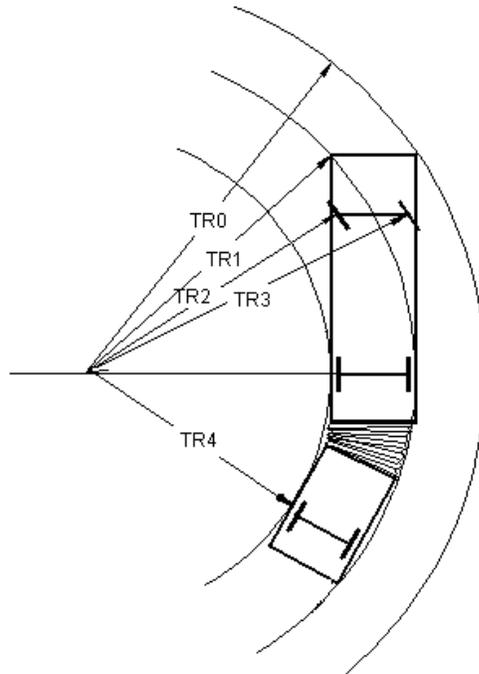
a. at Front door	_____ In.
b. at Front Axle	_____ In.
c. at Drive Axle	_____ In.
d. at Rear door	_____ In.

12. Minimum Ground Clearance (between bus and ground, with bus unkneeled)

a. Excluding Axles	_____ In.
b. Including Axles	_____ In.

13. Horizontal Turning Envelope (see diagram below)

a. Outside Body Turning Radius, TR0 (including bumper)	_____ Ft.	_____ In.
b. Front Inner Corner Radius, TR1	_____ Ft.	_____ In.
c. Front Wheel Inner Turning Radius, TR2	_____ Ft.	_____ In.
d. Front Wheel Outer Turning Radius, TR3	_____ Ft.	_____ In.
e. Inside Body Turning Radius, TR4 (including bumper)	_____ Ft.	_____ In.



14. Wheelbase
- a. Front \_\_\_\_\_ In.
  - b. Rear \_\_\_\_\_ In.
15. Overhang, Centerline of Axle Over Bumper
- a. Front \_\_\_\_\_ Ft. \_\_\_\_\_ In.
  - b. Rear \_\_\_\_\_ Ft. \_\_\_\_\_ In.
16. Floor
- a. Interior Length \_\_\_\_\_ Ft. \_\_\_\_\_ In.
  - b. Interior Width (excluding coving) \_\_\_\_\_ Ft. \_\_\_\_\_ In.
  - c. Total Standee Area \_\_\_\_\_ Sq. Ft.
  - d. Minimum distance between Wheelhouses:
    - Front: \_\_\_\_\_ In.
    - Center: \_\_\_\_\_ In.
    - Rear: \_\_\_\_\_ In.
  - e. Maximum interior floor slope  
(from horizontal) \_\_\_\_\_ Deg.
17. Passenger Capacity Provided
- a. Total Maximum Seating \_\_\_\_\_
  - b. Standee Capacity \_\_\_\_\_
  - c. Minimum Knee to Hip Room \_\_\_\_\_ In.
  - d. Minimum Foot Room \_\_\_\_\_ In.

E. WEIGHT OF BUS

	No. of People	Front Axle			Center Axle			Rear Axle			TOTAL BUS
		Left	Right	Total	Left	Right	Total	Left	Right	Total	
Empty Bus Full Fuel and Farebox	0										
Fully Seated Full Fuel and Farebox	_____ + Driver										
Fully Loaded Standee and Fully Seated Full Fuel and Farebox	_____ + Driver										
Crush Load (1.5xFully Loaded)	_____										
GVWR				N/A			N/A			N/A	
GAWR											N/A

Deleted: 11 [1]

F. ENGINE, MAIN

1. Manufacturer \_\_\_\_\_
2. Type \_\_\_\_\_
3. Model Number \_\_\_\_\_
4. No. of Cylinders \_\_\_\_\_
5. Bore \_\_\_\_\_ In.
6. Stroke \_\_\_\_\_ In.
7. Displacement \_\_\_\_\_ Cu. In.
8. Compression Ratio \_\_\_\_\_
9. Injector Type and Size \_\_\_\_\_
10. Net S.A.E. Horsepower \_\_\_\_\_ HP at \_\_\_\_\_ RPM
11. Net S.A.E. Torque \_\_\_\_\_ lb. ft. at \_\_\_\_\_ RPM
12. Crankcase Oil Capacity
  - a. New Engine, dry \_\_\_\_\_ gals.
  - b. New Engine, wet \_\_\_\_\_ gals.
13. Turbocharger, Make & Model \_\_\_\_\_
14. Maximum Speed, no load \_\_\_\_\_ RPM
15. Maximum Speed, full load \_\_\_\_\_ RPM
16. Speed at Idle \_\_\_\_\_ RPM
17. Speed at Fast Idle \_\_\_\_\_ RPM
18. Engine Information/graphs to be attached with this form:

*Engine speed vs. road speed  
 Torque vs. engine speed  
 Horsepower vs. engine speed  
 Fuel consumption vs. engine speed.  
 Vehicle speed vs. time (both loaded and unloaded)*

Vehicle speed vs. grade (both loaded and unloaded)  
 Acceleration vs. time  
 Change of acceleration vs. time.

- G. HYBRID DRIVE OR TRANSMISSION
1. Manufacturer \_\_\_\_\_
  2. Type \_\_\_\_\_
  3. Model Number \_\_\_\_\_
  4. Speeds \_\_\_\_\_
  5. Gear Ratios                      Forward \_\_\_\_\_ Reverse \_\_\_\_\_
  6. Shift Speeds
    - a. 1st - 2nd \_\_\_\_\_ mph
    - b. 2nd - 3rd \_\_\_\_\_ mph
    - c. 3rd - 4th \_\_\_\_\_ mph
    - d. 4th - 5th (if applicable) \_\_\_\_\_ mph
    - e. 5th - 6th (if applicable) \_\_\_\_\_ mph
  7. Fluid Capacity [Including heat exchanger and filter(s)] \_\_\_\_\_
- H. VOLTAGE REGULATOR
1. Manufacturer \_\_\_\_\_
  2. Model \_\_\_\_\_
- I. VOLTAGE EQUALIZER
1. Manufacturer \_\_\_\_\_
  2. Model \_\_\_\_\_
- J. ALTERNATOR
1. Manufacturer \_\_\_\_\_
  2. Type \_\_\_\_\_
  3. Model \_\_\_\_\_
  4. Output at Idle \_\_\_\_\_ Amps
  5. Output at Maximum Speed \_\_\_\_\_ Amps
  6. Maximum Warranted Speed \_\_\_\_\_ rpm
  7. Speed at Idle \_\_\_\_\_ rpm
  8. Drive Type \_\_\_\_\_
- K. STARTER MOTOR
1. Manufacturer \_\_\_\_\_
  2. Type \_\_\_\_\_
  3. Model \_\_\_\_\_
- L. AIR COMPRESSOR
1. Manufacturer \_\_\_\_\_
  2. Type \_\_\_\_\_
  3. Rated Capacity \_\_\_\_\_ cfm
  4. Capacity, at Idle \_\_\_\_\_ cfm
  5. Capacity, at Maximum Speed \_\_\_\_\_ cfm
  6. Maximum Warranted Speed \_\_\_\_\_ rpm
  7. Speed Idle \_\_\_\_\_ rpm
  8. Drive Type \_\_\_\_\_ rpm
  9. Governor
    - a) Cut-in Pressure \_\_\_\_\_ psi
    - b) Cut-Out Pressure \_\_\_\_\_ psi

M.1 AXLE, FIRST  
 1. Manufacturer \_\_\_\_\_  
 2. Type \_\_\_\_\_  
 3. Model Number \_\_\_\_\_  
 4. Gross Axle Weight Rating \_\_\_\_\_ lbs.  
 5. Axle Load \_\_\_\_\_ lbs.

M.2 AXLE, SECOND  
 1. Manufacturer \_\_\_\_\_  
 2. Type \_\_\_\_\_  
 3. Model Number \_\_\_\_\_  
 4. Gross Axle Weight Rating \_\_\_\_\_ lbs.  
 5. Axle Load \_\_\_\_\_ lbs.

N. AXLE, THIRD  
 1. Manufacturer \_\_\_\_\_  
 2. Type \_\_\_\_\_  
 3. Model Number \_\_\_\_\_  
 4. Gross Axle Weight Rating \_\_\_\_\_ lbs.  
 5. Axle Load \_\_\_\_\_ lbs.  
 6. Axle Ratio \_\_\_\_\_

O.1 SUSPENSION SYSTEM  
 1. Manufacturer \_\_\_\_\_  
 2. Type: First \_\_\_\_\_  
           Second \_\_\_\_\_  
           Third \_\_\_\_\_  
 3. Springs: First \_\_\_\_\_  
               Second \_\_\_\_\_  
               Third \_\_\_\_\_

O.2 JOINT  
 1. Manufacturer \_\_\_\_\_  
 2. Type \_\_\_\_\_  
 3. Model Number \_\_\_\_\_

P. WHEELS AND TIRES  
 1. Wheels  
    a. Make \_\_\_\_\_  
    b. Size \_\_\_\_\_  
    c. Capacity \_\_\_\_\_ lbs.  
    d. Material \_\_\_\_\_  
 2. Tires  
    a. Manufacturer \_\_\_\_\_  
    b. Type \_\_\_\_\_  
    c. Size \_\_\_\_\_  
    d. Load Range/Air Press. \_\_\_\_\_ lbs/p.s.i.

- Q.
1. STEERING, POWER
    1. Pump
      - a. Manufacturer & Model No. \_\_\_\_\_
      - b. Type \_\_\_\_\_
      - c. Relief Pressure \_\_\_\_\_ psi
    2. Booster/Gear Box
      - a. Manufacturer & Model No. \_\_\_\_\_
      - b. Type \_\_\_\_\_
      - c. Ratio \_\_\_\_\_
    3. Power Steering Fluid Capacity \_\_\_\_\_ gals
    4. Maximum Effort at Steering Wheel \_\_\_\_\_ lbs  
(unloaded stationary coach on dry asphalt pavement)
    5. Steering Wheel Diameter \_\_\_\_\_ in.

- R.
1. BRAKES
    1. Make of Fundamental Brake System \_\_\_\_\_
    2. Brake Chambers Vendor's Size & Part No.
      - a. First \_\_\_\_\_
      - b. Second \_\_\_\_\_
      - c. Third \_\_\_\_\_
    3. Brake Operation Effort \_\_\_\_\_
    4. Slack Adjusters Vendor's Type & Part No.
      - a. First
        - 1) Right \_\_\_\_\_
        - 2) Left \_\_\_\_\_
      - b. Second
        - 1) Right \_\_\_\_\_
        - 2) Left \_\_\_\_\_
      - c. Third
        - 1) Right \_\_\_\_\_
        - 2) Left \_\_\_\_\_
      - d. Length
        - 1) First Take-up \_\_\_\_\_ in.
        - 2) Second Take-up \_\_\_\_\_ in.
        - 3) Third Take-up \_\_\_\_\_ in.
    5. Brake Drums/Discs
      - a. First
        - 1) Manufacturer \_\_\_\_\_
        - 2) Part Number \_\_\_\_\_
        - 3) Diameter \_\_\_\_\_ in.
      - b. Second
        - 1) Manufacturer \_\_\_\_\_
        - 2) Part Number \_\_\_\_\_
        - 3) Diameter \_\_\_\_\_ in.
      - c. Third
        - 1) Manufacturer \_\_\_\_\_
        - 2) Part Number \_\_\_\_\_
        - 3) Diameter \_\_\_\_\_ in.

- 6. Brake Lining Manufacturer \_\_\_\_\_  
Type \_\_\_\_\_
- 7. Brake Lining Identification
  - a. First
    - 1) Forward \_\_\_\_\_
    - 2) Reverse \_\_\_\_\_
  - b. Second
    - 1) Forward \_\_\_\_\_
    - 2) Reverse \_\_\_\_\_
  - c. Third
    - 1) Forward \_\_\_\_\_
    - 2) Reverse \_\_\_\_\_
- 8. Brake Linings Per shoe
  - a. First \_\_\_\_\_
  - b. Second \_\_\_\_\_
  - c. Third \_\_\_\_\_
- 9. Brake Lining Widths
  - a. First \_\_\_\_\_ In.
  - b. Second \_\_\_\_\_ In.
  - c. Third \_\_\_\_\_ In.
- 10. Brake Lining Lengths
  - a. First \_\_\_\_\_ In.
  - b. Second \_\_\_\_\_ In.
  - b. Third \_\_\_\_\_ In.
- 11. Brake Lining Thickness \_\_\_\_\_ In.
- 12. Brake Lining Area Per Axle
  - a. First \_\_\_\_\_ Sq. In.
  - b. Second \_\_\_\_\_ Sq. In.
  - c. Third \_\_\_\_\_ Sq. In.

S. COOLING SYSTEM

- 1. Radiator/Charge Air Cooler
  - a. Manufacturer \_\_\_\_\_ / \_\_\_\_\_
  - b. Type \_\_\_\_\_ / \_\_\_\_\_
  - c. Model Number \_\_\_\_\_ / \_\_\_\_\_
  - d. Number of Tubes \_\_\_\_\_ / \_\_\_\_\_
  - e. Tubes Outer Diameter \_\_\_\_\_ In. / \_\_\_\_\_ In.
  - f. Fins Per Inch \_\_\_\_\_ Fins / \_\_\_\_\_ Fins
  - g. Fin Thickness \_\_\_\_\_ In. / \_\_\_\_\_ In.
- 2. Total Cooling and Heating System Capacity \_\_\_\_\_ Gals
- 3. Radiator Fan Speed Control \_\_\_\_\_ Type
- 4. Surge Tank, Capacity \_\_\_\_\_ Qts.
- 5. Engine Thermostat Temperature Setting
  - a. Initial Opening \_\_\_\_\_ ° F
  - b. Fully Closed \_\_\_\_\_ ° F
- 6. Overheat Alarm Temperature Sending Unit Setting \_\_\_\_\_ ° F
- 7. Shutdown Temperature Setting \_\_\_\_\_ ° F

T. AIR RESERVOIR CAPACITY

- 1. Supply Reservoir \_\_\_\_\_ Cu. In.
- 2. Primary Reservoir \_\_\_\_\_ Cu. In.
- 3. Secondary Reservoir \_\_\_\_\_ Cu. In.
- 4. Parking Reservoir \_\_\_\_\_ Cu. In.
- 5. Accessory Reservoir \_\_\_\_\_ Cu. In.
- 6. Other Reservoir Type \_\_\_\_\_ Cu. In.

- U. HEATING, VENTILATING AND AIR CONDITIONING EQUIPMENT
1. Heating System Capacity \_\_\_\_\_ B.T.U.
  2. Air Conditioning Capacity \_\_\_\_\_ B.T.U.
  3. Ventilating Capacity \_\_\_\_\_ cfm
  4. Compressor
    - a. Manufacturer & Model \_\_\_\_\_
    - b. No. of Cylinders \_\_\_\_\_
    - c. Drive Ratio \_\_\_\_\_
    - d. Maximum Warranted Speed \_\_\_\_\_ r.p.m.
    - e. Operating Speed \_\_\_\_\_ r.p.m.
    - f. Weight \_\_\_\_\_ lbs.
    - g. Oil Capacity
      - 1) Dry \_\_\_\_\_ gals.
      - 2) Wet \_\_\_\_\_ gals.
    - h. Refrigerant \_\_\_\_\_ Type \_\_\_\_\_ Lbs.
  5. Condenser
    - a. Manufacturer & Model \_\_\_\_\_
    - b. No. of Rows \_\_\_\_\_
    - c. No. of Fins/In. \_\_\_\_\_
    - d. O.D. of Tube \_\_\_\_\_ In.
    - e. Fin Thickness \_\_\_\_\_ In.
  6. Condenser Fan
    - a. Manufacturer & Model \_\_\_\_\_
    - b. Fan Diameter \_\_\_\_\_ In.
    - c. Speed Maximum \_\_\_\_\_ RPM
    - d. Flow Rate (maximum) \_\_\_\_\_ CFM
  7. Receiver
    - a. Manufacturer & Model \_\_\_\_\_
    - b. Capacity \_\_\_\_\_ Lbs.
  8. Condenser Fan Drive Motors
    - a. Manufacturer \_\_\_\_\_
    - b. Model \_\_\_\_\_
    - c. Type \_\_\_\_\_
    - d. Horse Power \_\_\_\_\_ HP
    - e. Operating Speed \_\_\_\_\_ r.p.m.
  9. Evaporator Fan Drive Motors
    - a. Manufacturer \_\_\_\_\_
    - b. Model \_\_\_\_\_
    - c. Type \_\_\_\_\_
    - d. Horse Power \_\_\_\_\_ HP
    - e. Operating Speed \_\_\_\_\_ r.p.m.
  10. Evaporator(s)
    - a. Manufacturer & Model \_\_\_\_\_
    - b. Number of Rows \_\_\_\_\_
    - c. No. of Fins/In. \_\_\_\_\_
    - d. Outer Diameter of Tube \_\_\_\_\_ In.
    - e. Fin Thickness \_\_\_\_\_ In.
    - f. Number of Evaporator \_\_\_\_\_
  11. Expansion Valve
    - Manufacturer & Model \_\_\_\_\_
  13. Filter-Drier
    - Manufacturer & Model \_\_\_\_\_
  14. Heater Cores
    - a. Manufacturer & Model \_\_\_\_\_
    - b. Capacity \_\_\_\_\_ B.T.U.
    - c. Number of Rows \_\_\_\_\_

- d. Number of Fins/In. \_\_\_\_\_
- e. Outer Diameter of Tube \_\_\_\_\_ In.
- f. Fin Thickness \_\_\_\_\_ In.
- g. Number of Heater Cores \_\_\_\_\_
- 15. Floor Heater Blowers
  - a. Heater Blower Motors
    - 1) Manufacturer & Model \_\_\_\_\_
    - 2) Horsepower \_\_\_\_\_ HP
    - 3) Speed(s) \_\_\_\_\_ r.p.m.
  - b. Heater Blower Wheel
    - Manufacturer & Model \_\_\_\_\_
    - Capacity \_\_\_\_\_ cfm
  - c. Cores
    - Manufacturer & Model \_\_\_\_\_
    - Capacity \_\_\_\_\_ B.T.U.
    - Number of Rows \_\_\_\_\_
    - Number of Fins/In. \_\_\_\_\_ Fins
    - Outer Diameter of Tube \_\_\_\_\_ In.
    - Fin Thickness \_\_\_\_\_ In.
    - Number of Heater Cores \_\_\_\_\_
- 16. Controls
  - a. Manufacturer & Model \_\_\_\_\_
  - b. Type \_\_\_\_\_
- 17. Driver's Heater
  - a. Manufacturer \_\_\_\_\_
  - b. Model No. \_\_\_\_\_
  - c. Capacity \_\_\_\_\_ B.T.U.
- 18. Ventilation System
  - Type \_\_\_\_\_
- 19. Coolant Heater
  - Make & Model \_\_\_\_\_
  - Capacity(B.T.U) \_\_\_\_\_

- V. INTERIOR LIGHTING
  - 1. Manufacturer \_\_\_\_\_
  - 2. Type \_\_\_\_\_
  - 3. Number of Fixtures \_\_\_\_\_
  - 4. Size of Fixtures \_\_\_\_\_
  - 5. Power Pack \_\_\_\_\_

- W. DOORS
  - 1. Front
    - a. Manufacturer of Operating Equipment \_\_\_\_\_
    - b. Type of Door \_\_\_\_\_
    - c. Type of Operating Equipment \_\_\_\_\_
  - 2. Rear
    - a. Manufacturer of Operating Equipment \_\_\_\_\_
    - b. Type door \_\_\_\_\_
    - c. Type of Operating Equipment \_\_\_\_\_

- X. PASSENGER WINDOWS
1. Manufacturer \_\_\_\_\_
  1. Model  \_\_\_\_\_
  2. Type \_\_\_\_\_
  3. Number: (Side) \_\_\_\_\_  
(Rear) \_\_\_\_\_
  4. Sizes: \_\_\_\_\_
  5. Glazing: Type \_\_\_\_\_  
Thickness \_\_\_\_\_  
Color of Tint \_\_\_\_\_  
Light Transmission \_\_\_\_\_

Y. MIRRORS

	<u>Size</u>	<u>Type</u>	<u>Manufacturer</u>	<u>Mfg. Part #</u>	<u>Model No.</u>
Right Side Exterior	_____	_____	_____	_____	_____
Left Side Exterior	_____	_____	_____	_____	_____
Center Rearview	_____	_____	_____	_____	_____
Front Entrance Area	_____	_____	_____	_____	_____
Upper-Right Hand Corner	_____	_____	_____	_____	_____
Rear Exit Area	_____	_____	_____	_____	_____

- Z. SEATS
1. Manufacturer \_\_\_\_\_
  2. Model  \_\_\_\_\_
  3. Type \_\_\_\_\_

- AA. PAINT
- Manufacturer \_\_\_\_\_
- Type \_\_\_\_\_

- BB. WHEELCHAIR RAMP EQUIPMENT
1. Manufacturer & Model No. \_\_\_\_\_
  2. Type \_\_\_\_\_
  3. Capacity \_\_\_\_\_ Lbs.
  4. Dimensions
    - a. Width of Platform \_\_\_\_\_ In.
    - b. Length of Platform \_\_\_\_\_ In.
  5. System Fluid Capacity \_\_\_\_\_ Qts.
  6. Type Fluid Used \_\_\_\_\_
  7. Operating Hydraulic Pressure \_\_\_\_\_
  8. Hydraulic Cylinders \_\_\_\_\_ psi
    - A) Size \_\_\_\_\_
    - B) Number \_\_\_\_\_

- CC. WHEELCHAIR SECUREMENT EQUIPMENT
1. Manufacturer & Model No. \_\_\_\_\_

- DD. DESTINATION SIGNS
1. Manufacturer \_\_\_\_\_
  2. Type \_\_\_\_\_
  3. Character Length
    - Front Destination \_\_\_\_\_ In.
    - Street Side Route \_\_\_\_\_ In.
    - Curb Side Destination \_\_\_\_\_ In.
    - Rear Route \_\_\_\_\_ In.

- 4. Character Height
  - Front Destination \_\_\_\_\_ In.
  - Street Side Route \_\_\_\_\_ In.
  - Curb Side Destination \_\_\_\_\_ In.
  - Rear Route \_\_\_\_\_ In.
- 5. Number of Characters
  - Front Destination \_\_\_\_\_ In.
  - Street Side Route \_\_\_\_\_ In.
  - Curb Side Destination \_\_\_\_\_ In.
  - Rear Route \_\_\_\_\_ In.
  - Rear \_\_\_\_\_ In.
- 6. Message Width
  - Front Destination \_\_\_\_\_ In.
  - Street Side Route \_\_\_\_\_ In.
  - Curb Side Destination \_\_\_\_\_ In.
  - Rear Route \_\_\_\_\_ In.

EE. ELECTRICAL

- 1. Multiplex System
  - a. Manufacturer \_\_\_\_\_
  - b. Model No. \_\_\_\_\_
- 2. Batteries
  - a. Manufacturer \_\_\_\_\_
  - b. Model No. \_\_\_\_\_
  - c. Type \_\_\_\_\_

FF. PASSENGER INTERIOR LIGHTING

Manufacturer \_\_\_\_\_  
 Model No. \_\_\_\_\_

GG. COMMUNICATION SYSTEM

- 1. GPS
  - a. Manufacturer \_\_\_\_\_ N/A
  - b. Model No. \_\_\_\_\_ N/A
- 2. P.A. System
 

	<u>Manufacturer</u>	<u>Model No.</u>	
a. Amplifier	N/A	N/A	
b. Microphone	_____	_____	
c. Int. Speakers	_____	_____	(number ____)
d. Ext. Speaker	_____	_____	(number ____)

HH. ENERGY STORAGE ( Hybrid Drive)

- 1. Type \_\_\_\_\_
- 2. Number of cells \_\_\_\_\_
- 3. Voltage per cell \_\_\_\_\_ V
- 4. Battery pack voltage \_\_\_\_\_ V
- 5. Weight \_\_\_\_\_ lbs.



\_\_\_\_\_  
Name of Manufacturer (if different from Proposer)

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State, Zip

Telephone Number \_\_\_\_\_ Fax Number \_\_\_\_\_

By: \_\_\_\_\_  
Signature \_\_\_\_\_ Print Name \_\_\_\_\_

Title: \_\_\_\_\_

**Part II**  
**BASE QUANTITY PRICE PROPOSAL – BUSES**

Contract MB 06-2, 60 FT HYBRID AND STANDARD DRIVE MOTOR BUSES

Name of Proposer: \_\_\_\_\_

Bus Model (Hybrid): \_\_\_\_\_

Bus Model (Standard): \_\_\_\_\_

Proposers are advised to fill in all spaces, using figures and "NA" to indicate spaces that are deliberately not filled in:

**PROPOSED PRICES**

Prices shall be based upon payment terms per Section B7.02. All bus prices include delivery.

Hybrid Drive Buses

A1.	Bus including delivery	\$ _____	X 20	\$ _____
A2.	Washington State Sales Tax @ 9.2%	\$ _____	X 20	\$ _____
A3.	Total	\$ _____		\$ _____

Standard Drive Buses

A4.	Bus including delivery	\$ _____	X 20	\$ _____
A5.	Washington State Sales Tax @ 9.2%	\$ _____	X 20	\$ _____
A6.	Total	\$ _____		\$ _____

**Part III  
 BUS QUANTITY OPTION AND OPTIONAL EQUIPMENT PRICE PROPOSAL  
 MANDATORY OPTIONS**

Proposers shall complete this section as a mandatory option under Section A6.03.03. All bus prices include delivery.

**1. Variation in Quantity, Hybrid Drive Buses, Initial order only**

	Unit Price	WA State Sales Tax	Total
1.a Up to 50% Less	\$ _____	\$ _____	\$ _____
1.b Up to 100% More	\$ _____	\$ _____	\$ _____

**2. Variation in Quantity, Standard Drive Buses, Initial order only**

	Unit Price	WA State Sales Tax	Total
2.a Up to 50% Less	\$ _____	\$ _____	\$ _____
2.b Up to 100% More	\$ _____	\$ _____	\$ _____

**3. Fareboxes, per C9.01, installed**

\$ \_\_\_\_\_ per farebox  
 \$ \_\_\_\_\_ WA State sales tax  
 \$ \_\_\_\_\_ Total

**4. Cash boxes, per C9.02**

\$ \_\_\_\_\_ per cash box  
 \$ \_\_\_\_\_ WA State sales tax  
 \$ \_\_\_\_\_ Total

**5 Revised Styling Features, per C9.03**

\$ \_\_\_\_\_ per bus  
 \$ \_\_\_\_\_ WA State sales tax  
 \$ \_\_\_\_\_ Total per bus

**6. Advanced Styling Features, per C9.04**

6.a Advanced Styling Features, per C9.04.01

\$ \_\_\_\_\_ per bus  
 \$ \_\_\_\_\_ WA State sales tax  
 \$ \_\_\_\_\_ Total per bus

6.b Bridge Plate, per C9.04.02

\$ \_\_\_\_\_ per bridge plate

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bridge plate

**7. Revised and Advanced Options, per C9.05**

7.a Flush-appearing Side Windows, per C9.05.01

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

7.b Rear Door Wheelchair Ramp, per C9.05.02

\$ \_\_\_\_\_ per ramp

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per ramp

7.c Streetside Doorways, per C9.05.03

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

7.d Streetside Destination Signs, per C9.05.04

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

7.e Inside Bike Storage, per C9.05.05

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

7.f Third Doorway, per C9.05.06

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**8. Seat and Upholstery Options, per C9.06**

**8.a High Back Seats, per C9.06.01**

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**8.b Low Back Seats, per C9.06.02**

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**8.c Cloth Upholstery, per C9.06.03**

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**9. Alternate Engine, per C9.07**

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**10. Alternate Transmission, per C9.08**

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**11. Adjustable Pedals, per C9.09**

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**12. Alternate Driver's Microphone, per C9.10**

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**13. Vapor "Class" System, per C9.11**

\$ \_\_\_\_\_ per doorway

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per doorway

**14. Provision for an Additional "Smart Card" Reader, per C9.12**

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**15. Alternate Flooring, per C9.13**

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**16. Rear Door Surveillance, per C9.14**

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**17. Inside Sign Wiring, per C9.15**

\$ \_\_\_\_\_ per bus

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total per bus

**18a. Maintenance Manuals and Parts Books, per C9.16.01**

\$ \_\_\_\_\_

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total

**18b. Drawing Reproducibles, per C9.16.02**

\$ \_\_\_\_\_

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total

**18c. Operating Manual, per C9.16.03**

\$ \_\_\_\_\_

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total

**18d. Vehicle Maintenance Training, per C9.16.04**

\$ \_\_\_\_\_

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total

**18e. Operator Training, per C9.16.05**

\$ \_\_\_\_\_

\$ \_\_\_\_\_ WA State sales tax

\$ \_\_\_\_\_ Total

**PART IV  
OPTIONAL EQUIPMENT PRICE PROPOSAL**

**NON-MANDATORY OPTIONS**

**20. Electrically-driven Accessories, per C9.20**

\$ \_\_\_\_\_ per bus  
\$ \_\_\_\_\_ WA State sales tax  
\$ \_\_\_\_\_ Total per bus

**21. Air Disc Brakes, per C9.21**

\$ \_\_\_\_\_ per bus  
\$ \_\_\_\_\_ WA State sales tax  
\$ \_\_\_\_\_ Total per bus

**22. Alternate Hybrid Drive System, per C9.22**

\$ \_\_\_\_\_ per bus  
\$ \_\_\_\_\_ WA State sales tax  
\$ \_\_\_\_\_ Total per bus

**PART V  
PRICE PROPOSAL**

**DELIVERY SCHEDULE**

Proposers shall propose delivery dates in compliance with Section A6.03.05:

A. Proposed delivery date of prototype 60 ft hybrid or standard drive bus: \_\_\_\_\_

B 1. Proposed delivery date of first production bus in first delivery group: \_\_\_\_\_

B 2. Proposed delivery date of last production bus in first  
delivery group: \_\_\_\_\_

C. Maximum and minimum number of buses to be delivered in any week.

Maximum: \_\_\_\_\_

Minimum: \_\_\_\_\_

**EA6.04  
PROPOSAL GUARANTY BOND**

KNOW ALL BY THESE PRESENTS:

THAT \_\_\_\_\_, hereinafter called the Principal, and \_\_\_\_\_, hereinafter called the Surety, are jointly and severally held and firmly bound unto the King County Department of Transportation, Transit Division (County), hereinafter called the Obligee, each in the penal sum of one hundred thousand dollars (\$100,000) of lawful money of the United States for the payment whereof unto the Obligee, the Principal and Surety jointly and severally bind themselves forever firmly by these presents.

WHEREAS, the Principal is herewith submitting its Proposal for the fulfillment of King County Contract MB 06-2 for MANUFACTURE AND DELIVERY OF 60 FT HYBRID AND STANDARD DRIVE MOTOR BUSES.

NOW THEREFORE, the condition of this obligation is such that if the Principal is awarded the contract, and if the Principal within the time specified in the Proposal for such contract, fulfills all requirements which are conditions precedent to formation of the contract, enters into, executes and delivers to the Obligee an agreement in the form provided herein complete with evidences of insurance, and if the Principal, within the time specified in the Proposal, gives to the Obligee the performance and payment bond on the form provided herein, then this obligation shall be void; otherwise, the Principal and Surety will pay unto the Obligee both the difference in money between the total amount of the Proposal of the Principal and the amount for which the Obligee legally contracts with another party to fulfill the contract if the latter amount be in excess of the former, and reimbursement of any other damages, costs, expenses or fees incurred by the Obligee resulting from said failures of the Principal; but in no event shall the Surety's liability exceed the penal sum hereof.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable under this obligation as Principal, and that nothing of any kind or nature whatsoever that will not discharge the Principal shall operate as a discharge or a release of liability of the Surety.

AND IT IS HEREBY FURTHER DECLARED AND AGREED that this obligation shall be binding upon and inure to the benefit of the Principal, and Surety and the Obligee and their respective heirs, executors, administrators, successors and assigns.

SIGNED AND SEALED THIS \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

Principal: \_\_\_\_\_ Surety: \_\_\_\_\_

By:: \_\_\_\_\_ By: \_\_\_\_\_

Title: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_ Address: \_\_\_\_\_

City/Zip: \_\_\_\_\_ City/Zip: \_\_\_\_\_

Telephone: (\_\_\_\_\_) \_\_\_\_\_ Telephone: (\_\_\_\_\_) \_\_\_\_\_

Note: A power of attorney must be provided which appoints the Surety's true and lawful attorney-in-fact to make, excute, seal and deliver this Proposal guaranty bond.

**EA6.08.03  
CERTIFICATE OF CURRENT COST AND PRICING DATA**

**(Put the following on vehicle manufacturer's letterhead, and  
have it signed by the CFO or VP of Sales.)**

This is to certify that, to the best of my knowledge and belief, the cost and pricing data submitted to the County, either actually or by specific identification in writing, to the County's cost/price analyst in support of my firm's proposal in response to the County RFP MB 06-2 are accurate, complete, and current as of (enter date price negotiations were concluded or a mutually-agreed upon date as close to date of price negotiation as possible).

Firm \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Date of execution \_\_\_\_\_

**EB5.01  
CONTRACT AGREEMENT  
Page 1 of 2**

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, is by and between King County, a home rule charter county of the State of Washington, hereinafter called 'the County' and

\_\_\_\_\_,  
hereinafter called the 'Contractor'.

WITNESSETH:

WHEREAS, the County has caused specifications, drawings, and other contract documents to be prepared for certain work as described therein, Contract MB 06-2, MANUFACTURE AND DELIVERY OF 60 FT HYBRID AND STANDARD DRIVE MOTOR BUSES ; and

WHEREAS, the Contractor has offered to perform the proposed work in accordance with the terms of the Contract;

NOW, THEREFORE, in consideration of the mutual covenants and agreements of the parties herein contained and to be performed, the Contractor hereby agrees to complete the work at the prices and on the terms and conditions herein contained, and the County agrees to pay the Contractor the contract prices provided herein for the fulfillment of the work and the performance of the covenants set forth herein.

The number of buses to be furnished, the optional equipment to be provided on each bus, and the total contract price, computed from the Best and Final Offer of the Contractor, shall be as follows:

A base quantity of \_\_\_\_\_ buses with the following optional equipment: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_, for a Total

Contract Price of \$ \_\_\_\_\_ for all

buses, subject to any adjustment by the County after selection of options for variations in quantity.

The County may order additional buses per sections A6.03.08, B5.02.01, and B7.12 as part of this multi-year procurement.

The further terms, conditions and covenants of the contract are set forth in the following exhibit parts, each of which is attached hereto and by this reference made a part hereof:

1. Section A - Legal and Procedural Requirements for Proposers
2. Section B - Legal and Procedural Post-Award Contract Requirements
3. Section C - Technical Specifications
4. Section D - Addenda
5. Section E - Forms
6. The Proposal or Best and Final Offer, as applicable, of the Contractor including all attachments complying precisely with the technical specifications.

IN WITNESS WHEREOF, this agreement has been executed in duplicate this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_.

KING COUNTY

BY: \_\_\_\_\_  
Director

APPROVED AS TO FORM: \_\_\_\_\_  
Deputy Prosecuting Attorney

CONTRACTOR

BY: \_\_\_\_\_

ITS: \_\_\_\_\_

State of \_\_\_\_\_

County of \_\_\_\_\_

I certify that I know or have satisfactory evidence that \_\_\_\_\_ is the person who appeared before me, and said person acknowledged that he/she signed this instrument, on oath stated that he/she was authorized to execute the instrument and acknowledged it as the \_\_\_\_\_ of \_\_\_\_\_ to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: \_\_\_\_\_  
Signature

(Seal or Stamp) \_\_\_\_\_  
Title

My appointment expires \_\_\_\_\_

**EB5.02**  
**PERFORMANCE AND PAYMENT BOND**  
Page 1 of 2

KNOW ALL BY THESE PRESENTS: That we, \_\_\_\_\_,  
as Principal, and \_\_\_\_\_,  
as Surety, are held and firmly bound unto the King County Department of Transportation, ("County"), in the full sum of  
Five thousand (\$5,000), per bus on order, lawful money of the United States, for the payment of which, well and truly  
to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally,  
firmly by these presents.

WHEREAS, the conditions of this obligation are such that the Principal has entered or will enter into an  
Agreement with the County for Contract MB 06-2, MANUFACTURE AND DELIVERY OF 60 FT HYBRID  
AND STANDARD DRIVE MOTOR BUSES, and the terms, conditions and covenants specified in said  
Agreement, including all of the Contract Documents, as amended and modified, therein referred to, are  
hereby referred to and made a part hereof as fully and completely as though set forth in detail herein;

NOW, THEREFORE, if the Principal shall faithfully perform all the provisions and requirements of the  
Agreement, including all of the Contract Documents, according to the terms and conditions thereof and  
shall hold the County harmless from any loss or damage to any person or property as required in the  
Contract Documents and shall pay all laborers, mechanics, subcontractors and materialmen and all  
persons who shall supply such person or persons or subcontractors with provisions and supplies for the  
carrying on of such work, and shall pay the State of Washington all amounts due pursuant to the applicable  
Washington State laws and regulations and shall further indemnify and save harmless the County from any  
defect or defects in any of the workmanship on materials entering into any part of such work as defined in  
the Agreement, then this obligation shall be null and void; otherwise this obligation shall remain in full force  
and effect, and the County shall have the right to sue on this bond for any breach of the Agreement or this  
bond.

**EB5.02**  
**PERFORMANCE AND PAYMENT BOND**  
**Page 2 of 2**

IT IS FURTHER DECLARED AND AGREED that, except as otherwise provided herein, the full sum of this bond shall remain in full force and effect from the execution of the bond until the County issues written notice of acceptance of the last bus to be delivered under the Agreement.

IT IS FURTHER DECLARED AND AGREED that nothing of any kind or nature whatsoever that will not discharge the Principal shall operate as a discharge or a release of liability of the Surety, any law, rule of equity or usage relating to the liability of sureties to the contrary notwithstanding, and the Surety waives notice of any alteration, or extension of time, made by the County and agrees that it, the Surety, shall be bound in all ways to the County for any such alterations or extensions of time as if it had received notice of the same.

SIGNED AND SEALED THIS \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

Principal: _____	Surety: _____
By: _____	By: _____
Title: _____	Title: _____
Address: _____	Address: _____
City/Zip: _____	City/Zip: _____
Telephone: _____	Telephone: _____

Note: A power of attorney must be provided which appoints the Surety's true and lawful attorney-in-fact to make, execute, seal and deliver this Performance and Payment bond.



CONTRACT CHANGE ORDER PROPOSAL PRICING FORM E-4

NAME OF OFFEROR		SUPPLIES AND/OR SERVICES TO BE FURNISHED			
HOME OFFICE ADDRESS (including Zip Code)					
DIVISION(S) AND LOCATIONS(S) WHERE WORK IS TO BE PERFORMED		TOTAL AMOUNT OF PROPOSAL		SOLICITATION NO.	
<b>DETAILED DESCRIPTION OF COST ELEMENTS</b>					
1. DIRECT MATERIAL (attach itemized schedule)		EST. COST		TOTAL EST. COST	
a. PURCHASED PARTS					
b. SUBCONTRACTED ITEMS					
c. OTHER - (1) RAW MATERIAL					
(2) YOUR STANDARD COMMERCIAL ITEMS					
(3) INTERDIVISIONAL TRANSFER (At other than cost)					
TOTAL DIRECT MATERIAL					
2. MATERIAL OVERHEAD (RATE % X \$ BASE)					
3. DIRECT LABOR (Specify by job classification)		ESTIMATED HOURS	HOURLY RATE	EST. COST	
TOTAL DIRECT LABOR					
4. LABOR OVERHEAD (Specify department or cost center)		O.H.RATE	XBASE=	EST.COST	
TOTAL LABOR OVERHEAD					
5. SPECIAL TESTING				EST.COST	
TOTAL SPECIAL TESTING					
6. SPECIAL EQUIPMENT (if direct charge) (attach itemized schedule)					
7. TRAVEL (if direct charge) (attach itemized schedule)				EST.COST	
a. TRANSPORTATION					
b. PER DIEM OR SUBSISTENCE					
TOTAL TRAVEL					
8. CONSULTANTS (Identify--purpose--rate) (attach itemized schedule)				EST.COST	
TOTAL CONSULTANTS					
9. OTHER DIRECT COSTS (attach itemized schedule)					
10. TOTAL DIRECT COST AND OVERHEAD					
11. GENERAL AND ADMINISTRATIVE EXPENSE (Rate % of cost element Nos. )					
12. ROYALTIES					
13. TOTAL ESTIMATED COST					
14. FEE OR PROFIT					
15. CUSTOMS OR DUTIES					
16. TOTAL ESTIMATED COST AND FEE OR PROFIT					
This proposal is submitted for use in connection with and in response to (Describe R.F.P. etc.)					
and reflects our best estimates as of this date, in accordance with the instructions to offerors.					
TYPED NAME AND TITLE			SIGNATURE		
NAME OF FIRM			DATE OF SUBMISSION		

**E5 – Escrow Agreement**

**RETAINAGE FORMS**

Pursuant to the General Terms and Conditions of this Contract, the selected Bidder must complete and submit Attachment 1, Retained Percentage Option, prior to execution of the Agreement for this Contract.

If the selected Bidder chooses either Option 2 or Option 3 on Attachment 1, then the firm must also execute in quadruplicate Attachment 2, Escrow / Interest Bearing Account Agreement, in accordance with the Contract Documents.



**ATTACHMENT 2  
ESCROW / INTEREST BEARING ACCOUNT AGREEMENT**

Public Body: King County

Contract No.:

Project Name:

Estimated Contract Completion Date: \_\_\_\_\_

Escrow/Interest Bearing Account No.: \_\_\_\_\_

TO: \_\_\_\_\_

ESCROW AGENT/INTEREST BEARING DEPOSITORY, located at

\_\_\_\_\_:

This Agreement is for the investment, or retention in an interest bearing account, of the retained percentages of the above referenced project and contract number ("Contract") in accordance with RCW chapter 60.28, now and as hereafter amended.

\_\_\_\_\_, hereinafter referred to as the Contractor, has directed King County, hereinafter referred to as the County, to deliver to you retainage warrants, checks, or drafts which shall be payable to you and the Contractor jointly. Such warrants, checks or drafts are to be held and disposed of by you in accordance with the following instructions and upon the terms and conditions hereinafter set forth.

**INSTRUCTIONS**

The Contractor has chosen you, and the County has agreed to your selection, to act as an

**ESCROW AGENT      INTEREST BEARING ACCOUNT DEPOSITORY      (circle one) .**

\_\_\_\_\_ (Contractor sign here to acknowledge selection).

If selected as an INTEREST BEARING ACCOUNT depository, in accordance with RCW 60.28.011, the depository shall be either a bank, mutual savings bank, or savings and loan association, authorized and doing business in the State of Washington.

If selected as an Escrow Agent, instructions 1 through 14 apply. If selected as an Interest Bearing Account Depository, instructions 15 through 24 apply.

**INSTRUCTIONS TO ESCROW AGENT**

1. Upon delivery to you, warrants, checks or drafts made payable to you and the Contractor jointly shall be endorsed by you and forwarded for collection. The moneys from all such warrants, checks, or drafts received hereunder, shall be used by you to purchase bonds or other securities selected by the Contractor and approved by the County. For the purpose of each such purchase, you may follow the last written direction received by you from the Contractor, provided said direction otherwise conforms with the restrictions on investments recited herein. Attached, as Exhibit A to this Agreement and incorporated herein as if fully set forth, is a list of such bonds or other securities approved by the County. The Contractor, subject to express prior written approval of the County, may select other bonds or securities not on this list, except stocks.
  
2. The Contractor has selected \_\_\_\_\_ as its designated investment selection from the pre-approved list attached as Exhibit A. You must purchase investments from that category, unless the County is given prior written notice identifying the other approved, listed security

replacing the prior selected investment vehicle. All investments purchased pursuant to this Agreement must mature on or prior to the date for the completion of the Contract, including any extensions thereof.

3. When and as interest on the securities held by you pursuant to this Agreement accrues and is paid, you shall collect such interest and forward it to the Contractor at its address designated below unless otherwise directed by the Contractor.
4. You are not authorized to deliver to the Contractor all or any part of the securities held by you pursuant to this Agreement (or any moneys derived from the sale of such securities or the negotiation of the County's warrants) except in accordance with the written instructions of the County, or by order of a court of competent jurisdiction. Compliance with such instructions or with a court order shall relieve you of any further liability related thereto.
5. In the event the County orders you to do so in writing, you shall, within thirty-five (35) days of receipt of such order, reconvert into money the securities held by you pursuant to this Agreement and return such money together with any other moneys held by you, hereunder, to the County.
6. The Contractor agrees to pay you for your services hereunder compensation in accordance with your published schedule of escrow fees. Payment of all fees shall be the sole responsibility of the Contractor and shall not be deducted from any property placed with you pursuant to this Agreement until and unless the County directs the release to the Contractor of the securities and moneys held hereunder whereupon you shall be granted a first lien upon such property released and shall be entitled to reimburse yourself from such property for the entire amount of your fees as provided for herein above. In the event that you are made a party to any litigation with respect to the property held by you hereunder, or in the event that the conditions of this escrow are not promptly fulfilled or that you are required to render any service not provided for in these instructions, or that there is any assignment of the interests of this escrow or any modification hereof, you shall be entitled to reasonable compensation for such extraordinary services from the Contractor and reimbursement from the Contractor for all costs and expenses, including attorney fees occasioned by such default, delay, controversy or litigation.
7. As Escrow Agent, you may resign on ten (10) days notice to the Contractor and the County. Contractor and/or County may remove you on ten (10) days notice to all parties hereunder. Upon receipt of such notice, County and Contractor shall appoint a successor Escrow Agent in writing delivered to you. Thereupon, you shall deliver all assets in your custody to such successor escrow agent and all of your responsibilities as Escrow Agent under this Agreement shall terminate; provided, however, your obligations under this Agreement shall not terminate until delivery of the assets to the successor escrow agent. If the parties fail to appoint a successor escrow agent, you shall deliver all assets in your custody as both the Contractor and the County shall instruct in writing or, in the absence of such joint instruction, interplead the property into a Court of competent jurisdiction.
8. As the Escrow Agent, you may consult with independent legal counsel in the event of any dispute or questions as to the construction of any of the provisions hereof or its duties hereunder and it shall incur no liability and shall be fully protected in acting in accordance with the opinion and instructions of such counsel. You shall notify the Contractor and the County when you intend to consult with such independent legal counsel. You shall have the right to file legal proceedings, including interpleader to determine the proper disposition of assets hereunder, all costs thereof constituting an expense of administration of this Agreement.
9. The Contractor agrees to indemnify and hold you as Escrow Agent, your officers, directors, employees and agents (collectively "Indemnified Parties") harmless from all loss, cost, damages, expenses, liabilities, judgments and attorneys' fees (including without limitation allocated costs of in-house counsel) suffered or incurred by the Indemnified Parties or any of them arising out of or in connection with this Agreement, except that this indemnity obligation shall not apply in the event of the gross negligence or willful misconduct of the Indemnified Parties or any of them. This indemnity obligation shall survive termination of this Agreement.
10. You shall not be responsible for the sufficiency of the form, execution, validity or genuineness of documents or securities now or hereafter deposited hereunder, or of any endorsement thereon, or for any lack of endorsement thereon, or for any description therein, nor shall you be responsible or liable in any respect on account of the identity, authority, or rights of the persons executing or delivering or purporting to execute or deliver any such document, security or endorsement.
11. Your duties and responsibilities as the Escrow Agent shall be limited to those expressly set forth in this Escrow Agreement; provided, however, that with your written consent, the duties and responsibilities in this Escrow Agreement may be amended at any time or times by an instrument in writing signed by the other parties. With the

exception of this Agreement, you are not responsible for, or chargeable with knowledge of, any terms or provisions contained in either the underlying Contract referred to in this Agreement or any other separate agreements and understanding between the parties. The Escrow Agent shall not be liable for the accuracy of any calculations or the sufficiency of any funds for any purpose. The Escrow Agent shall not have any liability under this Escrow Agreement except to the extent of its own gross negligence or willful misconduct. In no event shall the Escrow Agent be liable for any special, indirect or consequential damages.

You are authorized, in your sole discretion as Escrow Agent, to disregard any and all notices or instructions given by the Contractor or the County or by any other person, firm or corporation, except such notices or instructions as are specifically provided for herein.

12. This Agreement shall not be binding until executed by the Contractor and the County, and accepted by you.

13. This instrument contains the entire Agreement between you, the Contractor, and the County with respect to this escrow and you are not a party to nor bound by any instrument or agreement other than this. You shall not be required to take notice of any default or any other matter, nor be bound by nor required to give notice or demand, nor required to take any action whatever except as herein expressly provided. You shall not be liable for any loss or damage not caused by your own negligence or willful misconduct.

14. The foregoing provisions shall be binding upon the assigns, successors, personal representatives and heirs of the parties hereto.

#### INTEREST BEARING ACCOUNT INSTRUCTIONS

15. Upon delivery to you, warrants, checks or drafts made payable to you and the Contractor jointly shall be endorsed by you and forwarded for collection. The moneys from all such warrants, checks, or drafts received hereunder shall be deposited by you in an interest bearing account in your institution, as more fully described in Exhibit B to this Agreement. Statements for the account shall be provided both to the County and the Contractor at the addresses listed below. Statement shall reference both the Project Name and Contract Number.

16. The Contractor is not authorized to withdraw all or any part of the moneys deposited with you pursuant to this Agreement except in accordance with the written instructions of the County, or by order of a court of competent jurisdiction. Compliance with such instructions or with a court order shall relieve you of any further liability related thereto.

17. In the event the County orders you to do so in writing, you shall withdraw the moneys deposited with you from the interest bearing account and return such moneys, together with any other money held by you in that interest bearing account, to the County in accordance with the County's written instructions. The person signing this Agreement on behalf of the County and the King County Director of the Department of Finance shall be the co-signators on the interest bearing account. It will require the signatures of both to withdraw funds from the interest bearing account.

18. If there are any fees charged by you for services provided hereunder, the Contractor agrees to pay you. Payment of all fees shall be the sole responsibility of the Contractor and shall not be deducted from any moneys deposited with you pursuant to this Agreement until and unless the County directs the release to the Contractor of the moneys deposited hereunder whereupon you shall be granted a first lien upon such moneys released and shall be entitled to reimburse yourself from such moneys for the entire amount of your fees as provided for herein above. In the event that you are made a party to any litigation with respect to the moneys deposited by you hereunder, or in the event that the conditions of this Agreement are not promptly fulfilled or that you are required to render any service not provided for in these instructions, or that there is any assignment of the interests of this Agreement or any modification hereof, you shall be entitled to reasonable compensation for such extraordinary services from the Contractor and reimbursement from the Contractor for all costs and expenses, including attorney fees occasioned by such default, delay, controversy or litigation.

19. As the selected depository, you may consult with independent legal counsel in the event of any dispute or questions as to the construction of any of the provisions hereof or your duties hereunder and shall incur no liability and shall be fully protected in acting in accordance with the opinion and instructions of such counsel. You shall notify the Contractor and the County when it intends to consult with such independent legal counsel. You shall have the right to file legal proceedings, including interpleader to determine the proper disposition of assets hereunder, all costs thereof constituting an expense of administration of this Agreement.

20. The Contractor agrees to indemnify and hold you as the selected depository, your officers, directors, employees and agents (collectively "Indemnified Parties") harmless from all loss, cost, damages, expenses, liabilities, judgments and attorneys' fees (including without limitation allocated costs of in-house counsel) suffered or incurred by the Indemnified Parties or any of them arising out of or in connection with this Agreement, except that this indemnity obligation shall not apply in the event of the gross negligence or willful misconduct of the Indemnified Parties or any of them. This indemnity obligation shall survive termination of this Agreement.

21. Your duties and responsibilities as the selected depository shall be limited to those expressly set forth in this Agreement; provided, however, that with your written consent, the duties and responsibilities in this Agreement may be amended at any time or times by an instrument in writing signed by the County and the Contractor. With the exception of this Agreement, you are not responsible for, or chargeable with knowledge of, any terms or provisions contained in either the underlying Contract referred to in this Agreement or any other separate agreements and understanding between the parties. You shall not be liable for the accuracy of any calculations or the sufficiency of any funds for any purpose. As the selected depository, you shall not have any liability under this Agreement except to the extent of its own gross negligence or willful misconduct. In no event shall you as the selected depository be liable for any special, indirect or consequential damages.

You are authorized, in your sole discretion as the selected depository, to disregard any and all notices or instructions given by the Contractor or the County or by any other person, firm or corporation, except such notices or instructions as are specifically provided for herein.

22. This Agreement shall not be binding until executed by the Contractor and the County, and accepted by you.

23. This instrument contains the entire Agreement between you, the Contractor, and the County with respect to the interest bearing account and you are not a party to nor bound by any instrument or agreement other than this. You shall not be required to take notice of any default or any other matter, nor be bound by nor required to give notice or demand, nor required to take any action whatever except as herein expressly provided. You shall not be liable for any loss or damage not caused by your own negligence or willful misconduct.

24. The foregoing provisions shall be binding upon the assigns, successors, personal representatives and heirs of the parties hereto.

The undersigned have read and hereby approve the instructions as given above governing the administration of this escrow or, if applicable interest bearing account, and do hereby execute this Agreement.

\_\_\_\_\_  
(Contractor)

King County

\_\_\_\_\_  
(Tax Identification No.)

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Date signed: \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

attn: \_\_\_\_\_

attn: \_\_\_\_\_

The above escrow interest bearing account (circle one) instructions received and accepted this \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Escrow Agent/ Depository

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name and title of signator

Exhibit A to Attachment 2  
USE ONLY IF CHOOSING THE ESCROW AGENT OPTION

BONDS AND SECURITIES ACCEPTABLE  
BY KING COUNTY

- Bills, certificates, notes or bonds of the United States
- Other obligations of the United States or its agencies
- Indebtedness of the Federal National Mortgage Association
- Time deposits in commercial banks
- Municipal bonds (municipal bonds rated A or better by Moody's or Standard and Poor's)

DESIGNATE BELOW THE TYPE OF INVESTMENTS SELECTED

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Exhibit B to Attachment 2  
USE ONLY IF CHOOSING THE INTEREST BEARING ACCOUNT OPTION

Account No.: \_\_\_\_\_

Branch name and address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Type of Interest Bearing Account: \_\_\_\_\_

\_\_\_\_\_



**CERTIFICATION REGARDING DEBARMENT, SUSPENSION  
AND OTHER RESPONSIBILITY MATTERS -  
PRIMARY COVERED TRANSACTIONS**

Federal Transit Administration (FTA)

The prospective Primary Participant (potential contractor for a major third-party contract),  
\_\_\_\_\_certifies to the best of its knowledge and belief, that it and its  
principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
2. Have not within a three (3) year period preceding this Bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of the offenses enumerated in Paragraph 2 of this certification; and
4. Have not within a three (3) year period preceding this Bid had one or more public transactions (federal, state or local) terminated for cause or default.

[If the primary participant (applicant for an FTA grant, or cooperative agreement or potential third-party contractor) is unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.]

THE PRIMARY PARTICIPANT (POTENTIAL CONTRACTOR FOR A MAJOR THIRD-PARTY CONTRACT) CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 USC SECTIONS 3801, *ET SEQ.*, ARE APPLICABLE THERETO.

Name of Firm: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Lower Tier Participant Certification Regarding Debarment, Suspension,  
Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions**

I, \_\_\_\_\_ (name of person),  
duly authorized to act on behalf of \_\_\_\_\_  
prospective lower tier participant, including but not limited to subcontractors of any tier ("Participant")  
acknowledge and certify, to the best of my knowledge and belief, that:

1. This certification is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier Participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, King County ("County") may pursue available remedies, including suspension and/or debarment.

2. The Participant certifies, that neither it nor its "principals" (as defined at 49 C.F.R. Section 29.105) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

3. If the Participant is unable to certify to the statements in this certification, such prospective participant shall attach an explanation to this certification.

4. The Participant shall provide immediate written notice to the Contractor if at any time the Participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "persons," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549 [49 CFR Part 29]. You may contact the Contractor for assistance in obtaining a copy of those regulations.

6. The Participant agrees by submitting its proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized in writing by the County.

7. The Participant further agrees by submitting its proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction", without a modification, in all lower tier covered transactions with its subcontractors and in all solicitations for lower tier covered transactions.

8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List issued by the U.S. General Service Administration.

9. Nothing contained in the forgoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that, which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for the transactions authorized under Paragraph 6 of this certification, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to all remedies available to the Federal Government, the County may pursue available remedies including suspension and/or debarment.

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Signature of Authorized Official

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Name and Title of Authorized Official

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Name of Company/Organization

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Date