

*Moving Forward Together:*  
A Blueprint for Progress  
King, Pierce, Snohomish Counties



Regional Transportation Investment District

Planning Committee Recommendation  
June 8, 2007



# Regional Transportation Investment District

## *Moving Forward Together: A Blueprint for Progress* King, Pierce, Snohomish Counties

Planning Committee Recommendation  
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# Regional Transportation Investment District

## *Moving Forward Together: A Blueprint for Progress* King, Pierce, Snohomish Counties

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# The Draft Roads & Transit Investment Package



# I. Introduction

**T**he central Puget Sound region is on the verge of a great initiative. This spring, the Regional Transportation Investment District (RTID) will finish its plan: the *Blueprint for Progress*. We've been coordinating our planning with Sound Transit's plans for their phase two, *Sound Transit 2*. Our joint *Roads & Transit* plan when implemented will dramatically improve our highways, transit, and safety, and benefit the way people and goods get around the region for generations to come.

The *Blueprint for Progress* is our opportunity to do to do things better, on a scale equal to the traffic problems we face.

## Traffic: What it's Doing to Us

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Traffic. No other issue has vexed our region for so long. Our past failure to make focused transportation investments is the single biggest threat to our economic prosperity and quality of life.

We have a lot at stake. The central Puget Sound region is the fastest growing area and economic hub for our state. The region is part of a global economy, home to major seaports and employers, including: Boeing, Costco, The Gates Foundation, Microsoft, Nordstrom, Paccar, Puget Sound Energy, REI, Russell Company, Starbucks, Washington Mutual (WaMu), and Weyerhaeuser. Our unique and attractive landscape of mountains, rivers, lakes, and salt water make our region a destination and nurture an environmental ethic. However, our desirability as a place to live and visit, our economic success and our population growth are causing the region to struggle with serious transportation problems.

Extreme and prolonged traffic congestion and aging infrastructure threaten to overwhelm our prosperity. More households than ever before have two workers, and homes and businesses are more dispersed as a result of workers seeking affordable housing and the rise of new employment centers in mid-sized cities. Not surprisingly, traffic congestion, travel times, travel unpredictability, and vehicle crashes have increased.

Meanwhile, the population of the central Puget Sound region continues to grow rapidly, with nearly another 1 million more people expected to be living in King, Pierce, and Snohomish counties by 2030. Most will be our children and our children's children. That is a 40 percent increase in just the next 23 years. Last year alone, our population increased by 60,000 people in Snohomish, King, and Pierce counties—that's 5,000 more people each month. As that trend continues, our already overburdened transportation system will grind to a halt.

More than 40 years of underinvestment in our transportation system has finally caught up with us. Some of our aging infrastructure is dangerous; our roads are overflowing with traffic, and the public wants more to be done now.

## It's About Time

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Our transportation crisis is the target of RTID's *Blueprint for Progress*—a coordinated plan to improve critical transportation corridors, improve safety, invest in transit-friendly improvements and build new bridges that will reduce traffic backups and keep people and freight moving in the most congested corridors in Snohomish, King and Pierce counties.

The *Blueprint for Progress* invests first in the most congested corridors across central Puget Sound, such as I-405 between Renton and Bellevue, which experiences up to 14 hours of traffic congestion a day. The *Blueprint* will make traffic flow better on I-5 by connecting key roads and freeways: for example linking SR 509 to I-5 south of Sea-Tac Airport and reducing the back-up on I-5. The *Blueprint* will also improve heavily congested roads such as SR 9 and US 2 that serve designated growth areas in Snohomish County.

Band-aids and quick fixes won't cut it anymore. We need to make substantial investments in our most heavily-traveled corridors to make a real difference.

RTID is focusing on investments that do the most to reduce congestion and ease choke points—both where they exist today and where they will be in the future. We are planning to phase the construction to minimize disruptions. The project financing is being timed to reduce costs and to leverage limited dollars.

We are coordinating the road improvements with Sound Transit's phase 2 (ST2) investments that will expand on the regional transit and light rail system currently being built. The transit package will include light rail extensions from Seattle north to South 164th Street/Ash Way in Snohomish County, east to the Overlake Transit Center in Redmond and the Microsoft campus and south to downtown Tacoma, along with more commuter rail and express bus service in all three counties. A number of our road investments are designed to reduce bus and car conflicts and delays.

Light rail will dramatically reduce the time it takes to get from Bellevue to Qwest Field in downtown Seattle—from 37 minutes on transit today to about 20 minutes. That's every day, reliably and predictably.

The *Blueprint* and *Sound Transit 2* combine to form the *Roads & Transit* package. The *Roads & Transit* package will present to voters the first unified program of investments in highways, bridges, light- and commuter-rail, HOV lanes, park & ride lots, and express and local bus service in the central Puget Sound area. We are making sure all of them work together for everyone—whether they drive a car or truck or take transit.

We can do this and, fortunately, we are not starting from scratch. The *Blueprint for Progress* builds on the investments in roads, bridges and freight and truck routes that were approved by the legislature in 2003 and 2005, the Nickel and the Transportation Partnership Act (TPA) programs, and the voters upheld the TPA program when some tried to repeal it. Sound Transit's program builds on the investments voters approved in phase one, *Sound Move*, 10 years ago.



## One Region, One Transportation Plan

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We have made great strides since state legislation in 2002 allowed Snohomish, King, and Pierce counties to develop a regional transportation proposal. It is culminating with our cooperation with Sound Transit and other transit-agency partners in 2007 to develop an integrated *Roads & Transit* package.

Getting here hasn't been easy or assured. The complexity and size of our transportation problems are immense. Despite this, the *Blueprint for Progress* reflects years of close collaboration by local leaders to reach a common view on which transportation projects are going to be built in the Puget Sound region—from Arlington to Lakewood—over the next 20 years.

RTID members—whether we are from urban, suburban or rural communities—are united by a shared vision for the future: a regional transportation system that works and supports a vibrant economy with good jobs.

## Public Helps Shape the Plan

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The *Blueprint for Progress* is the result of efforts by thousands of community leaders and citizens from across central Puget Sound to reach agreement on the most significant regional transportation investments since the freeway system was built fifty years ago.

RTID members listened to the public, local officials and community leaders as we made decisions on our transportation priorities. People told us to get things done and to think big—to focus on investments that do the most to reduce congestion, address dangerous conditions and make a difference.

The RTID executive board and planning committee will send the final *Blueprint for Progress* to the Snohomish, King and Pierce county councils and executives for approval in June 2007. The approved RTID plan will be combined with *Sound Transit 2* as the *Roads & Transit* measure to be placed on the ballot in November 2007.

## It's Time to Get Moving

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Many of us have lived through the explosive growth in our region. Imagine what our traffic problems will be when another million people come to the Puget Sound region in the next 20 years. The stakes couldn't be higher. The choice is simple: we can get moving on our traffic problems, or we can do nothing and keep sitting in traffic. The *Blueprint for Progress* is about getting us moving.

## II. Proposed Investment Strategy and Plan

### Overview

The state legislature authorized the creation of regional transportation investment districts in 2002. (See RCW 36.120) Major urban regions were given authority to create investment districts because many of the state's transportation facilities have failed to keep up with population growth and because the state cannot by itself fund in a timely way necessary improvements on the state system.

Snohomish, Pierce and King counties convened the first meeting of the RTID planning committee authorized by the state on June 19, 2002, to begin planning a regional transportation investment strategy. A variety of factors have contributed to how the RTID developed its investment strategy over time. The Puget Sound Regional Council (PSRC), Washington State Department of Transportation (WSDOT), and local government transportation planners provided traffic flow and origin and destination travel information that were used to help identify investments with the greatest congestion relief benefit. WSDOT staff analyzed previous projects to factor in funding from the 2003 Nickel and 2005 Transportation Partnership Act (TPA) approved by the state.

The RTID executive board considered ways to leverage these state investments. Some projects were removed from consideration as other funding became available for construction. For example, the RTID executive board previously considered funding the HOV lanes on I-5 in Pierce County; however, the state TPA is now funding that project. Other factors for project selection included Sound Transit phase 2 planning, and successful votes in 2006 for the City of Seattle's *Bridging the Gap* and King County's *Transit Now* proposals. In addition, public comments from the 2006 and 2007 public comment periods have been analyzed and included where possible.

The RTID executive board worked with WSDOT and other project lead agencies to ensure cost estimates are up to date. This plan uses cost update information from the fall of 2006, reflecting the recent high construction costs due to world-wide demand for materials and labor. The WSDOT web site, [www.wsdot.gov](http://www.wsdot.gov), includes detailed information on the cost update assumptions and methods. The costs of projects have changed due to increases in base costs, including rights-of-way purchase assumptions, commodity prices, and scope changes; risk of project delay or other major external events that could increase project costs; and inflation. RTID used independent experts to review the initial investment strategy and worked with WSDOT to ensure that all projects have a high probability of being built within the estimated cost.

The project scopes included in the original *Blueprint for Progress* have been re-examined to ensure the highest value project for the most cost-efficient investment. A project sequencing and staging plan is included with this plan in Appendix C.

## State and Regional Policy Foundation

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This investment strategy builds upon State goals and objectives regarding the operation of an efficient statewide transportation system, including regional investment in state facilities. Substitute Senate Bill 5412 amends RCW 47.01 to include the following policy goals:

**Preservation:** To maintain, preserve, and extend the life and utility of priorities investments in transportation systems and services.

**Safety:** To provide for and improve the safety and security of transportation customers and the transportation system.

**Mobility:** To improve predictable movement of goods and people throughout Washington State.

**Environment:** To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities; and protect the environment.

**Stewardship:** To continuously improve the quality, effectiveness, and efficiency of the transportation system.

Furthermore, RCW 36.120 sets forth performance criteria to be considered in selecting transportation projects to improve corridor performance. Relative to the state's policy goals, RTID is aimed primarily at the mobility goal. RTID's project selection and performance criteria set by law are:

Reduce the level of congestion and improve safety (*mobility and safety*)

Improve travel time (*mobility*)

Improve air quality (*environment*)

Increase daily and peak period person and vehicle trip capacity (*mobility*)

Reduce person and vehicle delay (*mobility*)

Improve freight mobility (*mobility*)

Make cost-effective investments (*stewardship*)

Additionally, RCW 36.120.020 identifies the following goals for traffic mitigation during construction in affected corridors:

Reduce drive alone trips

Reduce delay per person and per unit of goods

Improve system performance

## Environmental Review and Policy Direction

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The Pacific Northwest has a strong environmental ethic including protection of natural resources and endangered species, reducing water and air pollution, preserving farm land and open space, protecting neighborhoods, and leading an active and healthy lifestyle. The *Blueprint for Progress* includes investments that restore and protect habitat. Investments also include sidewalks, bicycle lanes, bus-only lanes, HOV lanes, opportunities for HOT lanes, traffic signals, bus stops and shelters, park and ride lots, bus purchases and operational expenses for traffic mitigation provided solely for specific projects as outlined in this plan. These may include transit service hours; trip reduction incentives; nonmotorized mode support; and ridematching services. This plan includes guiding principles to optimize the regional transportation system and to coordinate with the State of Washington to ensure that state environmental goals are achieved.

The RTID executive board/planning committee reviewed the proposed investment strategy for conformance with the Puget Sound Regional Council's metropolitan transportation plan, *Destination 2030*, and they also reviewed the associated environmental documents that were provided to them electronically and in hard copies. In addition, the executive board/planning committee also reviewed Sound Transit's *Sound Transit 2* plan and its associated environmental documents. RTID staff worked closely with staff from the PSRC and Sound Transit to coordinate analysis and assumptions to develop an integrated transportation plan for the voters to consider that is consistent with *Destination 2030*. Appropriate project-level environmental reviews will be conducted by the proper agencies for the projects in the proposed Regional Transportation Investment District plan. The RTID investment plan includes highways of statewide significance, arterials, local collectors, transit capital and service investments. *Destination 2030* explicitly references major regional projects and addresses more generally investments at the arterial level as well as localized transit investments. Changes in facilities associated with projects, and changes of projects that are referenced in *Destination 2030* will not change the programmatic analysis associated with this plan.

Transportation and land-use planning have a direct relation to climate change. A system-wide approach is needed to account for and mitigate climate change impacts in the planning, design, construction and operation of transportation projects in the region. On May 4, 2007, the RTID executive board took action to work with the Puget Sound Regional Council to examine and address climate change policies and strategies as part of the required update to *Destination 2030*.

Most of the RTID investments are transportation facilities currently owned by the State of Washington. According to CTED and Department of Ecology, nearly 50% of greenhouse gas emissions in Washington State come from the transportation sector. The governor and state legislature have adopted goals to cut greenhouse gas emissions 50% below 1990 levels by 2050. Recent actions by the state to meet these goals include requiring new cars and light trucks to reduce CO<sub>2</sub> emissions by more than 30%, and a renewable fuel standard requiring 2% of transportation fuel sold to be biodiesel or ethanol.

On top of these measures, the state has committed to reducing per capita vehicle miles traveled to support an environmentally sustainable transportation system. The State of Washington and Puget Sound counties are national leaders in managing vehicle miles traveled. Efforts currently underway such as linking land use and transportation planning will need to be enhanced to achieve climate change goals. The measures may be as far-

reaching as creating affordable housing near jobs; supporting transit-oriented development; increasing alternatives to single-occupancy vehicle trips; and increasing the use of technology and telecommuting. The RTID recognizes that a comprehensive approach is needed to combat climate change and supports the state commitment to reducing vehicle miles traveled. Over the life of the investment plan, the RTID will do this by using its funding to leverage commitments from partner agencies to seek opportunities to reduce vehicle miles traveled. The transit components of the highway projects in the *Blueprint* are sequenced to maximize congestion relief and mobility and the construction mitigation funds are expressly permitted to help shift modal choice. RTID will also work with the lead agencies it funds to encourage identification of opportunities to reduce vehicle miles traveled during design, engineering, construction and operations phases of the projects referenced in the plan.

## Anticipating Change

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The *Blueprint* identifies transportation projects which, in conjunction with the transit proposal recommended by Sound Transit, represent cost-effective investments to reduce levels of congestion, improve safety, travel time or air quality, increase person and vehicle trip capacity, reduce person and vehicle delay and improve freight mobility within the proposed RTID boundaries. The accompanying financial plan projects that the two revenue sources identified in the *Blueprint* will produce adequate revenues to construct the recommended transportation projects over the projected construction schedule. The estimated costs of the projects assume that certain facilities will be built as part of these projects based on the best engineering and cost projections currently available, including the detailed projections required under RCW 36.120.040(5).

The legislation that authorizes the creation of RTID acknowledges that over the twenty-year investment plan period for RTID, there are likely to be circumstances that may require changes to the transportation projects and certainly modifications to the facilities being considered to implement those projects. These circumstances could include unexpected cost increases for materials, unforeseen environmental conditions, the availability of new technologies or additional federal, state or local funding and other factors that may or may not be foreseeable but are currently unknown.

The legislation establishes limits on the ability of the RTID board to change the transportation projects contained in the voter-approved *Blueprint* while it also acknowledges the likelihood of changed circumstances. The legislation specifically addresses the authority to change the transportation projects and the sources of revenue and allows a change in transportation projects or revenue sources only if two or more participating counties adopt a resolution to modify the plan and voters approve the redefined plan. The RTID board is also authorized to modify the plan to change transportation projects within a county with board and county voter approval, subject to maintaining overall equity among the participating counties. If the cost of a transportation project exceeds its original cost estimate by more than twenty percent, the RTID board may submit to voters a ballot measure that redefines the scope of the project, its schedule, or its costs or the counties may elect to have RTID proceed with the project. The legislation thus assures voters that the RTID board cannot substitute a new project for an approved project or abandon an approved project without resubmitting the issue to the voters.

The legislation acknowledges that transportation projects may have many components and many ways to achieve the mobility, capacity, safety, and environmental goals of the approved projects. These components, as identified in the legislation, can include highway approaches, high-occupancy vehicle lanes, flyover ramps, park-and-ride lots, bus pullouts, vans for vanpools, buses, signalization, ramp metering, operational expenses for traffic mitigation, and other system management improvements. The legislation requires that RTID issue reports, at least annually, to indicate the status of project costs, project expenditures, revenues and construction schedules. These reports may include progress toward meeting the performance criteria established under the legislation.

The completion of the transportation projects recommended in the *Blueprint* will take over twenty years. Each project must be designed and engineered, be subject to environmental review, be approved by the RTID board, be contracted for and constructed. Some of the projects may not commence construction for many years. Subject to the constraints imposed by the legislation, RTID needs to reserve to itself the ability to adjust to changing or unforeseen conditions as it designs the projects and implements the *Blueprint*. Thus, the descriptions of the facilities to be constructed as part of the transportation projects may be modified or replaced with other facilities to implement or improve the same transportation project. Furthermore the sequence of constructing facilities or transportation projects likewise may be modified over time to accomplish the plan, and thus reflect adaptation to changed conditions.

The RTID board will adopt procedures for approving any modification or replacement of a facility or change in sequencing, which will include a public notice procedure and opportunities for public comment. In addition, any modification or replacement of a facility or change in sequencing will be included in the report requirement by the legislature under RCW 36.120.140(4). Although facilities may be modified or replaced, or sequencing changed, upon RTID board approval, in accordance with the board's adopted procedures, any modifications of the plan to change a transportation project must be completed in accordance with RCW 36.120.140(1) or (2), as applicable. If a transportation project cost exceeds its original cost by more than twenty percent as identified in the plan, the board may proceed only in accordance with RCW 36.120.140(3).

The authorizing legislation and the *Blueprint* attempt to balance the need to define with voter consent the projects to be undertaken and the practical need to implement the *Blueprint* with some flexibility to best achieve its goals.

## Guiding Principles

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The RTID executive board refined a set of principles to help frame the roads investments that are in the *Blueprint for Progress* and will be in the regional *Roads & Transit* package. These principles combine RTID statutory requirements; principles from the original *Blueprint for Progress* adopted on January 26, 2006; and revised principles adopted by the executive board on January 12, 2007. Principles were further expanded in making final investment decisions based on public comment received on the January 26, 2007 draft *Blueprint*.

The guiding principles are listed below:

## Build Off Existing Investments in Key Areas

Focus on corridors where the value of existing state and local investments can be significantly increased by completing additional improvements in that corridor.

Focus on important time-sensitive corridor improvements that were not funded or have not been adequately funded by state or local investments.

Recognize that there are shared cost responsibilities for the SR 520 Bridge as described in the SR 520 funding strategy in this plan.

## Prioritize Regional Investments into Critical Corridors and Key Investments

Recognize that the region's needs exceed our ability to fund all projects at the same time.

Make investments that further the purposes of the Puget Sound Regional Council's metropolitan transportation plan, *Destination 2030*, to provide transportation mobility and access. Ensure that projects are included in *Destination 2030* and are consistent with associated environmental documents.

Focus on corridors and investments to reduce congestion and improve safety, improve travel time, increase daily and peak person and vehicle trip capacity, reduce person and trip delay, and improve air quality.

Improve freight mobility.

Utilize an implementation plan that provides incentives for re-investing cost savings, efficiencies, and subsequent matching funds to enhance the transportation benefits in that corridor.

## Optimize the regional transportation system by focusing on ways to increase mobility within corridors and anticipate change

Use regional funding of state facilities to leverage system management that assures reliable system performance. Reliable system performance is defined as an average travel speed of 45 miles per hour for half the weekdays on a corridor segment. The system performance is not reliable if average travel speed drops below 45 miles per hour for an hour or more. This measurement may be improved over time to better assess system performance but not to accommodate reduced system performance.

Ensure reliable system performance by continuously evaluating design, engineering, construction, and operations to make sure that investments accommodate technology for active traffic management, tolling, intelligent transportation systems, and other technologies that may emerge over the life of the investment plan.

If this evaluation determines that a corridor is unreliable or is projected to become unreliable, the RTID board will work with Washington State and its tolling authority, if necessary, to implement variable pricing, HOT lanes, tolling, and other management tools in the following King County corridors: SR 520, I-90, I-405, SR-167, SR-509. The RTID will work with the State or its tolling authority, if necessary, to implement pricing or tolling measures on highways of statewide significance if they are necessary to fund completion of projects defined in the plan or pay for essential improvements, and may use such funds to retire debt early or reduce the amounts for other revenue sources. In Snohomish and Pierce counties, the RTID board will work with PSRC and WSDOT to ensure tolling feasibility work is accomplished comparable to that completed to date in King County.

Build on the State of Washington SR 167 HOT lane pilot program. The State of Washington has recently undertaken several tolling studies and has adopted legislative direction about the future of tolling. The Regional Transportation Commission (RTC) found "...there is a vital need for ... tolls as a source of revenue and to manage demand." In 2006-2007 the Legislative Evaluation and Accountability Program in its capital study identified corridors in the region for future pricing strategies. During the 2007 legislature HB 1094 and SB 5412 also provide direction on future tolls and pricing.

Work with the State of Washington and its tolling authority to ensure, that when instituted, tolls within the RTID benefit the regional transportation system. Build on the priorities identified in the United States Department of Transportation's national strategy to reduce traffic congestion and the Urban Partnership Agreement, as well as other current and future USDOT congestion relief programs. These priorities now include technology tolling, transit, and telecommuting options.

Look to examples from other states that have adopted design guidelines for highways that are more accommodating to emerging technologies, policy priorities, and unique geographical constraints and conditions.

Ensure RTID-funded investments are constructed using the best practices for energy savings and reduced emissions consistent with state policy. Encourage the purchase of hybrid buses or other clean technology. Consider the provision of services for plug-in electric cars at park and ride lots.

Support integrated transportation and land use within the region by ensuring investments serve designated urban growth areas with a mix of jobs and housing.

### **Create an Integrated Regional Transportation Plan that Includes Both Roads and Transit Together**

Model integration after successful examples of combined road and transit packages from San Diego, Denver, and Vancouver, B.C.

Review project phasing and staging to maximize reliability and certainty of the region's transportation system while minimizing disruption during construction.

Plan for transit to assist in traffic flow as an eligible investment for RTID funding to provide construction traffic impact mitigation.

Demonstrate to our voters that we have a unified regional transportation plan that makes sense and is affordable.

### **Keep the Roads & Transit Package Affordable**

Ensure that investments are cost effective.

Limit revenue sources.

Reduce reliance on the sales tax and place primary reliance on the motor vehicle excise tax (MVET) to provide the necessary funding.

Use bonding to the extent necessary to implement the *Blueprint for Progress* projects on a timely basis.

Leverage federal, state, regional, and local funds to minimize financing costs.



## Ensure Project Delivery Accountability

Optimize investments by remaining flexible and using alternative contracting approaches for project delivery such as design-build.

Establish accountability mechanisms to encourage the State of Washington and other transportation facility owners receiving regional funds to comply with project reporting requirements to be set by the district. These measure will include but not be limited to the following provisions in Chapter 47.01.012 (Section 6) RCW:

Balance system safety and convenience through all phases of a project to accommodate all users of the transportation system to safely, reliably and efficiently provide mobility to people and goods.

Develop strategies to gradually reduce the per capita vehicle miles traveled based on consideration of a range of reduction methods.

Consider efficiency tools including high-occupancy vehicle and high-occupancy toll lanes, corridor specific and system-wide pricing strategies, active traffic management, commute trip reduction, and other demand management tools.

Promote integrated multi-modal planning.

Encourage engineers and architects to design environmentally sustainable, context sensitive transportation systems.

Leverage regional funds to achieve the greatest ecosystem benefits by coordinating project level environmental mitigation.

## Coordinate with the Puget Sound Regional Council to achieve policy goals established through *Destination 2030* and updates to *Destination 2030*.

Commit to efficient project planning and delivery by coordinating with Sound Transit from project planning through construction.

Establish system performance metrics to be monitored in conjunction with project sponsors, WSDOT, and PSRC to track system performance and to recommend plan modifications if necessary to achieve reliable system performance.

Work with PSRC and other agencies developing metrics for monitoring environmental and public health impacts related to carbon emissions.

## Provide Appropriate Oversight

Issue reports consistent with Chapter 36.120 RCW, at least annually, to indicate the status of project costs, project expenditures, revenues and construction schedules. These reports may include progress toward meeting the performance criteria established under the legislation.

Adopt procedures for approving any modification or replacement of a facility or change in sequencing, which will include a public notice procedure and opportunities for public comment.

Optimize the structure of issuing debt to increase project investments and decrease debt service and interest payments.

Adopt procedures for allocating interest and finance savings to the transportation projects in this plan and to retire debt early.

Allow RTID revenue to be used to back bonds and other debt instruments that may be issued by the state, federal government or other lead agencies in order to minimize finance costs.

Establish financial policies consistent with best practices from the U.S. Government Accountability Office (GAO) and the Washington State municipal finance officers association.

The RTID board will establish an oversight panel to provide independent expertise to the RTID in monitoring plan compliance, contracts with project owners, system performance, and the construction mitigation program.

### III. District Boundary

**I**n both King and Pierce counties, the proposed RTID boundary line generally matches the boundaries of the existing Sound Transit district, except for a difference in state law that requires the RTID boundary to include complete parcels of land. In Snohomish County the RTID boundary is larger than the Sound Transit district in order to include key road and highway corridors.

Snohomish County presented a different set of needs because the existing Sound Transit (Central Puget Sound Regional Transit Authority or RTA) boundary only includes the southwest urban growth areas (as far north as Everett) and does not include much of the northern and eastern portions of the county where new designated growth areas are located. The RTID boundary includes four major highways of statewide significance (I-5, State Routes 9 and 522, and US 2); several critical road projects to the north, and local transit services. Significant work was undertaken on how best to address the boundary question. Ultimately, after consultation and legal analysis, it was determined that the best way to proceed was to establish a boundary for the RTID that includes Sound Transit's boundary in King and Pierce counties but that also includes additional areas in Snohomish County.

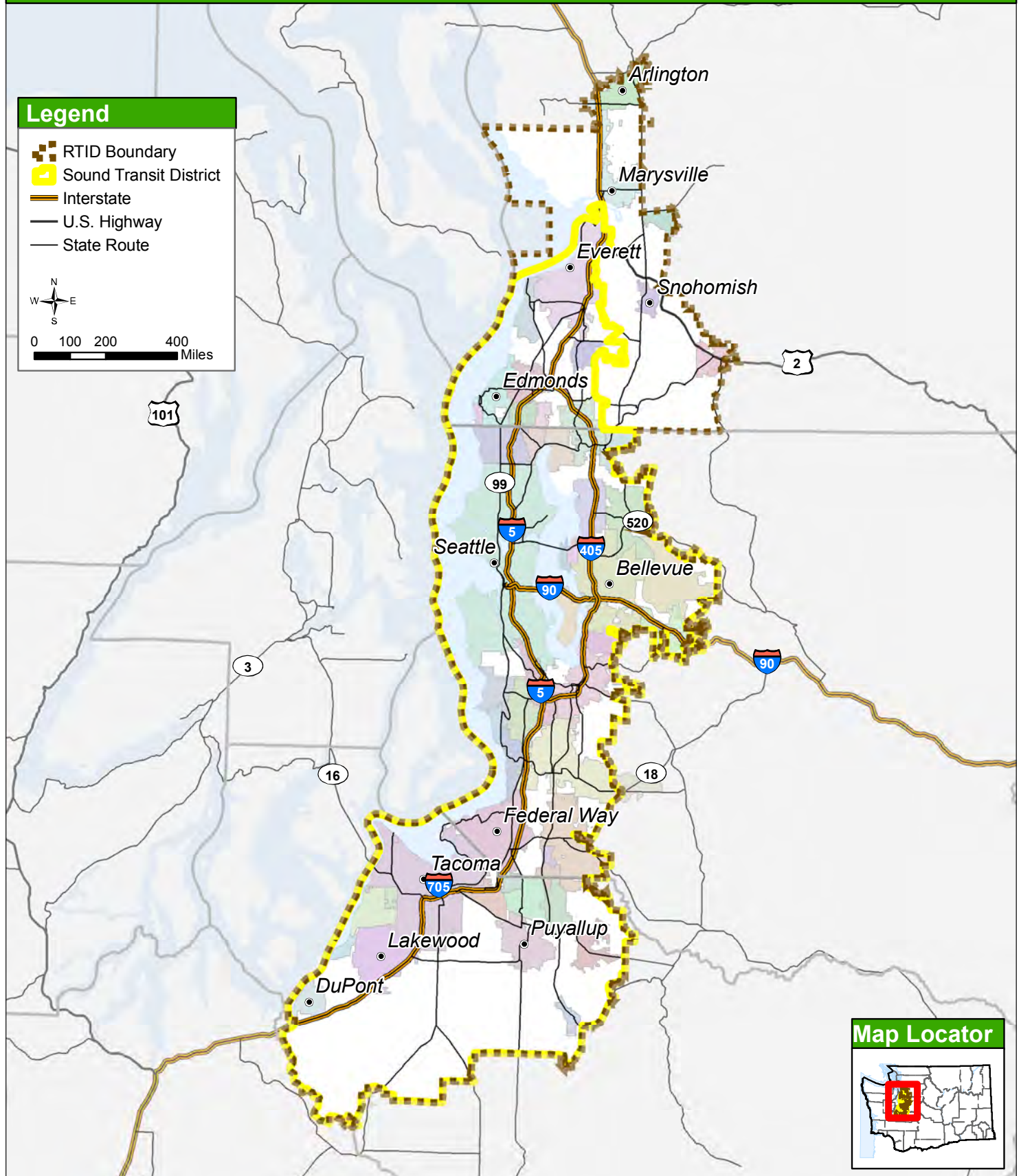
The following guidelines were used in developing the Snohomish County boundary proposal:

- Include projects within the I-5 Snohomish Corridor Action Plan (SNOCAP). This includes both the I-5 and SR 9 corridors from the King County line to Arlington.
- Include the adjoining urban growth areas (UGAs) along the SNOCAP corridor, i.e. I-5 and SR 9.
- Consider existing transit service areas or major routes within Snohomish County for inclusion in the new boundary.
- Include the Tulalip Reservation within the new boundary due to recent and continuing economic development expansion.

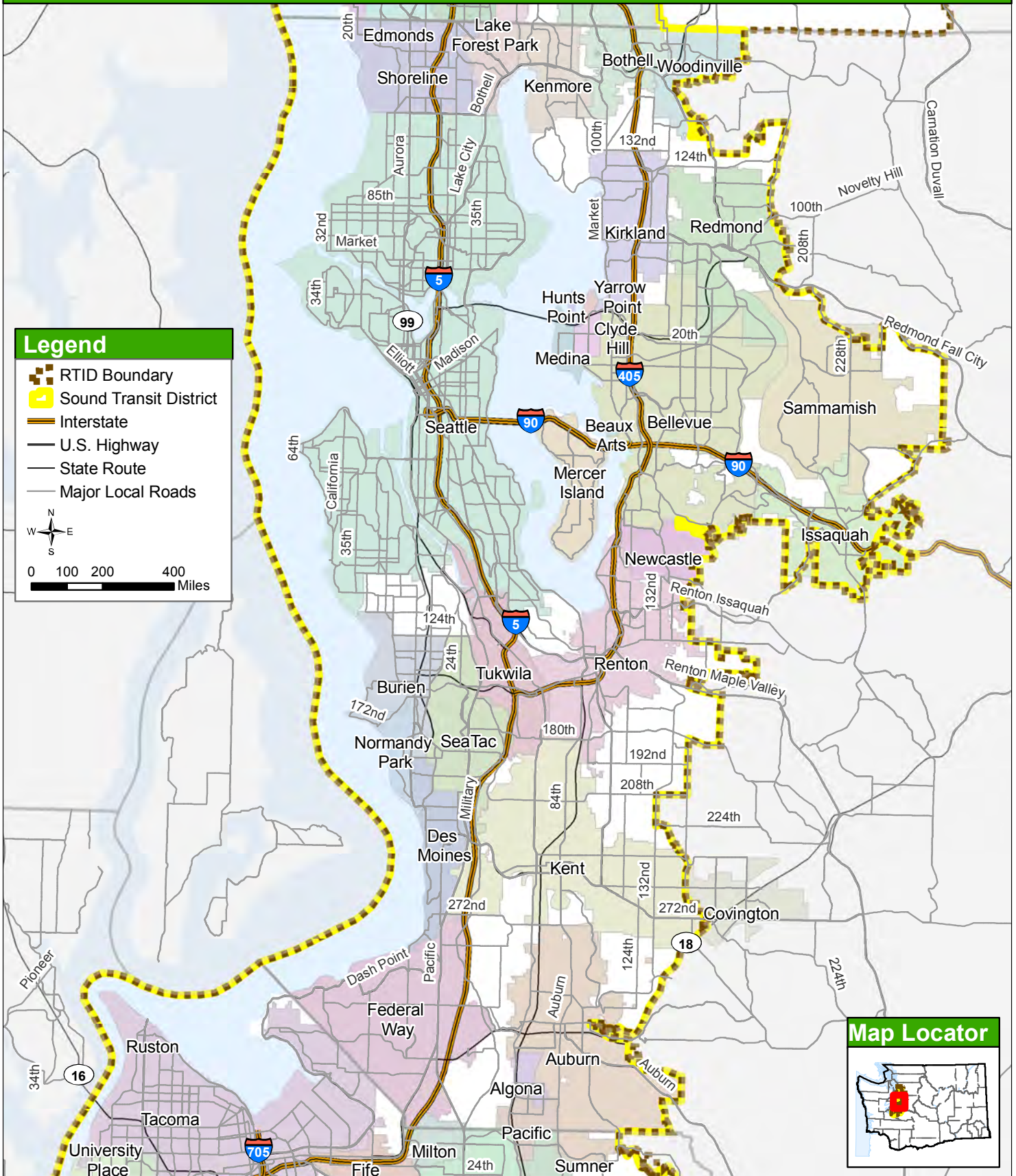
Applying these guidelines resulted in a Snohomish County RTID area bounded by King County to the south; Puget Sound to the west; SR 9 and associated urban growth areas, including Monroe to the east; and Arlington to the north. This boundary allows for a system approach that includes both road and transit projects in the majority of Snohomish County.

The RTID executive board directed staff to take additional steps to establish a legally defined boundary. RCW 36.120.040(1)(a) requires the RTID boundary line to be at least contiguous with the Sound Transit area, and to include complete parcels of land. To meet these requirements, staff worked with county auditors, county election officials and state officials to verify the legal location of the boundary line. Appendix A to this report includes the legal descriptions for the district boundary. Maps of the district are included here and in Appendix A.

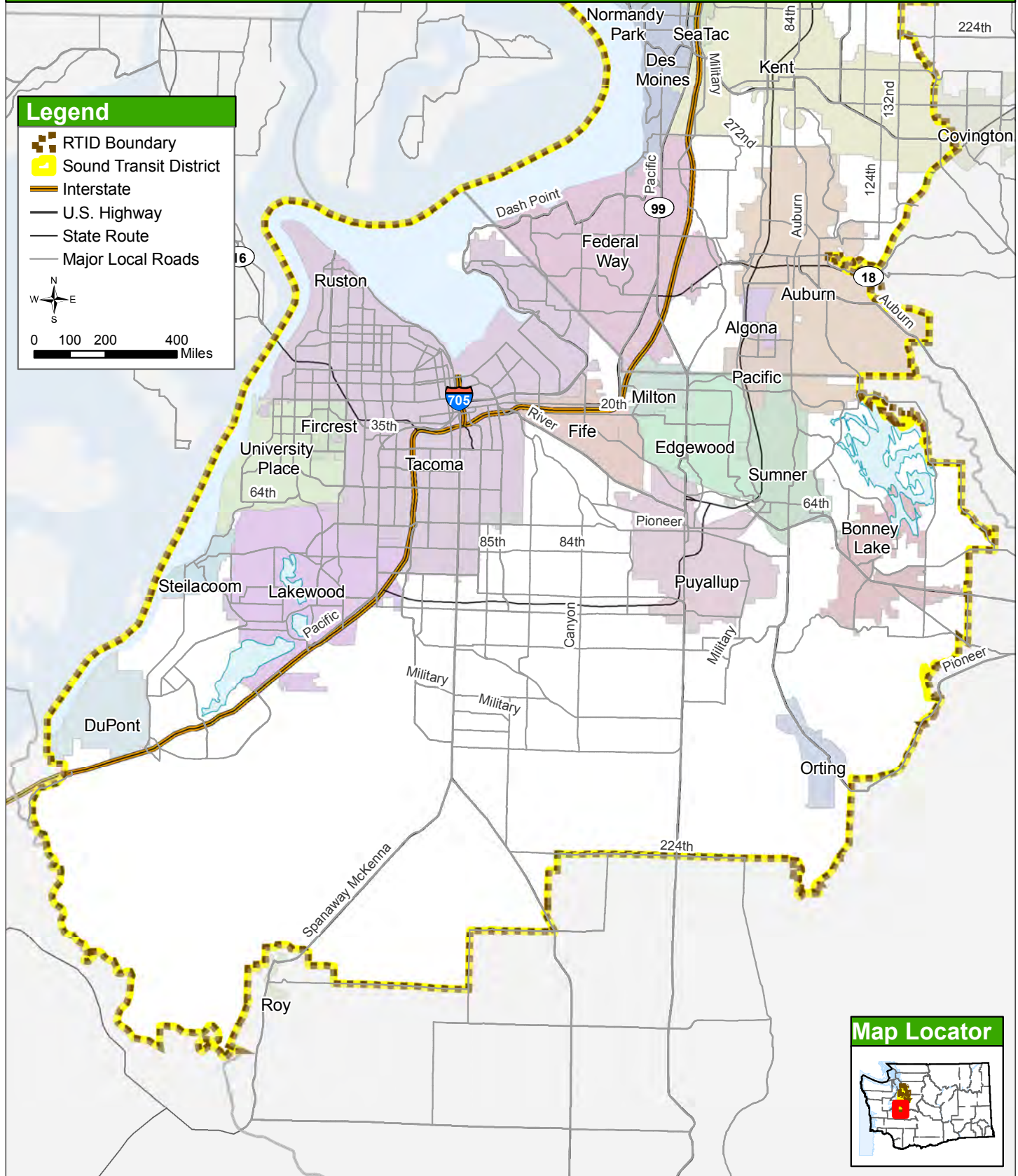
# Regional Transportation Investment District King, Pierce and Snohomish Counties



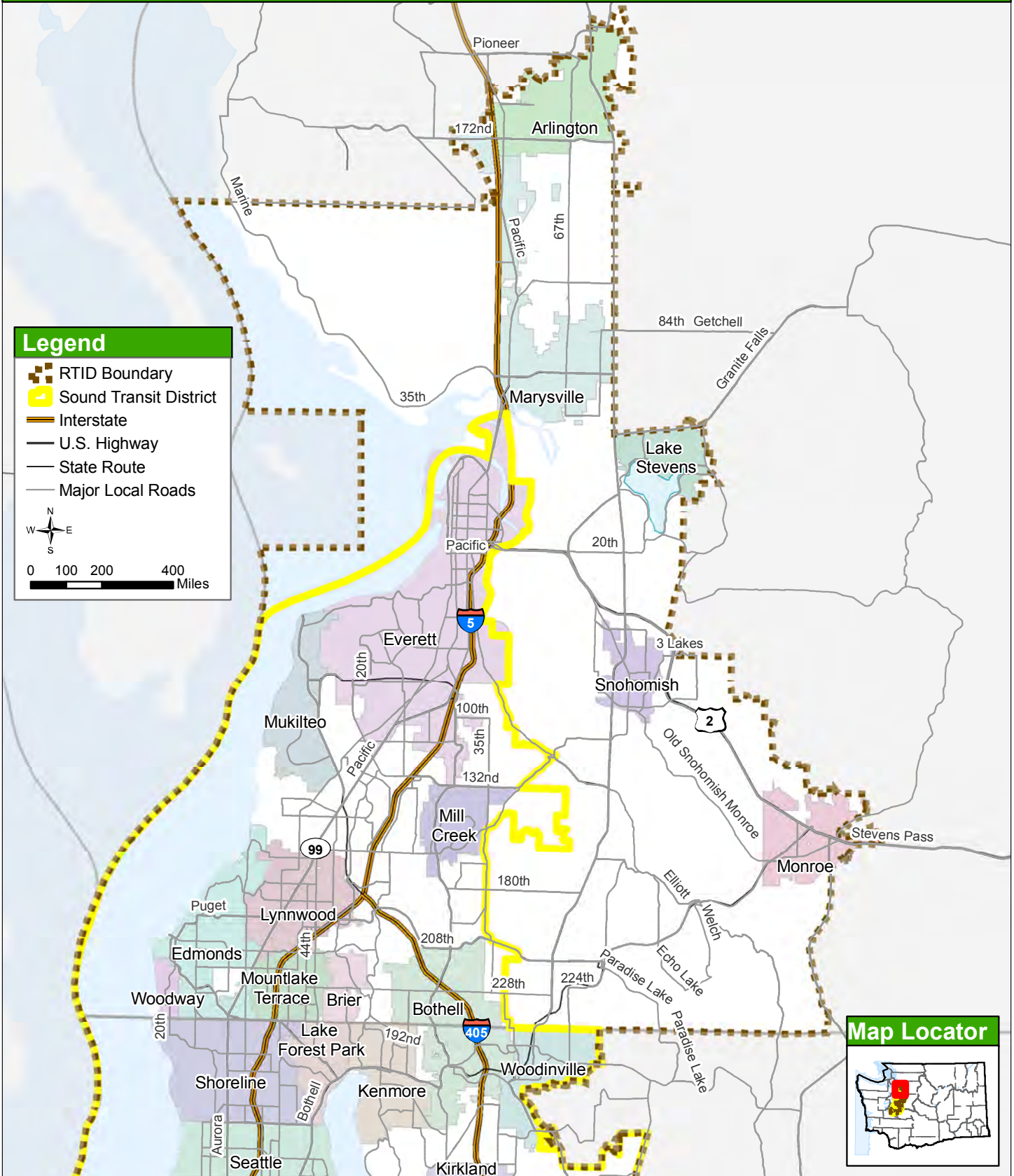
# Regional Transportation Investment District King County



# Regional Transportation Investment District Pierce County



# Regional Transportation Investment District Snohomish County



## IV. District Administration and Management

**I**t is the intent of the legislature as codified in 36.120.110 RCW that administrative and overhead costs of RTID be minimized. For projects costing up to \$50 million, administrative and overhead costs may not exceed 3% of the total construction and design project costs per year. For projects costing more than \$50 million, administrative and overhead costs may not exceed 3% of the first \$50 million in costs, plus an additional 0.1% of each additional dollar above \$50 million. These limitations apply only to RTID and do not limit the administration or expenditures of WSDOT.

RTID may not acquire, hold, or dispose of real property provided under RCW 36.120.020(8). Except for limited purposes, RTID may not own, operate, or maintain an ongoing facility, road, or transportation system.

RTID may use the “design-build procedure” for its projects, in which RTID contracts with another party for that party to both design and build the structures, facilities, and other items specified in the contract.

RTID is also responsible for designating a person with experience in financial matters as treasurer. This person may be the treasurer of a county within the district. Such a treasurer would have all of the powers, responsibilities, and duties the county treasurer has related to investing surplus funds. RTID will require a bond with a surety company authorized to do business in Washington, in an amount and under the terms and conditions RTID finds will protect the district against loss. RTID shall pay the premium on the bond.

If the treasurer of RTID is the treasurer of a county, all RTID funds must be deposited with a county depository under the same restrictions, contracts, and security as provided for county depositories. If the treasurer of the district is not the treasurer of a county, all funds must be deposited in a bank or banks authorized to do business in Washington, covered under the State’s public deposit protection act and qualified for insured deposits under any federal deposit insurance act as RTID designates by resolution. RTID may provide and require a reasonable bond of any other person handling monies or securities of the district, but RTID must pay the premium on the bond.

In RCW 36.120.200, an account referred to as the Regional Transportation Investment District account was created in the custody of the Washington State Treasurer. State money, if any, may be deposited into this account so that it may be used in conjunction with RTID money to fund transportation projects. Additionally, RTID may deposit funds into this account for disbursement, as appropriate, on projects. There is no requirement for state matching money in the creation of this account. All money deposited in this account will be used for design, right of way acquisition, capital acquisition, and construction, or for the payment of debt service associated with these activities for RTID projects. Only RTID may authorize expenditures from the account. The account is subject to allotment procedures under RCW 43.88, but appropriations are not required for expenditures.



RTID is authorized by RCW 36.120.130(3) to enter into agreements with another agency or the State under which such other agency or the State would issue bonds and RTID would agree to pledge a portion of its revenues to the issuer of the bonds to pay its share of such indebtedness. Under the right circumstances this could be advantageous to RTID taxpayers by lowering interest costs and transaction costs, for example when RTID is partnering on a project with a county or the State with a higher credit rating. In short, RTID revenues could make more capital available for the transportation improvement.

## Financial Oversight

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As a municipal corporation, RTID will be audited by the Washington State auditor under the authority of RCW 43.09. Independent auditors may also be used at the discretion of the RTID executive board.

## Financial Structure

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The financial statements of RTID will be maintained in accordance with methods prescribed by the Washington State auditor under the authority of RCW 43.09 and the Office of Financial Management under RCW 43.88. RTID will use the budgeting, accounting, and reporting systems (BARS) for special revenue type funds in the state of Washington as well as general accepted accounting principles (GAAP) established by the governmental accounting standards board (GASB).

The Regional Transportation Investment District account has been established as a non-appropriated, allotted treasury trust account in accordance with RCW 36.120.200. Special revenue funds are accounted for by using the modified accrual basis of accounting. Therefore, revenues are recognized when they become both measurable and available. Expenditures are recognized when the related liability is incurred. Funds are accounted for on a current financial resources measurement focus.

With the current financial resources measurement focus, generally only current assets and current liabilities are included on the governmental funds balance sheet. Operating statements for these funds present inflows (i.e. revenues and other financing sources) and outflows (i.e. expenditures and other financing uses) of expendable financial resources. As an account within the Washington State Treasury, these balances and activities will be reported in the State of Washington's comprehensive annual financial report (CAFR).

In addition to the Regional Transportation Investment District account, the RTID treasurer may establish a special account, into which may be paid district funds. The RTID treasurer may disburse district funds only on warrants issued by the district upon orders or vouchers approved by the district.

## V. Construction Mitigation

**D**uring the 2006 state legislative session the legislature approved and the governor signed into law engrossed Substitute House Bill 2871 requiring the RTID to finance transportation construction mitigation projects, as defined and described below:

*Operational expenses for traffic mitigation provided solely for transportation project construction mitigation directly related to specific projects as outlined in the plan shall be included in a regional transportation investment plan. Construction mitigation strategies may include, but are not limited to, funding for increased transit service hours, trip reduction incentives, nonmotorized mode support, and ridematching services. Prior to construction of any project, corridor mitigation plans must be developed in conjunction with the department and partner transit agencies, including local transit agencies and the regional transit authority serving the counties, with the following goals: (i) Reducing drive alone trips in affected corridors; (ii) reducing delay per person and delay per unit of goods in affected corridors; and (iii) improving levels of service that improve system performance for all transportation users in affected corridors. The regional transportation commission established under section 2 of this act, or a successor regional governing entity, shall review transit investments according to these performance measures to determine whether to continue funding for successful and effective operations after the construction period is completed.*

### Mitigation program requirements

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The mitigation program must show a direct relationship to the construction projects: operational expenses for mitigation may be allowed only if they are directly related to projects in the plan. A variety of mitigation strategies are prescribed and permitted: mitigation strategies may include increased transit service hours, trip reduction incentives, non-motorized mode support, and ride matching services. Mitigation strategies, however, are “not limited to” these.

Mitigation plans must be collaborative: corridor mitigation plans must be developed prior to construction, and in partnership with WSDOT, Sound Transit, and other transit agencies including Community Transit, Everett Transit, King County Metro, and Pierce Transit.

Mitigation plans must have the following goals in each of the affected corridors:

- Reduce drive-alone trips
- Reduce delay per person and per unit of goods
- Improve service levels and system performance for all users.

### Construction mitigation investments

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This plan assumes spending \$198 million for construction mitigation in year of expenditure dollars. The investment section of this report includes an investment category for construction mitigation. Actual investments will be selected closer in time to actual construction activity.

Appendix B at the back of this report includes greater detail on the assumptions being used to formulate construction mitigation investments.

## Construction mitigation allotments in project budgets and RTID finance

There is no requirement for, and thus no plan for, a certain percentage of RTID funds to be allocated for mitigation. RTID estimates for mitigation have been determined at the corridor level for planning purposes, and are included in the proposed RTID budget for each county, and not on a project-by-project basis. This will allow flexibility in the program and an ability to optimize resources, as construction mitigation needs will vary by corridor, and may change as project scopes are resolved, and project construction schedules are determined.

## Project level mitigation for environmental impacts

PSRC's environmental impact statement associated with *Destination 2030* contains guidelines for environmental impact mitigation. Appropriate and required project-level environmental mitigation related to projects contained within this plan will be conducted by the appropriate agencies. RTID will seek ways to optimize project level mitigation to achieve the greatest ecosystem benefits.

## Corridors not requiring mitigation

The configuration of new corridors, such as SR 509 south of Sea-Tac Airport and its connection with I-5, and the SR 167 extension in Pierce County, have no impact on traffic flow, and do not require construction mitigation plans.

## After construction is complete

RTID's 2006 legislation makes a provision for extension of transit mitigation services following completion of transportation construction projects, as stated below:

*The regional transportation commission established under section 2 of this act, or a successor regional governing entity, shall review transit investments according to these performance measures to determine whether to continue funding for successful and effective operations after the construction period is completed.*

## Guiding principles for construction mitigation

- Work with the Puget Sound Regional Council, WSDOT Office of Transit Mobility and stakeholders to develop a centralized construction mitigation program that leverages RTID mitigation funds and the expertise of transit providers and users of the system.
- Use construction mitigation funds to optimize system performance during construction and to achieve longer-term mobility improvements.
- Encourage flexibility and innovation in the development of construction mitigation tools to be responsive to real-time needs.
- Evaluate the cost and benefits of keeping HOV lanes open during construction in order to maximize traffic flow.
- Coordinate construction sequencing to minimize disruption and to take into account system performance. Examples include coordinating investments with the City of Seattle,

King County, and WSDOT to accommodate the Alaskan Way viaduct closure plans, coordinating investments with Sound Transit and WSDOT to ensure cross-lake functionality during replacement of the SR 520 bridge and building of light rail across I-90.

- Accelerate transit investments to assist mobility during construction.

### Construction mitigation funds

County	2006 dollars (\$ millions)	Year of expenditure (\$ millions)
<i>King</i>	74	100
<i>Pierce</i>	7	11
<i>Snohomish</i>	66	87
<b>Total</b>	<b>147</b>	<b>198</b>

## VI. Targeted Corridor Investments

### **Investment Totals by County** *(totals numbers are rounded)*

	RTID Funding Share	
	(\$ millions 2006)	(\$ millions YOE)
Snohomish County Investments	1,534	2,092
King County Investments	4,087	5,380
Pierce County Investments	1,289	2,047
<b>Total Investment</b>	<b>6,909</b>	<b>9,519</b>

### Definitions of corridors, projects and capital improvements and facilities

**Corridor**—A corridor may be the subject of one or many transportation projects.

**Transportation Project**—A project may include one or more capital improvements to all or a portion of a specified highway, street, bridge or road.

**Capital Improvements**—Capital improvements may result in new or repaired facilities.

**Capital Facilities**—Facilities may include new lanes, highway extensions, flyover ramps, park and ride lots, bus pull-outs, vans, buses, signalization, ramp metering, and transportation system management improvements.

### Expressing project costs in 2006 dollars and year of expenditure

The RTID is required to present costs in both current year dollars and year-of-expenditure dollars (YOE). Current year dollars for purposes of this report is 2006. Project cost estimates were developed and refined over time with the final estimates for purposes of this plan completed in 2006.

Year-of-expenditure dollar estimates include inflation assumptions for all components of the projects and in addition estimates for risk factors and contingencies.

### Project cost estimate process and review

This section describes the process and assumptions used in estimating and validating costs for the projects in this plan.

Lead agencies prepared cost estimates for the projects included in this plan. The RTID executive board hired US Cost in 2004 to review over 74 potential projects, including those selected to be included in this plan. US Cost was engaged to review the cost and schedule estimates, including the cost estimating methodologies used to produce these estimates, and to provide an assessment of these estimates in terms of the likelihood that

the projects will not overrun the estimate. The methods used by the lead agencies and evaluated by US Cost included conventional cost estimating procedures, WSDOT's cost estimate validation process (CVEP), cost risk assessment (CRA), and schedule cost risk evaluation (SCoRE) processes.

US Cost scored the 74 projects evaluated for a confidence level at the point in time when the review took place. Scores ranged from insufficient data to assess, to low, fair, and good. Ninety-one percent of the projects achieved a good or fair confidence rating.

Following US Cost's assessment, lead agencies updated their cost estimates and procedures.

In 2006, worldwide materials and labor inflation reached record levels. WSDOT determined that the projects included in this plan should be reevaluated based on new cost data.

As a result, the RTID executive board worked with lead agencies to re-scope projects to achieve transportation mobility and access within a constrained budget.

Described below is the process used by lead agencies regarding cost assumptions. Lead agencies include WSDOT, King, Pierce, and Snohomish counties, and city governments in all three counties. These agencies have on record detailed information for project specific cost estimates.

#### **Base Design and Construction Costs**

Throughout the nation, commodity prices have increased dramatically in the last two years. Global competition, rising oil prices, the impacts of Hurricane Katrina, and an improving economy have all contributed to a sharp spike in prices WSDOT and its contractors pay for key commodities necessary to build roads and bridges.

In addition, as projects move further along in the design process, project details are refined, and in some cases this leads to increased project costs. WSDOT provided the RTID executive board with summary sheet listing the key elements responsible for increasing the base costs of each project.

#### **Updated Risks**

For each project, lead agencies assigned risk factors to the key project elements. An example of this category would be the potential for increased environmental mitigation cost or unforeseen changes in design standards for seismic safety.

#### **Updated Inflation Rates**

The governor's expert review panel formed to review the Alaskan Way viaduct and SR 520 projects called for more robust inflation assumptions. WSDOT uses a forecast of inflation developed by Global Insights, an economic forecasting firm, that reflects the spike in commodity prices and construction costs over the past couple of years and for the next one or two years. However, the Global Insights forecasts that such costs will level out to a lower rate of average increases from this higher base. WSDOT determined that it would be prudent to have these cost estimates also include an inflation risk factor. Therefore an adjustment was made that assumes that in any given year, there is a three out of four chance of inflation exceeding the Global Insights number.

By adding this inflation risk factor into the cost estimates, the WSDOT projects and the Sound Transit projects are projected to be at roughly the same 3.5% rate of inflation per year. <sup>1</sup>

## Investment Choices

WSDOT and lead agencies provided RTID executive board members with a range of investment choices taking the RTID contribution in the *Blueprint* as a given and tried to match an investment to that number. The project teams looked at the elements that would provide the most significant congestion relief, or the biggest safety benefits and estimated the cost of each of these.

## Annual average inflation cost index (2008-2027)

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- Construction cost annual average inflation (King and Pierce counties): 3.5%
- Construction cost annual average inflation (Snohomish County): 2.3%
- Engineering cost annual average inflation (King and Pierce counties): 3.5%
- Engineering cost annual average inflation (Snohomish County): 1.9%
- Right-of-way cost annual average inflation (all counties): 7.0%

## Performance criteria for project selection

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The RTID statute lists the following benefits to be evaluated in selecting transportation projects to be included in this plan:

- Reduced level of congestion and improved safety
- Improved travel time
- Improved air quality
- Increases in person and vehicle trip capacity
- Reductions in person and vehicle delay
- Improved freight mobility
- Cost effectiveness

WSDOT conducted the analysis using the best practices for transportation planning in this region. The PSRC regional model was the technical tool used to analyze data related to this plan. Staff from RTID, WSDOT, Sound Transit, and PSRC met several times to review underlying assumptions and to integrate system-modeling assumptions. The regional model includes the following factors:

- Population and employment based on local and regional GMA plans
- All improvements tested together as a system
- System performance measured for King, Pierce and Snohomish counties.
- Projects then tested individually

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<sup>1</sup> It should also be noted that there is a slight methodological difference between the ways some of the WSDOT inflation estimates were developed. Most projects used the risk factor approach, but in others, generally the less complex ones, a surrogate measure of additional contingency funds was added to approximate the inflation risk.

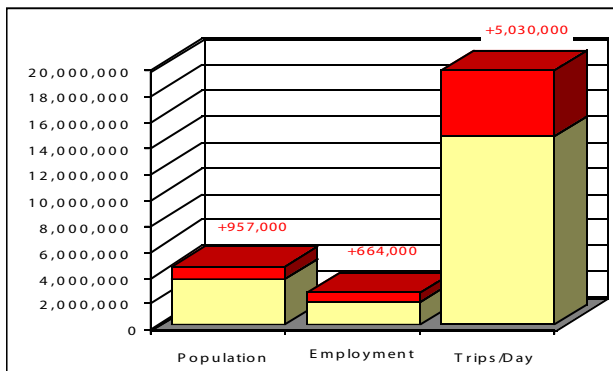
- Performance improvement measured against 2028 baseline congestion.

The system analysis was based on RTID projects defined as of May 23, 2007. Two future scenarios were analyzed:

1. 2028 baseline including all state-funded projects, plus *Sound Move*.
2. 2028 baseline without state-funded projects, but still including *Sound Move*.

*Sound Transit 2* projects are included in 2028 system-level performance benefits.

The chart below presents projected populations, employment, and trips per day from today to 2028, the twenty-year investment period for this plan.



### Scenario one

Scenario one compared the 2028 baseline against the RTID plan.

2028 baseline (including state-funded projects and *Sound Move*):

- Existing network plus local projects planned to be completed by 2028
- Funded state highway projects
- *Sound Move* is completed
- Other anticipated transit investments to be completed by 2028.

2028 with the RTID plan implemented:

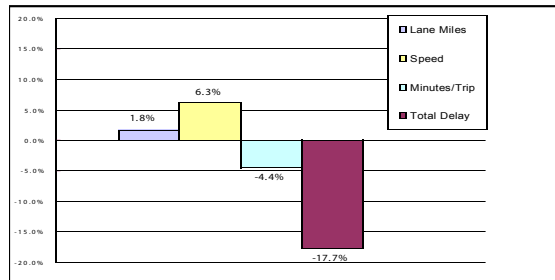
Included in the *Roads & Transit* built scenario is the 2028 baseline above, plus

- RTID proposal (as of May 23, 2007)
- 186 added lane miles
- 30 miles of HOV lanes
- 4 miles of transit (BAT) lanes
- 152 miles of general-purpose lanes
- *Sound Transit 2* light rail construction (164th/Ash Way to Tacoma Dome, and downtown Seattle to Overlake).



### Improved system performance under scenario one

1.8% additional system lane miles plus 50 miles of additional light rail would produce higher speeds and reduce both travel time and overall delay, as shown below.



### Road capacity added under scenario one

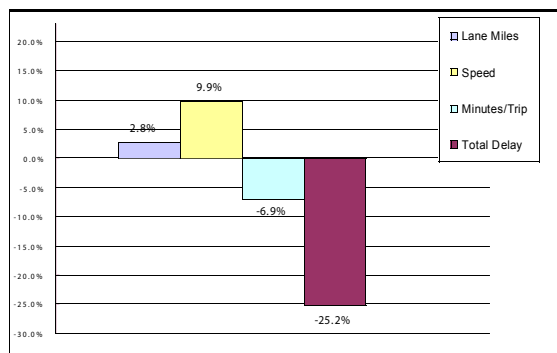
Freeway general-purpose	74 lane miles
Freeway HOV	30 lane miles
Other general-purpose	75 lane miles
Transit lanes (BAT)	4 lane miles
<b>Total roads</b>	<b>186 lane miles</b>

### Scenario two

Scenario one compared the 2028 baseline without state-funded projects against the 2028 *Roads & Transit* plan with state investments.

### Improved system performance under scenario two

Including state investments and *Roads & Transit* would add 2.8% of road system lane miles plus 50 miles of additional light rail, producing higher speeds while travel time and total delay would be significantly reduced (see chart below).



### Road capacity added under scenario two

Freeway general-purpose	122 lane miles
Freeway HOV	79 lane miles
Other general-purpose	107 lane miles
Other HOV	5 lane miles
<b>Total roads</b>	<b>313 lane miles</b>

### Freight benefits

- Many proposed improvements are on major freight routes.
- System-wide, truck hours delay reduction is estimated at 10,900 hours/day.
- Translated to dollar value, this plan would save about \$160 million annually in freight shipping costs.

### Safety benefits

- 50 high-accident locations in the three-county area will be addressed.
- 88 centerline miles of high-accident corridors will be addressed.
- Three seismically vulnerable structures will be upgraded (SR 520, South Park bridge and Spokane Street viaduct).

## Corridors

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The RTID executive board identified three corridors in the region to coordinate planning with Sound Transit and to ensure an integrated transportation system. The three corridors are:

### North – Arlington and Marysville to Edmonds and Lynnwood.

I-5  
SR 9  
SR 99  
US 2  
SR 522

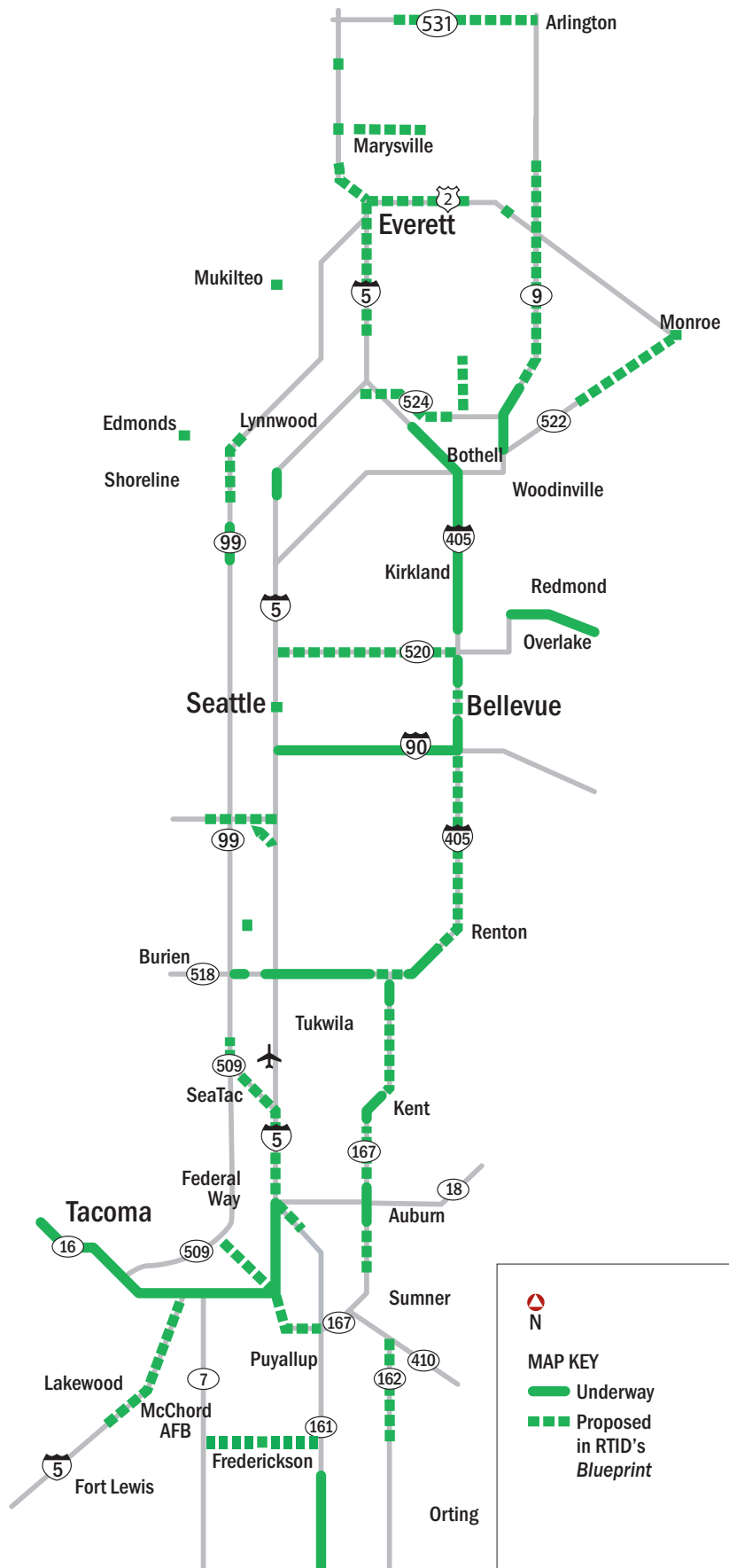
### East/Central – Shoreline and Bothell to Burien and Renton.

I-5  
SR 99  
I-405  
SR 520  
I-90  
SR 167/I-405

### South – SeaTac and Kent to Lakewood and Frederickson.

I-5  
SR 509  
SR 167

# The RTID Investment Package



## Project Summary by County

# North Corridor

### Snohomish County:

### RTID Funding Share:

**10 projects**  
**22 facilities**  
**construction mitigation**

**I-5 Improvement Project**

**U.S. 2 Improvement Project**

**SR 99 Improvement Project**

244th Street SW to SR 104 reconstruct interchange

**SR 9 Improvement Project**

Lanes, signals, intersection improvements, turn lanes, safety

**SR 522 Improvement Project**

Paradise Lake Road interchange widening

**SR 524 Improvement Project**

**SR 531 Improvement Project**

I-5/Smokey Point to SR 9 widening

**39th Ave. SE/35th Ave. SE Improvement Project**

**Transit and Multi-modal Improvement Project**

**Construction Mitigation Program**

**Total Snohomish County Investments**  
(rounded numbers)

2006 dollars  
(\$ in millions)

YOE dollars  
(\$ in millions)

256

356

350

477

40

64

304

486

127

143

104

123

55

68

79

110

154

179

66

87

**1,534**

**2,092**

## Project Summary by County

# Central/East and South Corridors

### King County:

### RTID Funding Share:

**12 projects  
construction mitigation**

**Seattle Mobility Project**

**I-5 Direct Access Project**

**South Park Bridge Replacement Project**

**SR 520 Bridge and HOV Lane Project**

**I-90 HOV Lane Project**

**I-405 Bellevue to Renton Project**

**I-5/SR 509 Corridor Completion and Freight Improvement Project**

**SR 167/I-405 Interchange HOV-to-HOV Direct Connection Project**

**SR 167 Green River Valley Corridor Congestion Relief Project**

**I-5/SR 18 Federal Way Congestion Relief Project**

**East Sammamish Plateau Access Project**

**SR 99 Transit Improvement Project**

**Construction Mitigation**

**Total King County Investments**  
(rounded numbers)

2006 dollars  
(\$ in millions)

YOE dollars  
(\$ in millions)

289

323

83

114

99

110

972

1,139

25

35

904

1,283

798

1,051

316

403

391

650

89

120

10

12

37

40

74

100

**4,087**

**5,380**

## Project Summary by County

# South Corridor

### Pierce County:

**4 projects**  
**7 capital facilities**  
**construction mitigation**

### RTID Funding Share:

	2006 dollars (\$ in millions)	YOE dollars (\$ in millions)
<b><u>SR 167 Tacoma to Puyallup Project</u></b>	888	1,358
<b><u>I-5/SR 704 Thorne Lane Interchange Project</u></b>	190	322
<b><u>South I-5 Mobility Project</u></b>	37	51
<b><u>SR 410/SR 162 Congestion Relief Project</u></b>	122	256
<b><u>Frederickson Mobility Project</u></b>	44	50
<b><u>Construction Mitigation</u></b>	7	11
<b>Total Pierce County Investments</b> (rounded numbers)	<b>1,289</b>	<b>2,047</b>

Funds raised in each county are invested in that county. Projects will be built between 2008-2027. Project sequencing assumptions are in Appendix C: Financial Plan.

## Snohomish County Investments

### Project Descriptions by County

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#### **Snohomish County**

**S**nohomish County is experiencing a high rate of growth and traffic congestion problems. Between 1990 and 2000, Snohomish County's population grew by 30.1 percent—the fastest growth in the RTID tri-county area. Approximately 40 percent of Snohomish County's 300,000 workers commute outside of the county every day, with most traveling to King County (34 percent). Approximately 20 percent of workers in Snohomish County commute from other counties. Commuting alternatives are critical to ensure that the local work force can reliably get to work on time.

The Snohomish County economy is forecasted to grow by 20 percent between 1998 and 2010, adding approximately 45,000 new jobs. Current projections show that most growth is expected to occur in the southwest portion of the county (Everett, Lynnwood, and Bothell.) All three are designated regional centers by the Puget Sound Regional Council. All RTID funded projects serve areas where housing and commercial development growth is allowed.

The proposed RTID investments would continue to build on the current state-funded investments by focusing significant improvements on key state highway corridors of SR 9, US 2, and key interchange improvements along I-5. US 2 is one of two main corridors across the Cascade Mountains. The other corridor is I-90. US 2 is accessed by SR 522 by drivers coming from northeast King County.

Improvements on SR 522, 524 and 531 will provide improved east-west connections. In addition, three major arterial projects in Marysville, Bothell, and unincorporated Snohomish County would be completed and additional funds would be invested in park & ride lots, transit related intersection improvements, the Edmonds multi-modal ferry terminal and capital purchases for Community Transit.

## Snohomish County Investments

### Snohomish County

### RTID Funding Share:

	2006 dollars (\$ in millions)	YOE dollars (\$ in millions)
<b><u>I-5 Improvement Project</u></b>	<b>256</b>	<b>356</b>
I-5/128th Street (SR 96) SW/SE reconstruct interchange, phase 1	113	185
I-5 south Everett interchange improvements (Everett Mall Way – 100th St. SE phase 1 HOV access)	3	3
I-5 south Everett interchange improvements (Everett Mall Way – 100th St. SE phase 2 HOV access)	56	71
I-5/41st Street interchange South Broadway/SB I-5 on-ramp bridge	6	6
I-5/116th Street NE interchange	25	27
I-5/88th Street NE interchange	38	43
88th Street corridor improvements (Marysville) widening	15	20
<b><u>U.S. 2 Improvement Project</u></b>	<b>350</b>	<b>477</b>
U.S. 2 Trestle: I-5 to SR 204	281	396
Everett arterial access improvements at U.S. 2/I-5 interchange	25	32
Monroe bypass/U.S. 2 phase 1 improvements	44	49
<i>Contingency scope to include Monroe bypass/U.S. 2 improvements phase 2</i>		
<i>Contingency scope to include U.S. 2/Bickford interchange</i>		
<b><u>SR 99 Improvement Project</u></b>	<b>40</b>	<b>64</b>
244th Street SW to SR 104 reconstruct interchange		
<b><u>SR 9 Improvement Project</u></b>	<b>304</b>	<b>486</b>
Lanes, signals, intersection improvements, turn lanes, safety		
<b><u>SR 522 Improvement Project</u></b>	<b>127</b>	<b>143</b>
Paradise Lake Road interchange and widening		
<b><u>SR 524 Improvement Project</u></b>	<b>104</b>	<b>123</b>
SR 524, 24th Avenue West to Royal Anne Road (vicinity SR 527) widening	94	111
196th Street SW (SR 524) from 48th Avenue West to 37th Avenue West widening	10	12
<b><u>SR 531 Improvement Project</u></b>	<b>55</b>	<b>68</b>
I-5/Smokey Point to SR 9 widening		
<b><u>39th Ave. SE/35th Ave. SE Improvement Project</u></b>	<b>79</b>	<b>110</b>
39th Avenue SE from 228th Street SE to 240th Street SE missing link	30	36
39th/35th Avenue SE from 228th St. SE to Seattle Hill Road widening	49	74
<b><u>Transit and Multi-modal Improvement Project</u></b>	<b>154</b>	<b>179</b>
Edmonds Crossing (SR 104) multi-modal terminal, ferry and transit	122	137
Bus and van fleet expansion	12	15
Park & ride facilities, north county	12	13
Park & ride facilities, SR 9	8	14
<b><u>Construction Mitigation Program</u></b>	<b>66</b>	<b>87</b>
<b>Total Snohomish County Investments</b> (rounded numbers)	<b>1,534</b>	<b>2,092</b>



## Snohomish County Investments

### I-5 Improvement Project

#### I-5/128th Street (SR 96) SW/SE Reconstruct Interchange, Phase 1

RTID Share (\$ 2006)     \$113 million

RTID Share (\$ YOY)     \$185 million

#### Lead Agency: WSDOT

Located in a rapidly growing residential and commercial area just south of Everett in Snohomish County, this busy interchange needs safety and traffic flow improvements to meet the area's heavy traffic needs. Crews would replace the existing I-5/128th Street SW bridge and ramps with a single-point urban interchange, giving drivers smoother traffic flow and improved safety on 128th Street (SR 96) and as they get on and off I-5.

The new interchange would help alleviate backups onto I-5 by increasing interchange capacity and flow. Reducing these daily backups would also improve safety. To improve pedestrian safety, crews would build sidewalks along 128th Street SW to meet up with existing sidewalks at each end of the project.



## Snohomish County Investments

# I-5 Improvement Project

## I-5 South Everett Interchange Improvements (Everett Mall Way - 100th Street SE Phase 1 HOV Access)

RTID Share (\$ 2006)     \$3 million

RTID Share (\$ YOE)     \$3 million

### Lead Agencies: WSDOT, City of Everett

Phase I of this project involves the construction an on-ramp to southbound I-5 south of the SR 526/ SR 527/South Broadway intersection. This project would significantly reduce traffic congestion at the existing SR 526/SR 527/South Broadway intersection.

With completion of both phases of this project, approximately 23 percent of the traffic from the SR 526/SR 527/Everett Mall Way intersection in the afternoon peak travel period would be removed, which would also reduce crashes at this location by about 23 percent.

The South Everett interchange improvements are also expected to improve the operation of the northbound and westbound legs of the SR 526/ SR 527/Everett Mall Way intersection by reducing overall traffic delay by 50% and 60%, respectively.

### Funding Partners: WSDOT, City of Everett



## Snohomish County Investments

### **I-5 Improvement Project** **I-5 South Everett Interchange Improvements** **(Everett Mall Way - 100th St SE Phase 2 HOV Access)**

RTID Share (\$ 2006)     \$56 million

RTID Share (\$ YOY)     \$71 million

#### **Lead Agencies: WSDOT, City of Everett**

Phase II of this project involves the construction of a crossing (tunnel) under I-5 at 100th St SE, with HOV-only access to the I-5 South Everett freeway station. Connecting improvements will also be made to 100th Street SE, east and west of the I-5 right-of-way, between SR 527 and 7th Avenue SE. This project would significantly reduce traffic congestion at the existing SR 526/SR 527/South Broadway intersection.

With completion of both phases of this project, approximately 23 percent of the traffic from the SR 526/SR 527/Everett Mall Way intersection in the afternoon peak travel period would be removed, which would also reduce crashes at this location by about 23 percent.

The South Everett interchange improvements are also expected to improve the operation of the northbound and westbound legs of the SR 526/SR 527/Everett Mall Way intersection by reducing overall traffic delay by 50% and 60%, respectively.

The I-5/100th Street undercrossing project would also provide a safe place for pedestrians and bicycles to cross the freeway, which the current I-5/SR 526/SR527 interchange currently lacks. Some pedestrians are known to run across I-5 near this interchange, due to the lack of adequate pedestrian facilities.

#### **Funding Partners: WSDOT, City of Everett**



## Snohomish County Investments

### **I-5 Improvement Project** **I-5/41st Street Interchange** **South Broadway/southbound I-5 on-ramp bridge**

*RTID Share (\$ 2006)*     \$6 million

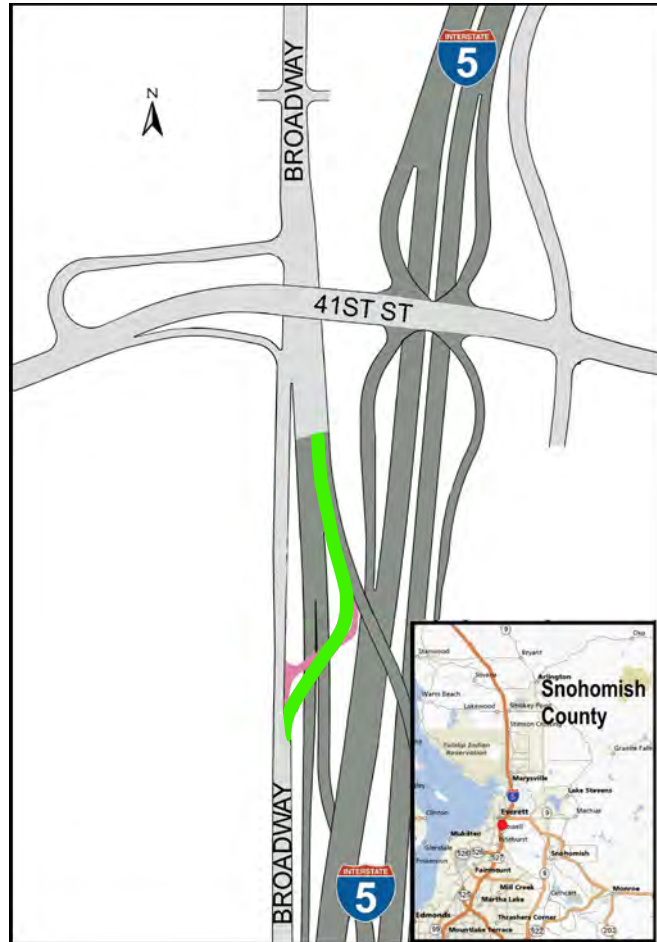
*RTID Share (\$ YOE)*     \$6 million

#### **Lead Agency: City of Everett**

This facility involves the construction of arterial improvements to support the new single-point interchange at I-5 and 41st Street. This facility would reduce traffic congestion in the area.

The RTID funding for this location would be used to re-construct the substandard, one-lane bridge over the Broadway on-ramp to southbound Interstate 5 just south of the new I-5/41st Street interchange. This bridge connects northbound traffic on South Broadway with the northbound lanes of Broadway at 41st Street.

#### **Funding Partners: City of Everett**



## Snohomish County Investments

### I-5 Improvement Project I-5/116th Street NE Interchange

RTID Share (\$ 2006)     \$25 million

RTID Share (\$ YOY)     \$27 million

#### Lead Agency: Tulalip Tribes

The 116th Street NE interchange facility will replace the existing diamond interchange with a single-point urban interchange. Key facility elements include widening of all interchange ramps to two lanes, with accommodation for future HOV bypass lanes and ramp metering; construction of a wider bridge overpass; addition of bicycle lanes and sidewalks across I-5; and extension of Quil Ceda Boulevard to connect to 34th Avenue NE and improve interchange operations.

The facility is being designed and constructed in four phases:

- Phase 1 is currently under construction, and will realign 34th Avenue NE to connect with Quil Ceda Boulevard further west from the interchange. This phase will be complete and open to traffic Spring 2007.
- Phase 2A will replace a major culvert under 116th Street NE, and widen 116th Street NE between the southbound ramp terminals and Quil Ceda Boulevard. This phase will provide the additional lanes west of the interchange and accommodate the temporary traffic control stages of the interchange reconstruction.
- Phase 2B will replace the existing bridge over I-5 with a widened structure including bicycle lanes and sidewalks. The new structure will provide additional westbound and eastbound through lanes and left-turn storage for the existing diamond interchange.
- Phase 2C will realign the existing ramps at the interchange from a diamond interchange layout with two signals into a single-point urban interchange layout with one signal. The realigned off-ramps will include additional left and right turning lanes to provide adequate storage lengths for traffic queues. Ramp metering and HOV bypass lane will be provided on the southbound on-ramp.

This facility will reduce congestion at this busy interchange leading into Marysville and the Tulalip Tribes Reservation. Other project benefits include:

- Queues onto I-5 will be eliminated on the northbound off-ramp, improving safety for I-5 motorists.
- Average vehicle delay at interchange ramp signals will be reduced from 252 seconds to 31 seconds through 2030.
- Facility area intersections' level of service (LOS) will improve from LOS E/F to D or better through 2030.

**Funding Partners: Tulalip Tribes, WSDOT, Snohomish County, City of Marysville**



## Snohomish County Investments

# I-5 Improvement Project

## I-5/88th Street NE Interchange

RTID Share (\$ 2006)     \$38 million

RTID Share (\$ YOY)     \$43 million

### Lead Agency: Tulalip Tribes

The 88th Street NE interchange facility would provide major interchange improvements to the existing diamond interchange, with one possible option being a single-point urban interchange. Key facility elements include providing additional lanes on the ramps with accommodation for future HOV bypass lanes and ramp metering; providing additional through lanes and turn lanes on the bridge overpass on to I-5; addition of bicycle lanes and sidewalks across I-5; auxiliary lanes on I-5 south, and continuity with the 88th St NE corridor facility east of the interchange to improve interchange operations

These improvements would:

- Reduce northbound off-ramp queue lengths by almost 600 feet, thus eliminating queues from backing up onto the I-5 mainline and improving safety.
- Reduce average vehicle delay at interchange ramp signals from 605 seconds to 29 seconds through 2030.
- Improve level of service (LOS) at project intersections from LOS F to LOS C/D through 2030.

**Funding Partners: Tulalip Tribes, WSDOT, Snohomish County, City of Marysville**



## Snohomish County Investments

### **I-5 Improvement Project** **88th Street Corridor Improvements (Marysville) Widening**

*RTID Share (\$ 2006)*      \$15 million

*RTID Share (\$YOE)*      \$20 million

#### **Lead Agency: City of Marysville**

The improvement would widen the existing 2-lane arterial corridor by expanding to a 5-lane roadway section with curb, gutter, sidewalks, bicycle lanes and landscape buffer through the Marysville city limits and unincorporated Snohomish County. The improvement would revise the State Avenue intersection and install traffic signals at the 48th and 55th Avenue intersections.

RTID funding would:

- Improve one of only two east–west routes within Marysville that connect I–5 to SR 9.
- Accommodate transit through the installation of bus stops and shelters.
- Improve traffic flow and capacity, and allow for non-motorized transportation by widening the roadway and installing sidewalks, bicycle lanes and roadway illumination.
- Improve safety by reducing the amount of cut-through traffic in residential neighborhoods, and by installing a roadway illumination system.



#### **Funding Partners: City of Marysville, Snohomish County**

## Snohomish County Investments

### U.S. 2 Improvement Project

#### U.S. 2 Trestle: I-5 to SR 204

RTID Share (\$ 2006)      \$281 million

RTID share (\$ YOY)      \$396 million

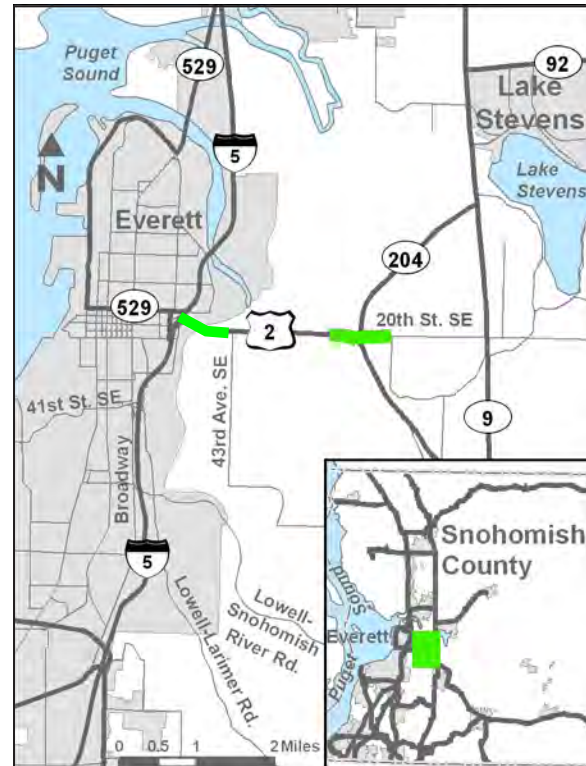
#### Lead Agency: WSDOT

The project would relieve congestion and improve safety at one of the worst chokepoints in Snohomish County. The US 2 Trestle is the major access point to I-5 and Everett for residents in the designated urban growth areas of Lake Stevens, Snohomish, and Monroe.

RTID funding would:

- Modify the US 2/SR 204 interchange to add capacity to all on and off-ramps.
- Improve westbound mobility.
- Improve Everett arterial access at I-5/US 2 to increase mobility in downtown Everett for general use and transit access.

This project would complement improvements already scheduled for the on- and off-ramps that connect US 2 to I-5, and would reduce traffic congestion and improve safety for users from I-5 and US 2.





## Snohomish County Investments

### **U.S. 2 Improvement Project** **Everett Arterial Access Improvements at U.S. 2/I-5 Interchange**

*RTID Share (\$ 2006)*     \$25 million

*RTID Share (\$ YOY)*     \$32 million

#### **Lead Agencies: WSDOT, City of Everett**

This facility would improve Everett arterial access at I-5/US 2, to increase mobility in downtown Everett for general use and transit access. This will reduce traffic congestion and improve safety for users from I-5 and US 2.

Specifically, the RTID funding would provide access improvements between the downtown Everett arterial street system, I-5, and US 2. These arterial access improvements, which would enhance the improvements to the I-5/US 2 interchange currently being constructed under the WSDOT Everett I-5 HOV project, include improved arterial connections to I-5 on- and off-ramps, an arterial couplet parallel to I-5, various traffic signal improvements, revised channelization, and traffic control measures.

#### **Funding Partners: WSDOT, City of Everett**



## Snohomish County Investments

### **U.S. 2 Improvement Project Monroe Bypass/US 2 Phase 1 Improvements**

*RTID Share (\$ 2006)*     **\$44 million**

*RTID Share (\$ YOY)*     **\$49 million**

#### **Lead Agency: WSDOT**

US 2 is one of only two year-round east-west links across the Cascade Mountains. In addition to the Burlington Northern Santa Fe rail line, US 2 is a major transportation corridor for all east-west container shipments to and from the ports of Tacoma and Seattle.

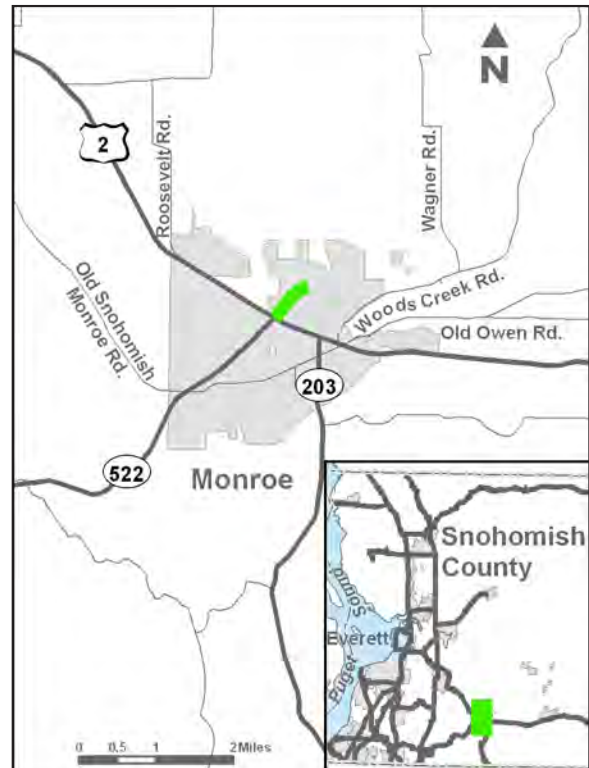
The city of Monroe is one of the fastest growing cities along US 2. Over the past 15 years its population almost quadrupled from just over 4,200 people in 1990 to almost 16,000 in 2005. As a result of this population surge, average daily traffic through the city has almost doubled. In 1990, 21,400 vehicles traveled on this stretch of US 2 each day. Now, over 40,000 vehicles use this section of US 2 each day. Recreational traffic on weekends also contributes to congestion. Between January 1999 and October 2006, 1,247 collisions occurred on US 2 within the Monroe city limits, including five fatalities.

RTID funding would:

- Build a two-lane limited access highway that terminates in a roundabout to the north of the Kelsey Shopping center.
- Collect trips generated in the residential area north of Monroe and direct them to SR 522 or west-bound US 2.
- Build a roundabout connecting to Kelsey Street and Chain Lake Road.

This facility would alleviate the chokepoint on US 2 at SR 522 by diverting traffic from US 2 to (Phase I of) the bypass and local street connections.

#### **Funding Partner: City of Monroe**



## Snohomish County Investments

### **SR 99 Improvement Project** **244th Street SW to SR 104 Reconstruct Interchange**

*RTID Share (\$ 2006)*     \$40 million

*RTID Share (\$ YOY)*     \$64 million

#### **Lead Agency: WSDOT**

SR 104 is the major east-west access from I-5 to the Edmonds ferry terminal and Kingston. SR 99 is the north-south corridor known as Aurora Avenue in Seattle. SR 99 is a major retail and business corridor and before construction of I-5, it was the state's major north-south corridor. This location experiences a high rate of crashes.

This intersection is one of the remaining chokepoints on SR 99.

RTID funding would:

- Widen the SR 99 bridge over SR 104 from four lanes to seven lanes, with three lanes in each direction.
- Provide signal improvements at SR 104 and 256th Street, which serves as the westbound connector from SR 99 to SR 104.
- Build a center median.
- Add sidewalks.
- Connect the City of Shoreline's SR 99 widening with the previously constructed widening of SR 99 in Edmonds.
- Reduce traffic congestion and collisions.



## Snohomish County Investments

### SR 9 Improvement Project

**Lanes, signals, intersection improvements, turn lanes, safety**

RTID Share (\$ 2006)     \$304 million

RTID Share (\$ YOY)     \$486 million

#### Lead Agency: WSDOT

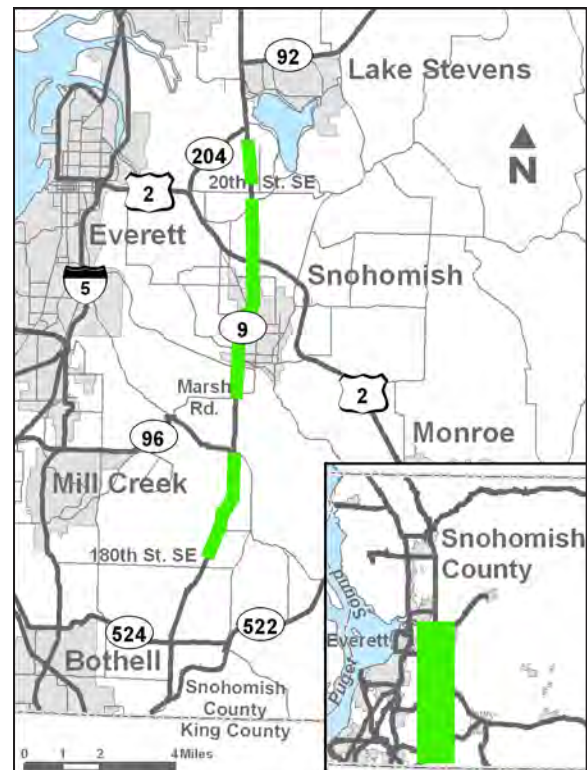
SR 9 extends from just north of Woodinville to the Canadian border a distance of about 100 miles. SR 9 largely parallels I-5. Lake Stevens is located along SR 9 and was incorporated as a city in 1960. This area of rapid population growth in Snohomish County and is served by Community Transit.

Investments in the SR 9 corridor will meld road and transit solutions. This project expands SR 9 from two to five lanes for about 14 miles, and improves intersections with turn lanes and signals to increase capacity and achieve current safety standards.

RTID funding would:

- Widen SR 9 from 176th Street to SR 92 (vicinity), to four and five lanes with access control.
- Build a new bridge over the Snohomish River.
- Make intersection improvements to facilitate transit and general mobility.
- Build park & ride lots (see related transit and multi-modal improvement project).

This facility would improve the alternate route to I-5 by widening SR 9 from 176th Street SE to SR 92 to four/five lanes with access control. In addition to widening the existing highway from two lanes, various public road intersections would be improved to match the new highway.



## Snohomish County Investments

### **SR 522 Improvement Project Paradise Lake Road Interchange and Widening**

RTID Share (\$ 2006)     \$127 million

RTID Share (\$ YOY)     \$143 million

#### **Lead Agency: WSDOT**

SR 522 is a major access point from I-405 and vicinity to US 2 (one of only two year-round routes over the Cascade Mountains to eastern Washington). It is also the location for the University of Washington's Bothell campus. This corridor was considered by *Reader's Digest* magazine to be one of the least safe routes in the United States. WSDOT completed the widening of SR 522 from SR 9 to Paradise Lake Road widening in 2002. This improvement significantly enhanced safety. During the two years before construction began (1995-96), an average 40 collisions per year occurred on this three-mile stretch of highway. Sixteen of these caused injuries. During the two years after construction was complete (2003-04) an average 23 collisions per year occurred, with 11 causing injuries. Fatal collisions were eliminated. However, the intersection at SR 522 and Paradise Lake Road remains a bottleneck and accident location. This project will complete the widening of SR 522 to four lanes from I-405 to US 2.

RTID funding would:

- Build a new interchange at the existing Paradise Lake Road intersection in Maltby.
- Complete four-lane, median divided highway.
- Eliminate existing signalized intersection and resulting stop and go traffic.
- Build on and off-ramps.
- Construct detention ponds to capture and clean highway runoff.
- Alleviate bottlenecks.
- Reduce collisions.
- Improve driver safety.



## Snohomish County Investments

### SR 524 Improvement Project

#### SR 524, 24th Avenue West to Royal Anne Road (vicinity SR 527) Widening

RTID Share (\$ 2006)     \$94 million

RTID Share (\$ YOY)     \$111 million

#### Lead Agency: Snohomish County

State Route 524 is also known as 196th Street SW in Lynnwood, Filbert Road east of I-5, or Maltby Road east of Thrashers Corner. It runs about 15 miles from Edmonds in the west to Bothell in the east. It passes south of the Alderwood Mall west of I-5, and ends at SR 522.

The RTID-funded facility would widen SR 524 between 24th Ave W. in Lynnwood and Royal Anne Road (near SR 527) in Bothell, in two phases. The easternmost portion of the route would be widened first.

RTID funding would:

- Widen the existing two-lane road to four and five lanes through most of the corridor.
- Add a center-turn lane.
- Add sidewalks.
- Add bicycle lanes.
- Add new traffic signals at some intersections.
- Construct replacement bridges at the North Creek and Swamp Creek crossings.



## Snohomish County Investments

### SR 524 Improvement Project

#### 196th Street SW (SR 524) from 48th Avenue W. to 37th Avenue W. Widening

RTID Share (\$ 2006)     \$10 million

RTID Share (\$ YOY)     \$12 million

#### Lead Agency: City of Lynnwood

This location is the major access point from I-5 to downtown Lynnwood. Lynnwood is evolving from a suburban town to an urban center. It is one of three designated urban centers in Snohomish County. Lynnwood recently opened a convention center and is building a high-density urban core. Sound Transit 2 is planning light rail to extend from Seattle to Lynnwood. Sound Transit currently operates a transit center and park & ride lot located near 44th Avenue West.

RTID funding would:

- Widen 196th Street SW from 5 lanes to 7 lanes, from 48th Avenue West to 37th Avenue West.
- Construct a new northbound lane on 44th Avenue West from 200th Street SW to 196th Street SW.
- Add capacity for traffic exiting I-5.
- Improve access to the Sound Transit park & ride lot.



## Snohomish County Investments

### **SR 531 Improvement Project** **I-5/Smokey Point to SR 9 Widening**

*RTID Share (\$ 2006)*      **\$55 million**

*RTID share (\$ YOY)*      **\$68 million**

#### **Lead Agency: WSDOT**

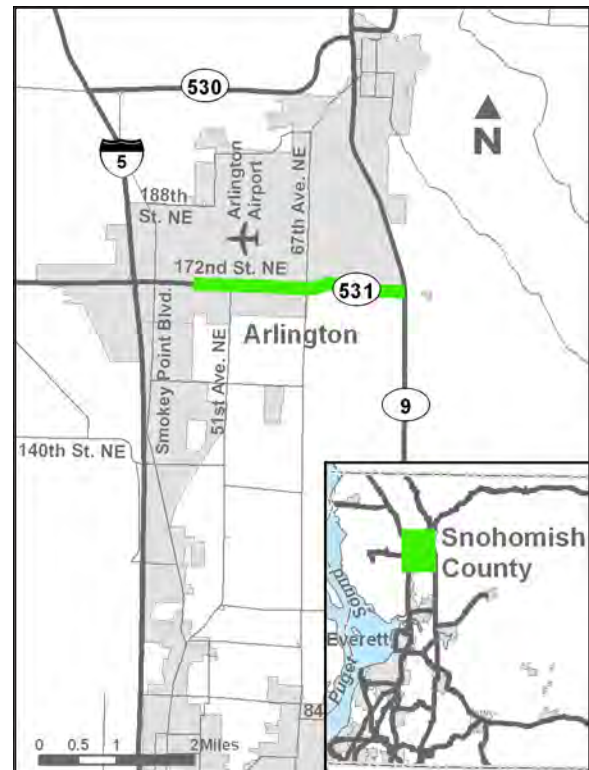
SR 531 is located in the vicinity of the Smokey Point exit from I-5 near Marysville and Arlington. The area of the proposed improvement is from 43rd Avenue NE (east of I-5) to SR 9. Locally, SR 531 is also known as 172nd Street NE. The section between 43rd and 67th Avenues is a commercial and light-industrial area close to the Arlington Airport, and the portion from 67th east to SR 9 is primarily residential.

RTID funding would:

- Widen the state highway to be two lanes in each direction with a two-way left-turn lane in the signalized areas, with the possibility of roundabouts in lieu of signals between 43rd and 67th Avenues.
- Add pedestrian facilities.
- Add bicycle lanes.
- Add landscaped planters.
- Relieve chokepoints.
- Improve safety and capacity.

This facility would alleviate chokepoints between SR 9 and I-5 by widening 2.65 miles of SR 531 from two lanes to four lanes. In addition to widening the existing highway, all public road intersections would be upgraded to match the new highway.

**Funding Partners: City of Arlington, private development, future annexation**





## Snohomish County Investments

### 39th Ave. SE/35th Ave. SE Improvement Project 39th Avenue SE from 228th Street SE to 240th Street SE Missing Link

RTID Share (\$ 2006)     \$30 million

RTID Share (\$ YOY)     \$36 million

#### Lead Agencies: Snohomish County, City of Bothell

This facility, stage 1 of the overall project, will complete a vital missing link in the north-south 39th Avenue SE arterial corridor from the vicinity of 228th Street SE to 240th Street SE. The project will construct a new county and city arterial. The project will improve capacity and improve pedestrian, bicycle, and vehicle safety.

The overall project, when completed, will result in a continuous north-south local arterial from Mill Creek and South Everett to Woodinville that will complement the I-405 and SR 9 proposed improvements by providing an alternative route for local traffic. This will reduce congestion on these state highways as well as SR 527, reduce traffic on nearby north-south residential streets, and put traffic on an arterial designed for the appropriate volumes and speeds, thereby reducing congestion and enhancing safety in the local area.

RTID funding would:

- Complete the final design.
- Assist in the right-of-way acquisition.
- Complete the construction of the project.



Stage 1

#### Funding Partners: Snohomish County, City of Bothell, Transportation Improvement Board

## Snohomish County Investments

### **39th Ave. SE/35th Ave. SE Improvement Project** **39th/35th Avenue SE from 228th Street SE to Seattle Hill Road Widening**

RTID Share (\$ 2006)     \$49 million

RTID Share (\$ YOY)     \$74 million

#### **Lead Agency: Snohomish County**

This facility, stage 2 of the overall project, will widen the existing corridor to improve capacity and construct curb, gutter, sidewalks and bicycle lanes. This facility will improve capacity by adding a two-way left-turn lane, and will also improve pedestrian and bicycle safety.

The overall project, when completed, will result in a continuous north-south local arterial from Mill Creek and South Everett to Woodinville that will complement the I-405 and SR 9 proposed improvements by providing an alternative route for local traffic. This will reduce congestion on these state highways as well as SR 527, reduce traffic on nearby north-south residential streets, and put traffic on an arterial designed for the appropriate volumes and speeds, thereby reducing congestion and enhancing safety in the local area.

RTID funding would:

- Complete the final design.
- Assist in the right-of-way acquisition.
- Complete the construction of the project.



*Stage 2*

**Funding Partners: Snohomish County, Transportation Improvement Board**

## Snohomish County Investments

# Transit & Multimodal Improvement Project

## Edmonds Crossing (SR 104) Multi-modal Terminal, Ferry and Transit

RTID Share (\$ 2006)     \$122 million

RTID Share (\$ YOY)     \$137 million

### Lead Agencies: Washington State Ferries, City of Edmonds

Edmonds Crossing is a regional multi-modal facility intended to accommodate future growth in travel along the State Route (SR) 104 corridor which includes the Edmonds/Kingston ferry route, while providing a long-term solution to current operational and safety conflicts between ferry, passenger and commuter rail, carpool/automobile, bus, and pedestrian traffic. The Federal Highway Administration, Federal Transit Administration, Washington State Department of Transportation (including Washington State Ferries), and City of Edmonds propose to develop a multi-modal center that would integrate ferry, commuter and intercity rail, and transit services into a single complex.



### Facility Components

- A new ferry terminal that meets the operational requirements for forecasted ferry ridership through 2030, by providing adequate on-site vehicle storage that would virtually eliminate queuing along State Route 104, thus improving arterial operations, eliminating street congestion, and improving on-time efficiency.
- A train station designed to provide for intercity (Amtrak) passenger and commuter rail (Sounder) service while providing amenities for passenger comfort and convenience.
- A transit center that meets local bus and regional transit system requirements while providing an opportunity to connect the downtown business centers with the multi-modal terminal through the use of a local circulator service.
- Flexibility to operate the facility to respond to changing travel demands for transportation providers in the future.
- Facilities for accommodating both vehicular commuters and walk-on passengers of the available transportation modes (parking, drop-off and waiting areas).
- Safety features including grade separation of train traffic from other modes of travel, designated vehicle parking and holding areas, and safer more convenient waiting for bus, train and ferry riders.

This facility addresses environmental concerns by:

- Removing over-the-water structures made of creosote-treated timber and building new structures made of concrete and steel, thus eliminating marine contamination from creosote-treated timber.
- Making environmental enhancements such as replanting eel-grass, day-lighting creeks, treating storm water, replacing undersized culverts, removing an old tanker dock, and coordinating with Unocal for the cleanup of the tank farm property.

**Funding Partners: Federal Highway Administration, Federal Transit Administration, Washington State Department of Transportation, Sound Transit (Phase 2), Community Transit, City of Edmonds**

## Snohomish County Investments

### Transit & Multimodal Improvement Project Park & Ride Facilities, North County and SR 9

RTID Share (\$ 2006) \$20 million

RTID Share (\$ YOY) \$27 million

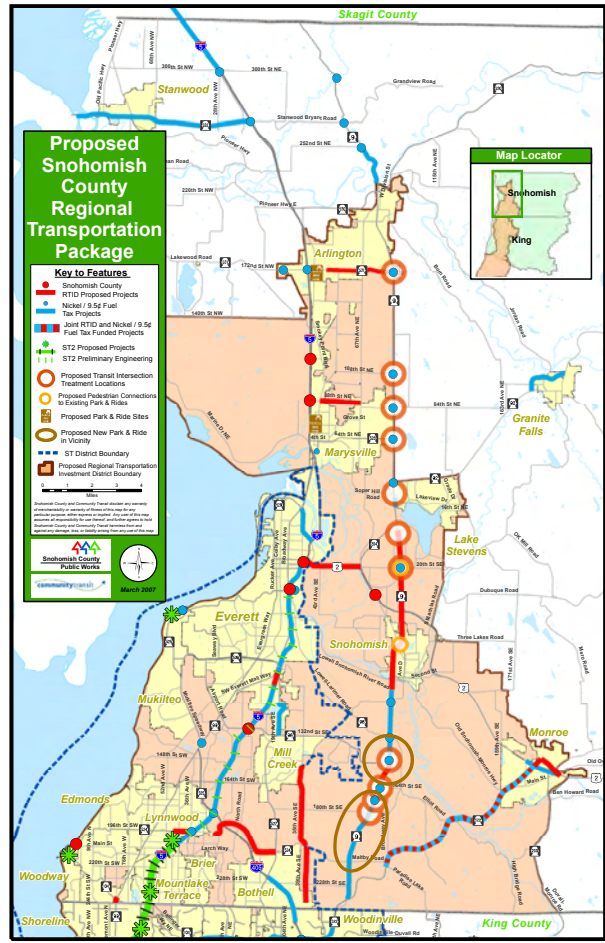
#### Lead Agency: Community Transit

Community Transit will supply the transit component for the Snohomish County RTID area outside of the Sound Transit boundary. (See map for locations.)

Four new park & ride lots are proposed to serve the increasing demand for transit service being generated by the rapid development in Snohomish County: two in the Marysville/Arlington portion of Snohomish County, and two in the southern portion of the SR 9 corridor. Specific locations are:

- Smokey Point Park & Ride (Smokey Point Boulevard and 169th Street): 374 stalls
- Cedar and Grove Park & Ride in Marysville (Cedar Avenue and Grove Street): 226 stalls
- Cathcart Park & Ride (in the vicinity of Cathcart Way and SR 9): 200 stalls
- SR-524 Park & Ride (in the vicinity of SR 524 and SR 9): 200 stalls

#### Funding Partners: FTA, Community Transit



### Transit & Multimodal Improvement Project Bus and Van Fleet Expansion

RTID Share (\$ 2006) \$12 million

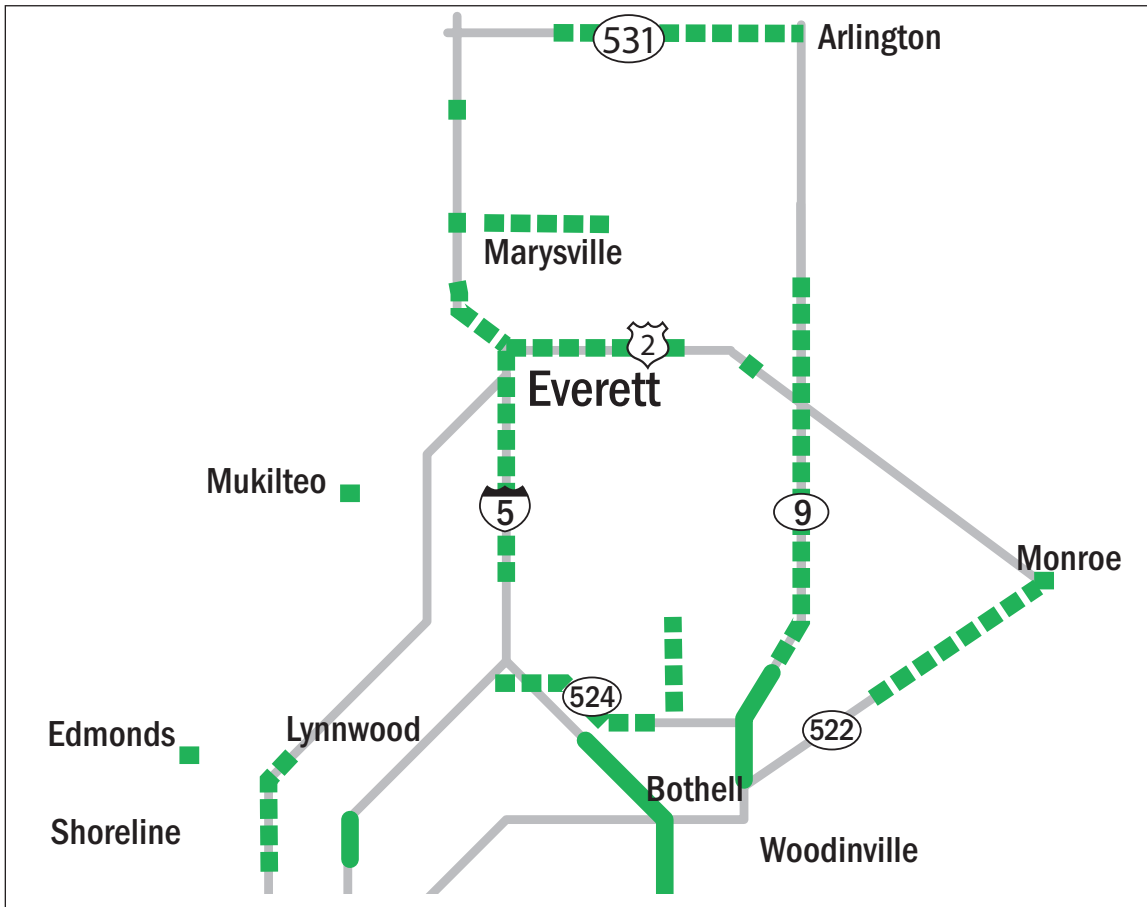
RTID Share (\$ YOY) \$15 million

#### Lead Agency: Community Transit

In addition to park & ride lots and transit-related infrastructure improvements, RTID money is planned for purchase of additional buses and vans for use in the RTID areas of Snohomish County as part of the overall transportation improvement package. Community Transit would deploy buses and vans to specific routes and situations as transit markets develop, taking into account the density of land use, proposed development, and transit-related infrastructure. The fleet expansion would allow for the provision of additional transit service in Snohomish County, particularly along SR 9 and US 2.

#### Funding Partner: Community Transit

## Map of North Corridor Investments



## King County Investments

### Project Descriptions by County

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#### King County

**K**ing County's population of 1,793,600 makes it the 14th largest county in the United States, according to the U.S. Census Bureau (July 2005 estimate). King County is home to nine of the top 15 largest cities in the state. Heavily congested roads are the result of population growth, new urban centers and new travel patterns. At the same time, King County and the region's economy depends on a number of large and expanding employment centers as well as the Port of Seattle and the large warehousing, distribution and manufacturing district in the Green River Valley cities area. Severe traffic congestion problems hamper commuters and freight mobility.

In addition, some of our most critical transportation infrastructure is unsafe and needs to be repaired. Proposed investments in King County are targeted at six main corridors: I-5, I-405, SR 167, SR 520, SR 509, and SR 99. These investments will help improve traffic flow throughout the region and address critical safety concerns.

## King County Investments

### King County

### RTID Funding Share:

	2006 dollars (\$ in millions)	YOE dollars (\$ in millions)
<b><u>Seattle Mobility Project, SR 99 to I-5</u></b> I-5 approach, Mercer Street widening Lander Street improvements I-5/Spokane Street viaduct	289	323
<b><u>I-5 Direct Access Project</u></b>	83	114
<b><u>South Park Bridge Replacement Project</u></b>	99	110
<b><u>SR 520 Bridge and HOV Lane Project</u></b> Bridge replacement, connections to I-5, connections to I-405, mitigation integral to and inseparable from the project, non-motorized improvements	972	1,139
<b><u>I-90 HOV Lane Project</u></b> HOV lanes <i>contingency scope I-90 congestion relief</i>	25	35
<b><u>I-405 Bellevue to Renton Project</u></b> SR 520 to Bellevue, I-90 to downtown Bellevue, SR 169 (Maple Valley Highway) to I-90, non-motorized and transit improvements	904	1,283
<b><u>I-5 / SR 509 Corridor Completion and Freight Improvement Project</u></b> SR 509, I-5 improvements	798	1,051
<b><u>SR 167/I-405 Interchange HOV to HOV Direct Connection Project</u></b>	316	403
<b><u>SR 167 Green River Valley Corridor Congestion Relief Project</u></b>	391	650
<b><u>I-5/SR 18 Federal Way Congestion Relief Project</u></b>	89	120
<b><u>East Sammamish Plateau Access Project</u></b> 244th Avenue SE widening	10	12
<b><u>SR 99 Transit Improvement Project</u></b> Shoreline bus rapid transit improvements	37	40
<b><u>Construction Mitigation Program</u></b>	74	100
<b>Total King County Investments</b> (rounded numbers)	<b>4,087</b>	<b>5,380</b>

## Seattle Mobility Project, SR 99 to I-5

RTID Share (\$ 2006)     \$289 million

RTID Share (\$ YOY)     \$323 million

### I-5 Approach, Mercer Street Widening

#### Lead Agency: City of Seattle

Mercer Street is the major corridor linking I-5 to SR 99, or Aurora Avenue, and the Seattle Center. The corridor helps carry the 12 million visitors a year going to the Seattle Center and supports the region's emerging biotechnology center. Over the next two decades, the number of jobs in this area is expected to increase by 8,000 to 10,000.

This portion of Mercer Street is one of the most congested in Seattle, with backups onto I-5 due to numerous turns and the chokepoint at Fairview Avenue–Valley Street. Increases in employment and travel are expected to continue in coming years, putting more traffic pressure on an already-congested area.

RTID funding would:

- Keep motorists moving. Widen Mercer Street from I-5 to Dexter Avenue, converting Mercer from one-way to two-way, with three lanes eastbound and three lanes westbound, on-street parking and left-turn lanes.
- Add new connections. Reconnect two urban centers by extending two-way Mercer across Aurora and building up to two additional crossings.
- Improve freight movement. Decrease the number of turns from I-5 to Westlake Avenue N. from three to one, and create an easy-to-navigate street grid.
- Remove barriers. Eliminate turn restrictions and add bicycle lanes and sidewalks.
- Provide congestion relief during major construction. A Mercer two-way corridor would enhance access to alternative routes for traffic when the Alaskan Way Viaduct replacement is under construction.

#### Funding Partner: City of Seattle





## King County Investments

### Seattle Mobility Project, SR 99 to I-5

RTID Share (\$ 2006)      \$289 million

RTID Share (\$ YOY)      \$323 million

#### Lander Street Improvements

##### Lead Agency: City of Seattle

The South Lander Street overpass is a companion facility to the South Spokane Street viaduct facility, as well as an alternative to SR 519—a corridor heavily used by stadium-goers and trucks. Building a link over the BNSF railroad tracks would reconnect a part of one of our most important industrial areas, the Duwamish Manufacturing and Industrial Center (DMIC). The DMIC is a major employment hub that provides around 68,000 jobs.

South Lander Street and the BNSF rail line currently intersect, creating significant vehicle and pedestrian delay. By 2030, delays at this location are expected to double due to substantial increases in freight and passenger rail traffic.

RTID funding would:

- Improve safety. The overpass would separate trains from vehicles and pedestrians.
- Keep commuters, transit and freight moving. Reduce traffic delays caused by train crossings.
- Make it easier to drive. Enhance circulation around the future Link light rail station, the Port of Seattle, stadium district and DMIC.
- Provide transportation options. Provide a grade-separated connection to the SoDo busway to create a continuous transit connection between West Seattle, the Lander Link station, and downtown Seattle.
- Provide congestion relief during major construction. The South Lander overpass would enhance access to alternative routes for traffic when the Alaskan Way Viaduct replacement is under construction.

##### Funding Partner: City of Seattle



## Seattle Mobility Project, SR 99 to I-5

RTID Share (\$ 2006)      \$289 million

RTID Share (\$ YOY)      \$323 million

### I-5/Spokane Street Viaduct

#### Lead Agency: City of Seattle

The S. Spokane Street viaduct is a critical connection linking I-5 to Port of Seattle terminals, businesses along the Duwamish River, and West Seattle to I-5, I-90 and SR 99. This corridor is important to the region's economic success. The Port of Seattle is one of the largest in the country, and provides 195,000 jobs throughout the region.

The structure has several deficiencies, including narrow lanes, no permanent barrier between lanes, no safety shoulders and substandard off-ramps creating a significant chokepoint, resulting in high levels of congestion.

RTID funding would:

- Keep buses moving. Extend a lane between First and Fourth S. avenues for transit.
- Make it easier to drive. Widen the structure, expand lanes and construct a new westbound on- and off-ramp at First Avenue South, allowing more time for I-5 drivers to merge right.
- Add options to driving. Build a new eastbound off-ramp at Fourth Avenue South to provide a potential continuous transit connection between West Seattle and the Seattle central business district. Rebuild the lower road and add a sidewalk and bike path along the north side, connecting the SoDo busway to the East Marginal Way trail.
- Keep freight moving. The state Freight Mobility Strategic Investment Board and the FAST Corridor partnership recognize the project as a high priority for regional and statewide freight movement.
- Provide congestion relief during major construction. An improved corridor would enhance access to alternative routes for traffic when the Alaskan Way Viaduct replacement is under construction.

#### Funding Partner: City of Seattle



## King County Investments

# I-5 Direct Access Project

RTID Share (\$ 2006)      \$83 million

RTID Share (\$ YOY)      \$114 million

### Lead Agency: WSDOT

The SoDo busway, operating in the right-of-way that would be Fifth Avenue South, begins at the south portal of the downtown Seattle transit tunnel at South Dearborn Street, and continues south to Spokane Street. Express buses traveling on I-5 between south King County, Pierce County, south-east Seattle, and downtown Seattle use this transit-exclusive right-of-way. Buses enter or exit I-5 at Spokane Street, and must weave through several lanes of traffic in each direction of travel to enter or exit I-5. King County Metro and Sound Transit buses operate at this location, and approximately 10,000 daily riders will benefit from this improvement. This project has been identified as a needed mitigation to the transportation impacts that would be caused by the Alaska Way Viaduct replacement construction. Ideally, the I-5 components of this project should be completed on or before the start date for the viaduct replacement.

RTID funding would:

- Construct an HOV direct access ramp from the northbound I-5 HOV lane to South Industrial Way.
- Link I-5 to the existing SoDo busway via a busway extension between South Spokane Street and South Industrial Way. This extension would improve speed and reliability for express buses operating northbound to downtown Seattle.
- Eliminate weaving conflicts between transit/HOV and northbound I-5 general-purpose traffic at the exit approach.
- Provide congestion relief during major construction. The Industrial Way transit ramp would enhance transit access while the central waterfront portion of the Alaskan Way Viaduct replacement is under construction.



## King County Investments

# South Park Bridge Replacement Project

RTID Share (\$ 2006)     \$99 million

RTID Share (\$ YOE)     \$110 million

### Lead Agency: King County

The South Park bridge is located immediately west of Boeing Field, the King County Airport. The 77-year-old bridge crosses the Duwamish Waterway, connecting East Marginal Way and 16th Avenue South in Seattle with 14th Avenue South in unincorporated King County, in the area known as South Park. The bridge provides access to White Center, West Seattle, Georgetown, and Boulevard Park. More than 20,000 vehicles a day use the bridge. Traffic counts show that 14% of the trips are truck traffic. The bridge is located on a principal freight corridor linking downtown Seattle, the Port of Seattle, and the manufacturing and industrial centers in the Duwamish River valley.

The bridge sufficiency rating is 4, one of the lowest ratings of any major structure in the region. This project has been identified as a necessary mitigation to transportation impacts that would be caused by replacement of the Alaska Way viaduct. Ideally, this project should be completed on or before the construction start date for the viaduct replacement.



The bridge has major structural deficiencies; it is very vulnerable and could suffer structural failure even in a moderate earthquake. It will be closed by the year 2010 if funding has not been secured for its replacement. Replacement of the South Park bridge is critical to the future smooth functioning of the I-5/SR 509 corridor project improvements and the First Avenue South bridge.

RTID funding would:

- Replace the bridge with a new parallel bascule drawbridge, which keeps traffic flowing throughout the project.
- Add capacity and meet current standards.
- Improve capacity by widening substandard lanes and providing a protected, separate bicycle and pedestrian facility.
- Preserve an important freight corridor across the Duwamish River.

**Funding Partners: King County, City of Seattle, City of Tukwila, and federal funds**

## King County Investments

### SR 520 Bridge and HOV Lane Project

**Bridge replacement, mitigation integral to and inseparable from the project, connections to I-5, non-motorized improvements, connections to I-405**

RTID Share (\$ 2006)	\$972 million
RTID Share (\$ YOY)	\$1,139 million
Other	\$700 – \$1,200 million tolls

#### Lead Agency: WSDOT

The purpose of this project is to improve mobility for people and goods across Lake Washington within the SR 520 corridor from I-405 to I-5 in a manner that is safe, reliable and cost effective while avoiding, minimizing, and/or mitigating impacts on affected neighborhoods and the environment. The SR 520 Bridge faces danger from earthquakes and windstorms and needs to be replaced. In addition, the capacity of the corridor needs to be increased with the addition of HOV lanes and provision of pontoons sized to allow for future high-capacity transit in the corridor. Governor Gregoire expressed her findings in support of a six-lane alternative in her report issued on SR 520 Bridge released, December 15, 2006. The six-lane alternative would accommodate 120,000 vehicle trips by 2030.

RTID funding would:

- Expand lane capacity from 4 lanes to 6 lanes by adding one HOV lane in each direction.
- Add safety shoulders.
- Add a bicycle lane and pedestrian walkway.
- Provide pontoon support adequate for future high-capacity transit on the bridge.

Financial plans for SR 520 include tolling. Future tolling in the corridor, which will be set by the State of Washington, will be comparable to tolls on the Tacoma Narrows bridge, reinvested in the corridor, and managed to ensure reliable system performance.



# I-90 HOV Lane Project

## HOV lanes

RTID Share (\$ 2006)     \$25 million

RTID Share (\$ YOY)     \$35 million

### Lead Agency: WSDOT

The I-90 corridor faces growing population and increased traffic congestion. The project would provide reliable transit and high-occupancy vehicle (HOV) operations between Bellevue and Seattle by reconfiguring the I-90 roadway to add new HOV lanes to the outer roadway lanes, and adding new (and modifying) existing HOV direct access ramps.

RTID funding would allow for completion of the new HOV lanes on I-90 between Seattle and Bellevue. RTID funding would supplement current funding from Sound Transit, WSDOT, and other funding sources to complete the new outer roadway HOV lanes, enabling 24-hour/day HOV operations between Bellevue and Seattle. This project would improve roadway and transit capacity during both peak and non-peak travel periods. The project would be a first step in the ultimate configuration of I-90 with high-capacity transit (light rail) in the center roadway.

To date, WSDOT and Sound Transit have budgeted approximately \$98.6 million for this project. RTID funding would complete the project.



RTID funding would:

- Extend eastbound and westbound HOV lanes from Rainier Avenue to Bellevue Way.
- Construct a new 80th Avenue SE HOV ramp from westbound HOV lane.
- Reconstruct the existing 80th Avenue SE HOV ramp so that HOV/transit users have access to the new eastbound HOV lane.
- Build new direct access to 77th Avenue SE HOV ramp from the new eastbound I-90 HOV lane.
- Modify Bellevue Way HOV direct access ramps to provide for 24-hour per day operation in both the westbound and eastbound direction.

Construction of proposed additional traffic congestion relief facilities on the east side of the I-90 bridge would proceed as funding permits.

**Funding Partners: Sound Transit, WSDOT**

## King County Investments

# I-405 Bellevue to Renton Project

## SR 520 to Bellevue, I-90 to downtown Bellevue, SR 169 (Maple Valley Highway) to I-90, non-motorized and transit improvements

RTID Share (\$2006)     \$904 million

RTID Share (\$VOE)     \$1,283 million

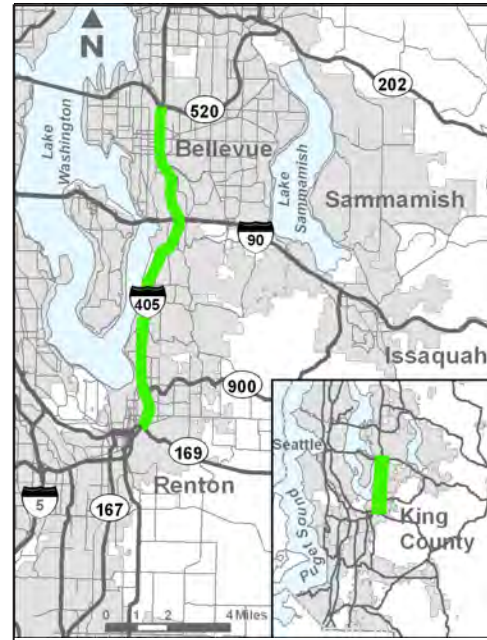
### Lead Agency: WSDOT

The I-405 corridor project's primary purpose is to construct a series of facilities in stages to relieve traffic congestion. This corridor experiences gridlock more than 50 percent of the day. Relieving traffic congestion along I-405 would significantly reduce congestion-related crashes and improve traffic safety. Construction of the proposed facilities will proceed as funding permits. State funds will complement those provided by RTID.

The RTID investments are targeted to improve the most congested section of highway in the state. With completion of the I-405 project described below, traffic congestion between Renton and I-90 would be reduced by more than nine hours per day.

Construction of key facilities listed would add new capacity to accommodate an additional 40,000 vehicles per day on I-405. The I-405 RTID project would also connect with existing and planned improvements on SR 167 and SR 512, to create a 62-mile eastern alternative to I-5.

These improvements include elements necessary to establish the infrastructure for bus rapid transit (BRT) on I-405 and the northern portion of the SR 167 corridor. The corridor improvements from Renton to Bellevue would facilitate and may include express/toll (HOT) lanes, pending the outcome of the state's high-occupancy toll (HOT) lane pilot program.



RTID funding would:

### SR-520 to Bellevue

- Build an elevated ramp that separates traffic (a "braided ramp") on southbound I-405 between SR 520 and NE 8th Street in Bellevue. This complements state funding for the braided ramps in the northbound direction.
- Eliminate the conflict between vehicles and the congestion created by weaving traffic on I-405 exiting to NE 8th Street and vehicles coming from SR 520 that are merging south onto I-405.
- Connect with the NE 10th Street bridge across I-405.

### I-90 to Downtown Bellevue

- Construct an additional lane in the northbound and southbound directions to complement lanes being added with state funds, and facilitate possible future express/toll lanes.

### SR 169 (Maple Valley Highway) in Renton to I-90

This section will be constructed in two stages. Stage 1 will be constructed to accommodate stage 2 and will be consistent with the I-405 Corridor Program Final Environmental Impact Statement.

Stage 1: Build one lane in each direction from SR 169 to I-90.

Stage 2: Build an additional lane in each direction from SR 169 in Renton to I-90.

Build mobility projects consistent with the I-405 master plan or other projects that provide equal or greater benefit.

### I-405 bicycle, pedestrian and transit improvements:

- Build bicycle and pedestrian facilities on Burlington Northern Santa Fe right-of-way between the 44th Street interchange and the Wilburton tunnel near SE 8th Street in Bellevue.
- Build a transit/HOV direct access ramp at North 8th Street in Renton with funding provided by partners.

### Funding Partners: Sound Transit, WSDOT

## King County Investments

# I-5/SR 509 Corridor Completion and Freight Improvement Project

## SR 509, I-5 improvements

RTID Share (\$ 2006)      \$798 million

RTID Share (\$ YOY)      \$1,051 million

### Lead Agency: WSDOT

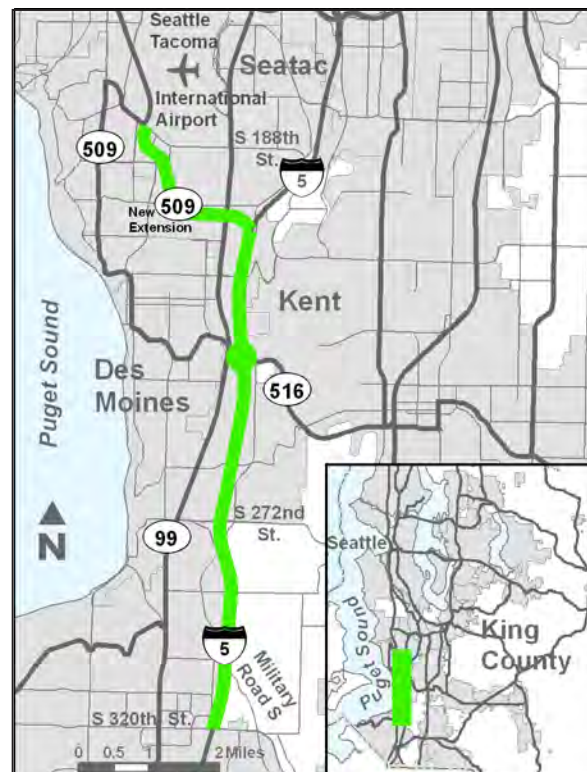
Under this project, SR 509 would become a western alternative corridor to I-5 for freight, transit, and general-purpose traffic. The existing SR 509 freeway currently terminates on the southwest side of Seattle–Tacoma International Airport. RTID funding would extend SR 509 as a limited-access freeway from South 188th Street near Burien and SeaTac to Interstate 5 in the vicinity of South 210th Street in Des Moines, approximately 2.5 miles.

The new route would directly link I-5 and SR 509 in south King County, relieving congestion and improving freight mobility. Computer models show that a significant portion of truck and other freight-related traffic destined for the Port of Seattle's facilities in the Duwamish area and at Sea-Tac airport would use the new SR 509 alignment, relieving I-5 of considerable freight-related traffic and congestion.

RTID funding would:

- Build a four-lane road between South 210th Street and South 188th Street in SeaTac and Burien.
- Construct a major new I-5/SR 509 interchange.
- Add collector/distributor lanes to I-5 from South 210th Street to SR 516.
- Improve the I-5/SR 516 interchange, including a new connection to South 228th Street.
- Add general-purpose lanes to I-5 from SR 516 (Kent-Des Moines Road) to South 320th Street.
- Provide direct access to Sea-Tac Airport at South 200th Street.
- Construct a new connection to the SeaTac business district at 24th/28th Avenue South.
- Build frontage roads for easier access to the Green River valley cities, and warehouse and distribution centers.
- Extend Des Moines Creek Trail to the south.
- Provide sidewalks in targeted locations.

**Funding Partners: WSDOT, Port of Seattle, federal and local funding**





## King County Investments

# SR 167/I-405 Interchange HOV-to-HOV Direct Connection Project

RTID Share (\$ 2006)      \$316 million

RTID Share (\$ YOY)      \$403 million

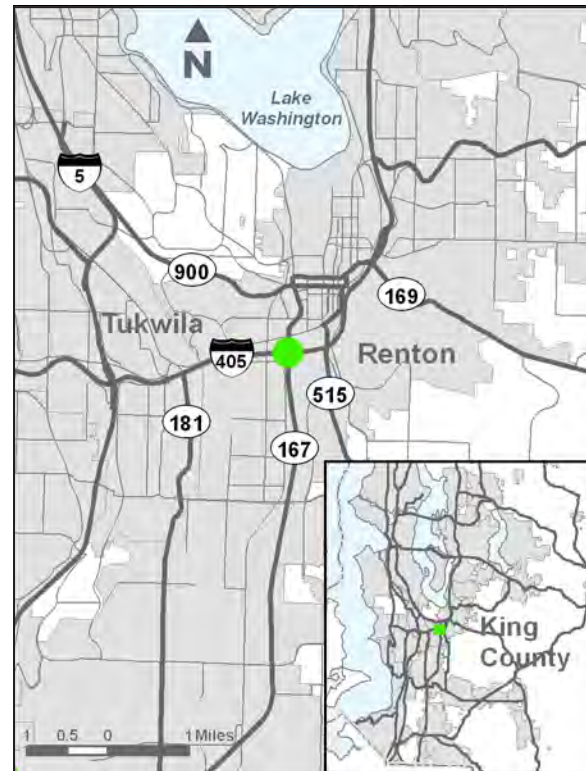
### Lead Agency: WSDOT

The I-405/SR 167 interchange is one of the most heavily congested interchanges in the state of Washington. Traffic analysis shows that this project significantly reduces person hours of delay that is currently experienced by motorists both at the interchange and throughout the SR 167 corridor and the southern portion of I-405.

Improvements on SR 167 in King County would provide commuters better access to affordable housing and employment centers, and would expand freight mobility to the Green River Valley cities' warehousing and distribution center. These investments would build upon state funded investments in the corridor.

RTID funding would:

- Provide a direct HOV-to-HOV connection between SR 167 and I-405.
- Eliminate the existing weave for both northbound and southbound traffic.
- Provide a direct connection between I-405 HOV and SR 167 proposed HOT lanes.



## SR 167 Green River Valley Corridor Congestion Relief Project

RTID Share (\$ 2006)     \$391 million

RTID Share (\$ YOY)     \$650 million

### Lead Agency: WSDOT

State Route 167 connects with I-405 at Renton on the north and SR 512 in Pierce County on the south. Along with I-405, it provides a 62-mile alternative to I-5, and is a primary freight corridor. SR 167 serves one of the fastest-growing areas of King County, and experiences more than six hours of congestion a day. This project will provide commuters better access to affordable housing and employment centers, and would improve freight mobility to the Green River Valley cities warehousing and distribution center. The purpose of the improvement program is to fix chokepoints and bottlenecks, in order to ease congestion and increase safety.

These investments are complemented and improved by the HOV-to-HOV connection at the SR 167 and I-405 interchange.

RTID funding would:

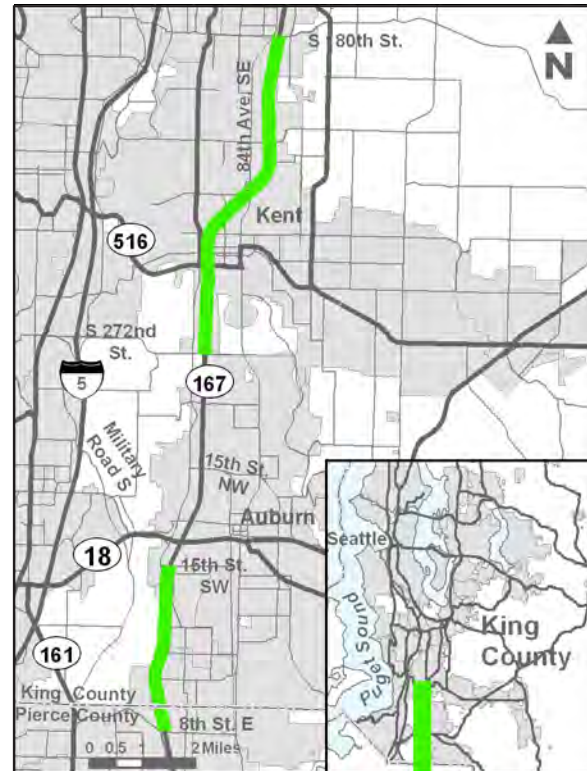
From 8th Street East in Pierce County to 15th SW in Auburn (near the Super Mall)

- Add one northbound HOV/HOT lane for 3 miles between Pacific and Auburn, completing the HOV/HOT lane system on SR 167 in King County.
- Provide additional capacity for transit and vanpools.
- Provide a more reliable trip for paying single-occupant vehicles in the HOV lane if HOT (high-occupancy toll) lanes are implemented.

From SE 180th in Renton/Kent to South 277th Street in Kent/Auburn:

- Add one southbound lane to increase capacity and reduce delays.
- Provide more space to get on and off the freeway.
- Reduce sideswipe and rear-end collisions caused by merging and exiting traffic.

The southbound lane would be constructed in stages.



## King County Investments

# I-5/SR 18 Federal Way Congestion Relief Project

RTID Share (\$ 2006)      \$89 million

RTID Share (\$ YOY)      \$120 million

### Lead Agency: WSDOT

This interchange is a high crash location and experiences traffic congestion at the cloverleaf as drivers navigate among I-5, SR 18, SR 161 and access to the city of Federal Way. The project will eliminate the loop ramps and eliminate the current weave situation caused by closely spaced on- and off-ramps on I-5 and SR 18. The loop ramps would be replaced with flyover ramps that are safer; they would also increase the capacity of I-5 and SR 18. Traffic congestion would lessen and safety would improve in all directions as a result.

RTID funding would:

- Construct a collector/distributor roadway that provides both a southbound I-5 and a westbound SR 18 direct connection to SR 161.
- Rebuild the southbound I-5 ramp to eastbound SR 18.
- Construct auxiliary lanes on I-5 to improve merging and existing from the freeway.
- Rebuild several ramps at the I-5/SR 18 and SR 18/Weyerhaeuser Way interchanges to improve safety and capacity.
- If funding allows, rebuild the SR 161 bridge crossing over I-5.

**Funding Partners: FHWA, WSDOT, local jurisdictions**



## East Sammamish Plateau Access Project 244th Avenue SE Widening

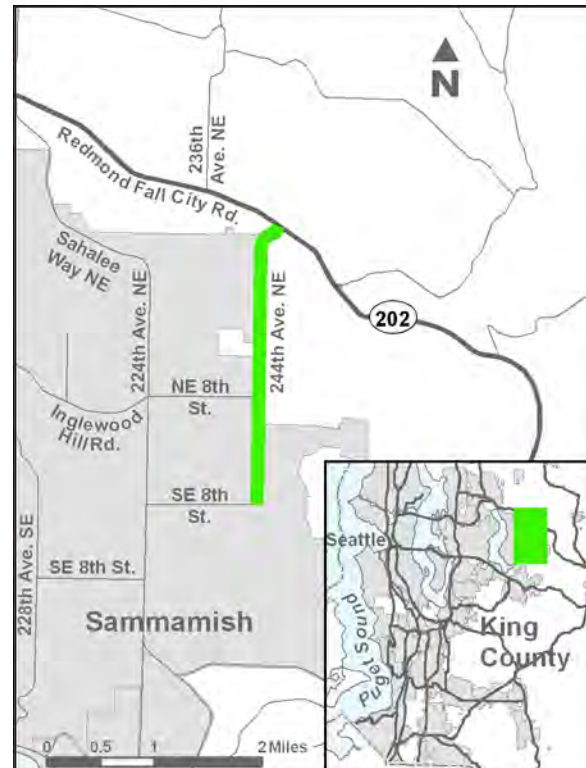
RTID Share (\$ 2006)      \$10 million

RTID Share (\$ YOY)      \$12 million

**Lead Agency: City of Sammamish**

This project would construct the northern missing link and retrofit existing portions of roadway to complete a three-lane (one lane in each direction, plus turn lane) minor arterial, providing much-needed additional capacity and congestion relief on the north end of the Sammamish plateau. This project would include curbs, gutters, sidewalks, bicycle lanes, street lighting, storm drainage, and landscaping.

This project would be a cost-effective means of addressing severe congestion and access constraints on the north end of the Sammamish plateau, according to the Sammamish Plateau Area Corridor study, involving Issaquah, Redmond, Sammamish, King County and WSDOT. Alternatives (widening Sahalee Way or East Lake Sammamish Parkway) have been determined to be far more costly. The 2020 traffic volume for this corridor, based on Sammamish's projected future growth would be around 15,000 vehicles on an average weekday (AWDT), which is a significant increase over the current 9,300 AWDT. This project also provides secondary access for emergency vehicles to a fast-growing area within the urban growth boundary. In addition, safety for pedestrians and bicyclists would be improved.



## King County Investments

# SR 99 Transit Improvement Project

## Bus Rapid Transit Improvements, Shoreline

RTID Share (\$ 2006)     \$37 million

RTID Share (\$ YOY)     \$40 million

**Lead Agency: City of Shoreline**

This project provides a major capital component of the arterial bus rapid transit (BRT) system envisioned for this corridor. RTID funding would complete arterial business access transit (BAT) lanes, increase transit speed and reliability, and improve safety for all modes in Shoreline between N. 165th and N. 205th streets.

RTID funding would:

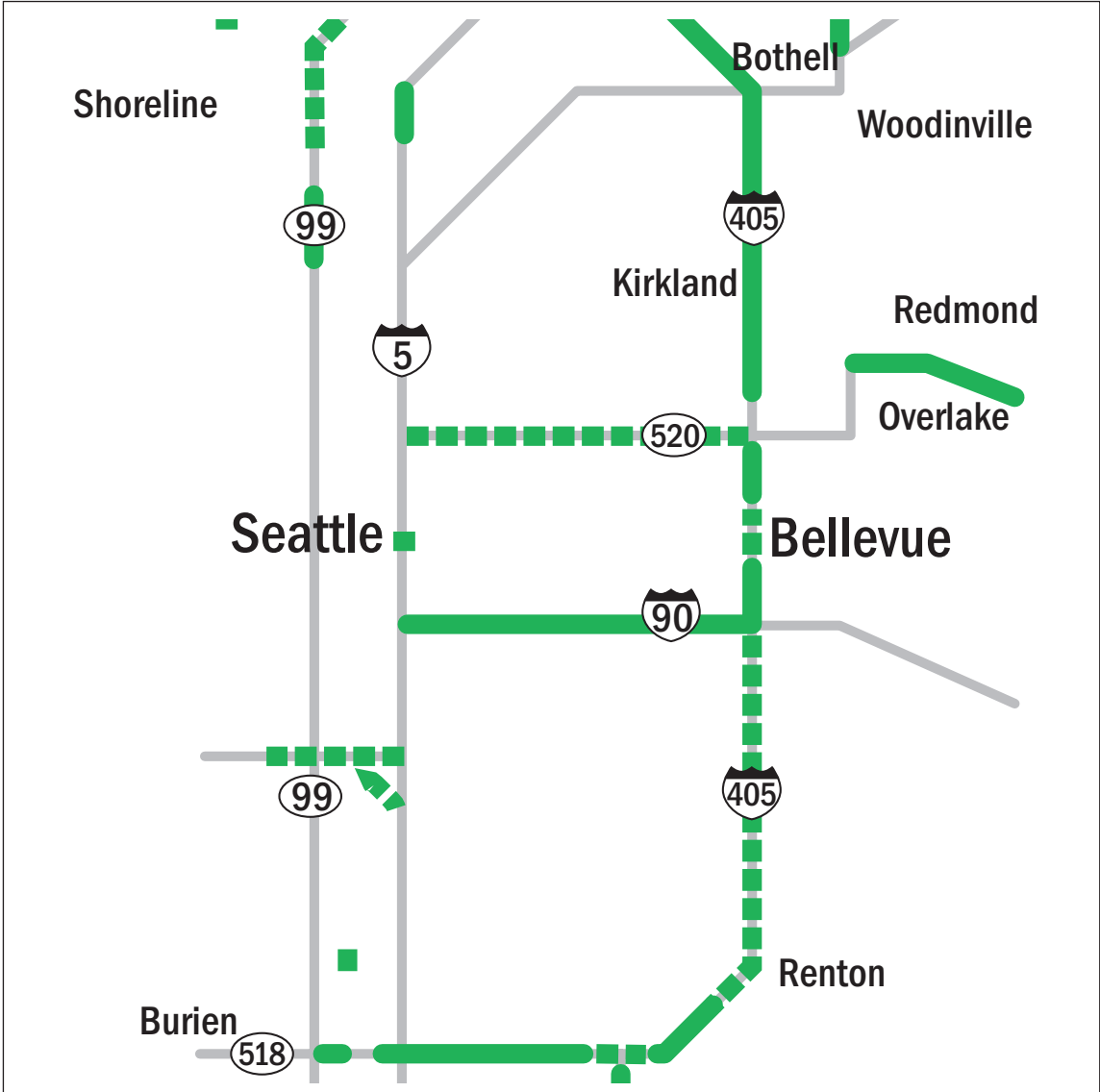
- Provide bus enhancements including sidewalks, curbs and gutter, pedestrian lighting and ADA compliant bus zone additions.
- Add proposed new traffic signals and pedestrian crossings at North 182nd and North 195th Streets.
- Connect the widening projects for SR 99 by the Cities of Shoreline and Edmonds with the Snohomish County RTID project to widen the SR 99 bridge over SR 104.
- Allow for continuous transit lanes on SR 99 in South Snohomish and North King Counties.
- Provide congestion relief during major construction. The SR 99 North improvements would enhance transit access to alternative routes when the Alaskan Way Viaduct replacement is under construction.



This project complements similar investments being made in Snohomish County by RTID and Community Transit, and by King County and the City of Seattle in King County.

**Funding Partners: WSDOT, FHWA, City of Shoreline, and King County**

# Map of Central/East Corridor Investments



## Pierce County Investments

### Project Descriptions by County

#### Pierce County

**A** growing transportation infrastructure is Pierce County's economic engine. In fact, the number of Pierce County jobs in the Transportation and Public Utilities sector has grown 124 percent since 1990. The economic well-being of Pierce County is inextricably linked with its freeways, rail systems, and maritime traffic that serve as sources for job growth, commercial traffic, and a quality of life residents have come to know and love.

The job growth and quality of life accounts for why Pierce County is expected to grow by more than 200,000 people by 2020. It is important that the transportation infrastructure grows with it. The investments in the RTID package will help Pierce County build the highway to its future, creating more than 80,000 new jobs through one project alone.

The Port of Tacoma is a major source of jobs in Pierce County. It is the second-largest port in the state and the seventh-largest container port in North America. A study released in July 2005 highlighted the port's economic impact at both the local and state level. More than 43,000 jobs in Pierce County are related to the Port of Tacoma's activities. Port-related jobs generate \$637 million in annual wages in Pierce County. The port, and jobs, will grow exponentially over the next several years if the transportation infrastructure can keep pace.

With almost 30 percent of Pierce County's residents commuting to jobs in King County, there is excitement about creating new jobs that will stay in Pierce. In 2005, the mean travel time to work for a Pierce County resident was 28.4 minutes, 3 minutes longer than the statewide mean. There is hope that new jobs and a more efficient transportation infrastructure in Pierce County will reduce commute times and congestion for residents.

The proposed RTID investments seek to link Pierce County's jobs to highways, so workers and goods have freedom of movement throughout the region. As more jobs are created in Pierce County, these corridor investments will help implement the county's growth management plan and fewer people will have to commute to King County for good jobs.

Pierce County's proposed investments address key corridors for economic development and sustainability and truly will be the blood lines to the heart of Pierce County's growing economic prosperity.

## Pierce County Investments

*see amendment*

### Pierce County

### RTID Funding Share:

	2006 dollars (\$ in millions)	YOE dollars (\$ in millions)
<b><u>SR 167 Tacoma to Puyallup Project</u></b> <i>Contingency scope full corridor project as defined in WSDOT corridor plan</i>	<b>888</b>	<b>1,358</b>
<b><u>I-5/SR 704 – Thorne Lane Interchange Project</u></b>	<b>190</b>	<b>322</b>
<b><u>South I-5 Mobility Project</u></b> I-5 and SR 512 intelligent transportation system technology facilities Tacoma Mall access	<b>37</b> 25 12	<b>51</b> 35 16
<b><u>SR 410/SR 162 Congestion Relief Project</u></b>	<b>122</b>	<b>256</b>
<b><u>Frederickson Mobility Project</u></b> 176th Street East and Canyon Road	<b>44</b>	<b>50</b>
<b><u>Construction Mitigation</u></b>	<b>7</b>	<b>11</b>
<b>Total Pierce County Investments</b> (rounded numbers)	<b>1,289</b>	<b>2,047</b>



## Pierce County Investments

*see amendment*

# SR 167 Tacoma to Puyallup Project

*RTID Share (\$ 2006)*      *\$888 million*

*RTID share (\$ YOY)*      *\$1,358 million*

### Lead Agency: WSDOT

From Renton in King County to Puyallup in Pierce County, SR 167 operates as a limited-access freeway, a vital north-south commuter and freight corridor and alternative route to I-5. Between Puyallup and SR 509 at the Port of Tacoma, SR 167 becomes a signalized urban arterial of slow-moving traffic.

This key project in Pierce County would build the remaining six-mile portion of SR 167, connecting SR 509 in Tacoma to the existing SR 167 at Puyallup. This connection would allow commuters direct access from Tacoma to SR 167 as an alternative route to I-5 for those traveling to destinations in east King County such as Bellevue and Redmond. It would improve freight mobility and access from the Port of Tacoma to Green River Valley cities—the fourth largest warehouse, distribution and manufacturing center in the United States.

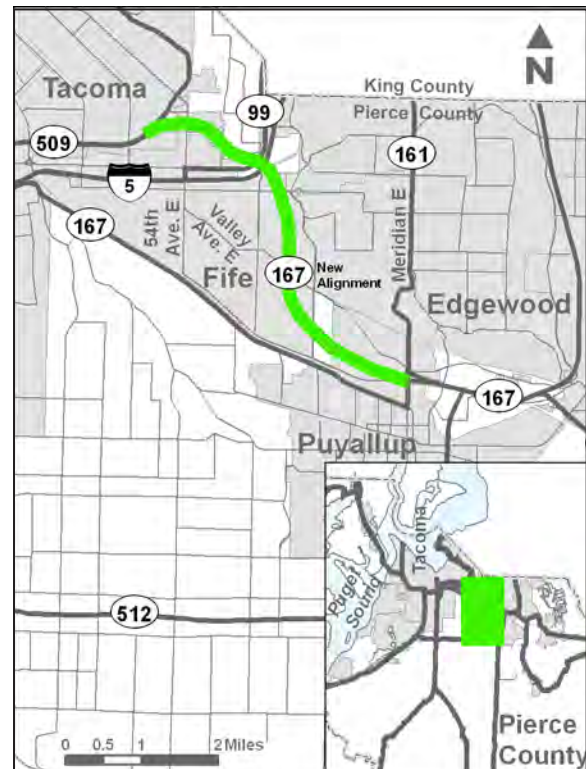
The proposed RTID investment would be a first phase of the overall SR 167 corridor completion and extension plan.

RTID funding would:

- Acquire the majority of the needed right-of-way. (Note: Some remaining parcels along I-5 have existing businesses. Property acquisition of these parcels would not take place until the later phases of construction have been funded and are ready to be constructed.)
- Construct one lane in each direction from 54th Avenue East to Valley Avenue East, and two lanes in each direction from Valley Avenue East to SR 161, North Meridian Avenue East.
- Construct a direct connect ramp from SR 509, South Frontage Road, to northbound SR 167.
- Construct an interchange at 54th Avenue East in Fife.
- Construct half of a complete interchange at Valley Avenue East with access to northbound SR 167 and an exit from southbound SR 167.
- Modify the existing SR 161 interchange into an interim configuration to provide for movement in four directions. The current interchange only allows movement in two directions.
- Partially restore Hylebos Creek and Surprise Lake drain.
- Construct storm water facilities to improve storm water collection and treatment.

In addition to freight benefits, this project would include a separated bicycle lane along the right-of-way between SR 99 and 54th Avenue. Property acquisition for two park & ride lots is also expected in the first phase.

When additional funding becomes available, it would be used to complete the entire scope of this project. The first priority for additional funding would be the I-5/SR 167 interchange. Additional funds would also be used to accelerate the construction timetable.



## Pierce County Investments

*see amendment*

# I-5/SR 704 Thorne Lane Interchange Project

*RTID Share (\$ 2006)*      \$190 million

*RTID Share (\$ YOY)*      \$322 million

### Lead Agency: WSDOT

Improvements to the Thorne Lane and Gravelly Lake interchanges on I-5 in south Pierce County would improve traffic safety and provide traffic congestion relief along I-5 in the Lakewood area, and allow for more reliable goods delivery times. Additionally, a connector road between the two interchanges would improve local access in Tillicum and Lakewood, and reduce traffic congestion on this portion of I-5.

RTID funding would:

- Build a new elevated Thorne Lane interchange at I-5 to improve vehicular traffic flow, and provide a railroad overpass to separate commuter train traffic from vehicular traffic entering and exiting I-5.
- Provide a dedicated right turn lane at the new Thorne Lane interchange.
- Make improvements at the I-5 Gravelly Lake interchange to improve traffic flow.
- Make improvements from I-5 to the base gate at 150th.
- Build a new road to connect Tillicum and Lakewood, including pedestrian and bicycle facilities, such as sidewalks and wide shoulders.



## Pierce County Investments

*see amendment*

### South I-5 Mobility Project

#### I-5 and SR 512 Intelligent Transportation System Technology Facilities

RTID Share (\$ 2006)     \$25 million

RTID Share (\$ YOY)     \$35 million

#### Lead Agency: WSDOT

Safety enhancements such as ramp metering, cameras for rapid response to traffic accidents, and traffic advisory signs for drivers have been shown to reduce traffic crashes by as much as 38 percent. Better use of the available capacity of the roadway will also improve overall traffic flow. Investments in these intelligent transportation system (ITS) improvements, such as a fiber-optics communications system, are proposed for portions of I-5 and SR 512 in Pierce County.

RTID funding would:

- Install traffic monitoring cameras and driver alert message boards on I-5 between Dupont and Tacoma, and on SR 512 east of I-5.
- Build wider ramps, where necessary, to install and implement ramp metering and/or other technologies to improve traffic flow.



## Pierce County Investments

*see amendment*

### South I-5 Mobility Project Tacoma Mall Access

RTID Share (\$ 2006)     \$12 million

RTID Share (\$ YOY)     \$16 million

#### Lead Agency: WSDOT

There is currently no direct access from I-5 to the Tacoma Mall. Lack of a direct freeway connection contributes to traffic congestion on nearby streets and arterials, as well as queuing on I-5.

Currently, the 38th Street/Steele Street intersection operates at Level of Service "F" during the evening peak period. It is not unusual for westbound traffic queues to extend back to the I-5 interchange, over a quarter-mile east of this intersection. Traffic waiting for the 38th/Steele Street signal blocks traffic exiting from southbound I-5, making weaving difficult for traffic wishing to access the Tacoma Mall retail area.

This project completely alters the way southbound I-5 traffic will access Tacoma Mall Blvd. thereby eliminating a serious chokepoint at the 38th Street/Steele Street intersection. A ramp would be constructed from the southbound I-5 collector/distributor lane, crossing over the existing 38th Street on-ramp, and intersecting Tacoma Mall Boulevard. The ramp would widen from one to two lanes approaching Tacoma Mall Boulevard to provide more efficient traffic flow at the intersection, which would be signalized.

RTID funding would complete the facility.



## Pierce County Investments

*see amendment*

# SR 410/SR 162 Congestion Relief Project

*RTID Share (\$ 2006)      \$122 million*

*RTID Share (\$ YOY)      \$256 million*

### Lead Agency: WSDOT

This 9-mile corridor, between Sumner and the community of Orting, is an important connector for residents of eastern Pierce County. With recent population and traffic growth inside and outside of the urban growth boundary, including the Bonney Lake area, the corridor is frequently congested. The proposed project will fix a chokepoint by reconstructing the existing SR 410 and SR 162 interchange, and provide congestion relief by adding lanes to SR 162 from the SR 410 interchange to the Puyallup River bridge.

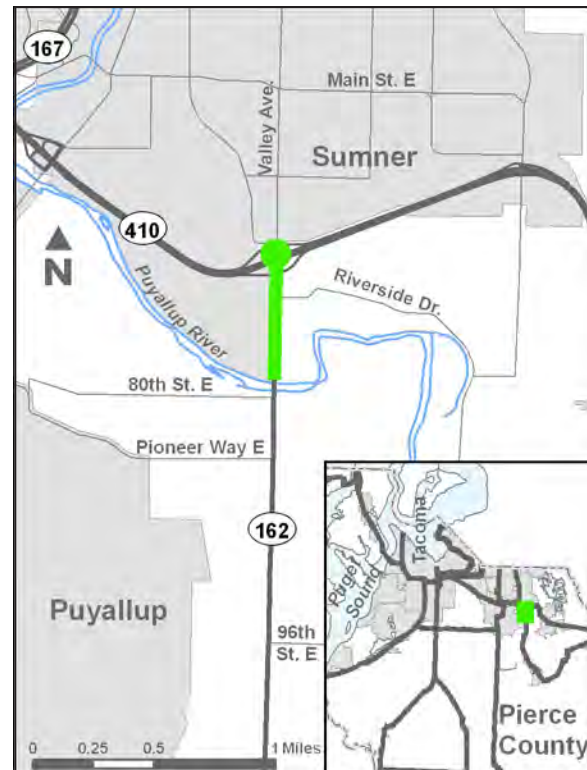
It would complete lane expansion of Main Street at Traffic Avenue and accommodate future SR 410 widening. Sidewalks would be provided from SR 410 to the Puyallup River.

RTID funding would:

- Complete full corridor plan and environmental work.
- Acquire right of way to construct roadway improvements, storm water facilities, and environmental mitigation on SR 162 between SR 410 and 96th Street and along SR 410 between SR 167 and SR 162.
- Reconstruct the SR 410/SR 162 interchange.
- Widen SR 162 to five lanes with curbs and sidewalks from SR 410 to the Puyallup River Bridge.
- Reconstruct the SR 410/Traffic Avenue interchange bridge.

RTID's investment will be matched by local contributions.

### Funding Partners: private development



## Pierce County Investments

*see amendment*

### **Frederickson Mobility Project** **176th Street E. and Canyon Road**

*RTID Share (\$ 2006)      \$44 million*

*RTID Share (\$ YOY)      \$50 million*

#### **Lead Agency: Pierce County**

The Frederickson area, with a large and expanding industrial economy, is growing more quickly than its infrastructure, leading to traffic congestion on local roads and time delays for businesses transporting goods. Both Canyon Road and 176th Street East, principal arterials located in the center of Frederickson, experience serious traffic congestion on a daily basis. This project would invest in capacity improvements along 176th Street E. between SR 7 and SR 161.

In addition, funds could be available to complete missing pieces or unanticipated cost increases for Canyon Road improvements between SR 512 and 244th Street E., especially the portion south of 160th Street E. County work is at various stages of design and construction for Canyon Road.

Along with its funding partners, the RTID investment would fully fund the improvements needed to add capacity along this corridor.

RTID funding would:

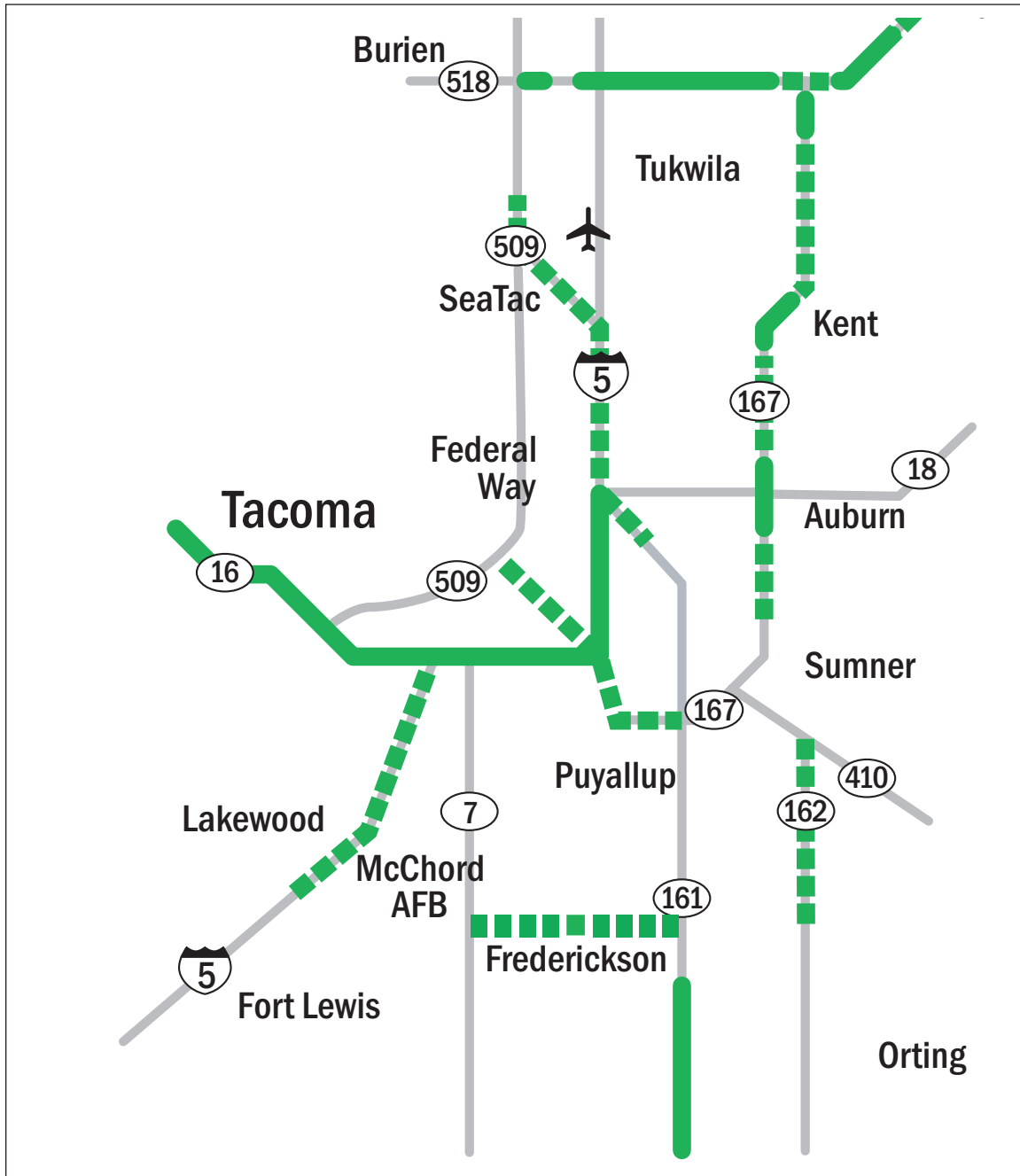
- Redesign 176th Street E. and Canyon Road E. as T-1 freight routes (classified under WSDOT's Freight and Goods Transportation System as having over 10,000,000 annual gross tonnage, and carrying over 800 large trucks per day).
- Widen 176th Street E. from two lanes to four lanes between SR 7 and SR 161, with medians and appropriate turning lanes.
- Complete missing pieces or unanticipated cost increases for Canyon Road improvements between SR 512 and 244th Street E
- Provide non-motorized improvements along the corridor, including striped shoulders, concrete curb, gutter, and sidewalks.

**Funding Partners: Pierce County, real estate excise tax funds, impact fees**



# Map of South Corridor Investments

see amendment



  
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MAP KEY

-  Underway
-  Proposed in RTID's Blueprint

## VII. Revenue Forecasts and Project Funding

### Summary

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**T**his investment plan assumes RTID investments of \$6.9 billion in 2006 dollars, over a 20-year period beginning July 2008. Costs and revenues were estimated in 2006 and are presented in both 2006 and year-of-expenditure dollars. The assumption for the year-of-expenditure program investment cost is \$9.5 billion.

Two revenue sources are proposed: a 0.1 percent sales tax and a 0.8 percent motor vehicle excise tax (MVET) based on vehicle values and a depreciation schedule set by new state law that is closer to “Blue Book” value. In 2006 dollars, these tax sources generate \$4.7 billion in revenue over the investment period. In nominal dollars, these sources yield \$7.5 billion. The difference between program investments and estimated revenue is due to borrowing. Bonding some of the revenue results in accelerating projects and leveraging funds.

### Financial Assumptions and Method

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This long-term financial plan includes refinements based on a review performed by an expert review team in June 2004 and also by a group of financial experts in April 2007.

The plan is maintained on a cash basis. It states and projects all sources and uses of funds for the 20-year investment period, from 2008 to 2027, and the subsequent debt service payments. The plan represents the revenue forecast, financial plan, debt amortization schedules and expenditures for this period. The plan incorporates the 20-year investment plan described in this report for projects addressing highway corridor needs in RTID district within King, Pierce, and Snohomish counties.

### Funding Sources

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The RTID executive board/planning committee is recommending using two revenue sources from the array of revenue options provided by law. The RTID financial plan incorporates a regional sales and use tax of 0.1% and a motor vehicle excise tax (MVET) of 0.8%.

The RTID executive board is working with the state to determine the best methods for including tolling as a revenue source for capital investment in the SR 520 bridge as an important component of a financial plan to complete the SR 520 project from I-5 to I-405.

RCW 36.120.050 section (g) provides that the regional transportation plan must identify the facilities that may be tolled. However, the State transportation commission is designated under state law as the current authority to impose tolls, set tolling rates, and collect tolls, therefore this plan includes identification of facilities that may be tolled in the future and policies for coordinating with the state to represent the region’s interests when and if tolls are imposed by the state.



## Implementation and Collection of Taxes

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The RTID financial plan assumes all taxes will be implemented beginning in July 2008 with the first actual collections occurring in September 2008. However, there is the possibility that the sales and use tax could be implemented as early as April 2008 and the motor vehicle excise tax collections could be received as early as July 2008.

The RTID financial plan assumes collection costs to be 1% of the total tax revenue. The RTID is required to contract with the Washington State Department of Licensing (DOL) and the Washington State Department of Revenue (DOR), as appropriate for collection of the motor vehicle excise tax (RCW 81.100.060) and the sales and use tax (RCW 82.14.050). Current law states that the collecting department shall deduct a percentage amount not to exceed 2% of the taxes for administration and collection expenses.

## Sales Tax Transfer on Initial Construction for RTID projects

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The legislation authorizing the RTID included a mechanism for sales tax paid on the initial construction of RTID projects to be transferred back to the project to defray costs. This section of law was codified in RCW 82.32.470(1) and states:

- The tax imposed and collected under chapters 82.08 and 82.12 RCW, less any credits allowed under chapter 82.14 RCW, on initial construction for a transportation project to be constructed under chapter 36.120 RCW, must be transferred to the transportation project to defray costs or pay debt service on that transportation project. In the case of a toll project, this transfer or credit must be used to lower the overall cost of the project and thereby the corresponding tolls.

To calculate the sales tax transfer on RTID projects, several assumptions were made:

- The sales tax transfer applies to all RTID projects.
- The language of RCW 82.32.470(1) applies to an entire transportation project to be constructed under chapter 36.120 RCW.
- The allocation of sales and use tax revenues collected on the construction of transportation projects applies only to the state share, currently imposed at 6.5%.

Project expenditures were estimated by year in three phases: preliminary engineering, right of way acquisition and construction. Sales tax is paid only on the construction phase, except in the case of design-build projects. Although some projects may use design-build, these decisions have not yet been made. For the purposes of making the initial estimates of the sales tax transfer for each project, this plan assumes the use of design, bid, build contracting. Based on that assumption, the construction phase expenditures for each project were reduced by 15% to represent the estimated amount of construction engineering and other expenses that would not be subject to sales tax.

The sales tax rate of 6.5% was then applied to this net construction phase expenditure. Since the sales tax must first be paid, then transferred back to the project, it was assumed that the sales tax paid in a given year would be transferred back to the project in the next year.

## Revenue Forecasting Methodology

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The RTID executive board/planning committee and Sound Transit are using the same tax base forecast to calculate revenue from the proposed district and revenue sources. Both districts include incorporated and unincorporated areas in the three counties.

To forecast revenues for King, Pierce, and Snohomish counties, the RTID executive board/planning committee used Sound Transit's summer of 2006 regional forecast produced by Conway Pederson Economics, Inc. (CPE). This long-term forecast was developed with a regional econometric model that depicts the economic behavior of the tri-county region within the context of the national economic environment and is based upon a national economic forecast developed by a blue chip panel of economic forecasters and Global Insight. The national economic forecast is an input into the regional economic model that combined with a separate model of the aerospace sector and Microsoft accounts for the three major forecasting assumptions underlying the Puget Sound and county projections.

The model generates 25-year estimates of taxable retail sales and motor vehicle value for the three counties and indicates, via the growth rates associated with the forecast tax bases, the business cycles expected within the next 25 years. The variables used to predict taxable retail sales include personal income, the unemployment rate and housing permits. Per capita personal income, the driving age population, and the average value of motor vehicles are the principal determinants of the MVET base. An adjustment is made to the retail sales and use tax base to account for use taxes not captured by the CPE's model.

Sound Transit's MVET base is the sum of the original and depreciated manufacturer's suggested retail price (MSRP) values of the vehicle fleet in the Sound Transit boundary area using the old statewide MVET valuation statute. The MVET base for RTID would be governed by SSB 6247 (Chapter 318, Laws of 2006) that specifies a new method for calculating a newly enacted local MVET more closely based on Blue Book valuation. The new method uses 85% of MSRP or purchase price and a longer depreciation schedule. The MVET Study final report to the Joint Transportation Committee (JTC), January 6, 2006, concluded that the new method for calculating local MVET enacted in SSB 6247 which include new definitions for vehicle value and new market based annual depreciation schedules are 26% lower than the old statewide MVET valuation method.

The vehicle fleet data set used in the JTC MVET study is from the DOL statewide vehicle database for 2005. It matches individual vehicles in the Sound Transit district with values (85% of MSRP or purchase price) and the appropriate depreciation schedule for each vehicle. The reduction in total base MVET value from the old statewide method to the SSB 6247 method is 26% for 2005. This reduction is assumed as a constant throughout the forecast horizon. The forecast beyond 2030 uses average annual growth rates for the applicable local jurisdiction from the Sound Transit base forecast.

The tax bases are distributed among the three counties using shares of regional tax bases computed with historical data from the DOR, the DOL and Sound Transit collections. Shares for future periods are estimated with regression models. The retail sales and use

tax, and MVET rates are applied to the estimated tax bases to derive the RTID revenues. Revenues are converted from an accrual to a cash basis using a one-month lag for MVET revenues and a two-month lag for retail sales and use tax revenues.

The regional forecast provided by CPE's model estimates the tax base for the Puget Sound region including King, Pierce, and Snohomish counties. These countywide tax base forecasts form the basis for Sound Transit's and the RTID's forecasts. The revenue estimates for MVET and retail sales and use tax rely on these countywide tax base estimates and are adjusted for boundary differences between each county, Sound Transit's district, and the proposed RTID boundaries. Adjustments for Sound Transit's boundary within each county utilize the historical collections of actual MVET and sales and use tax to derive an estimate of the Sound Transit tax base for that county. Projected annual growth rates in each county's tax base from CPE's model are then used to determine the tax base forecast for Sound Transit.

For the RTID, a similar approach is used. In King and Pierce counties, the RTID boundaries are assumed to be the same as Sound Transit's boundary and therefore rely on the forecasts prepared for Sound Transit. In Snohomish County, the RTID boundary is larger than Sound Transit's boundary. To estimate the tax base for the RTID in Snohomish County, a simple approach of extrapolating from similar areas was used. Per capita MVET taxable base levels were extended to the expansion areas using known per capita MVET taxable base levels for the Snohomish County portion of Sound Transit and expansion area population estimates provided by the Washington State Office of Financial Management. Sales tax base estimates relied on actual retail sales for incorporated areas from the DOR and conservative assumptions for per capita taxable retail sales for the unincorporated portions of the expansion areas. Projections for future periods are estimated using the growth rate of each tax base as forecast in the Sound Transit regional forecast prepared by CPE.

The respective retail sales and use tax, and motor vehicle excise tax rates are applied to the estimated tax bases to derive the RTID revenues.

## Interest Earnings

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The financial plan assumes that the RTID will earn a 4.0% rate of return on its cash balances throughout the planning period from 2008 until the debt is retired.

## Bonding Assumptions

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The RTID executive board policy direction is to use debt strategically to leverage the purchasing power of the revenue from the district. In addition, bonding will allow critical projects to be accelerated into the early years of the program. If the board were to rely on cash only, funding for most projects would not accrue sufficiently for construction to proceed until the mid-point of the 20-year plan.

The RTID may issue general obligation bonds or other evidences of indebtedness, secured by the pledge of one or more of the taxes, tolls, charges, or fees authorized to be imposed by the district, in an amount not exceeding, together with any existing indebtedness of the district not authorized by the voters, 1.5% of the value of the taxable property within the boundaries of the district. The bonds would be issued and sold in accordance with RCW 39.46.

This plan would allow the RTID to enter into agreements with the lead agencies or the state of Washington to pledge taxes or other revenues of the district for the purpose of paying in part or whole principal and interest on bonds issues by the lead agency or the state of Washington. The agreement pledging revenues and taxes shall be binding for their terms, but not to exceed 30-years, and no tax pledged by an agreement may be eliminated or modified if it would impair the pledge made in any agreement. (36.120.130 RCW)

The current bond capacity at 1.5% based on the 2006 assessed property valuation within the Sound Transit boundary is \$5.6 billion. This does not include the additional assessed property valuation for the expanded RTID boundary in Snohomish County.

The current financial plan for RTID estimates issuing approximately \$6.3 billion during the 20-year investment period. Since bond principal is paid down throughout this period, the highest level of outstanding bond principal is estimated to be \$5.6 billion in 2027. This amount is right about the \$5.6 billion level of capacity based on the 2006 valuation described above without including the Snohomish County expansion area. Additionally, during the past decade, the total assessed valuation in the three-county area has more than doubled, growing by 7.4% annually resulting in a bond capacity growth of \$3.0 billion. Therefore, it is reasonable to assume that there will be sufficient growth in assessed valuation to provide a surplus bond capacity throughout the 20-year investment period.

In the unlikely event that the borrowing need would exceed the 1.5% of assessed property valuation threshold, with the approval of three-fifths of the voters voting at an election, the RTID may issue general obligation bonds or other evidences of indebtedness as long as the total indebtedness of the district does not exceed 5% of the assessed value of the taxable property within the district.

The RTID may at any time issue revenue bonds or other evidences of indebtedness, secured by the pledge of one or more of the revenues authorized to be collected by the district, to provide funds to carry out its authorized functions without submitting the matter to voters of the district.

Once construction of projects in the plan has been completed, including contingency projects, revenues collected by the district may only be used for the following purposes: payment of principal and interest on outstanding indebtedness of the district; to make payments required under a pledging agreement; and to make payments for maintenance and operations of toll facilities as may be required by toll bond covenants. The RTID investment plan may include a list of contingency projects and the RTID may submit a new investment plan to the voters

The financial policies adopted by the RTID executive board encourage a conservative use of debt. The RTID's debt service coverage ratio policy will be set at a minimum coverage ratio of 1.25 for gross revenues over annual debt service costs.

The plan assumes that bonds will be structured with a 30-year term in accordance with RCW 36.120.130, with principal payments deferred for five years as needed. The plan assumes 1.5% issuance cost and the ending balance of six months debt service or greater. All program debt service could be paid off as early as 2037.

A group of financial experts consisting of investment bankers and financial consultants reviewed the financial plan in June 2004. The group noted that the financial plan found a balance between interest rates and debt service coverage. At that time, the panel concluded that the financial plan could assume a bond rating of "A".

## Interest Rates

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The financial model assumes that the agency can, on average borrow at 6.0% interest rate for its long-term bonds. If interest rates were to rise substantially from the current levels and remain at those levels for a prolonged period, the agency's borrowing costs would rise and there would be a corresponding increase in its debt service and a reduction in its total financial capacity. If the interest rates were to drop, the borrowing costs would decrease, debt service would decrease and there would be an increase in financial capacity.

## Summary of Financial Assumptions

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### Funding Sources

- Sales and Use Tax Rate: 0.1%
- Sales and Use Tax Annual Average Growth (2008-2027): 5.1%
- MVET Rate: 0.8%
- MVET Annual Average Growth (2008-2027): 5.2%

### Annual Average Inflation Cost Index (2008-2027)

- Construction Cost Annual Average Inflation (King and Pierce counties): 3.5%
- Construction Cost Annual Average Inflation (Snohomish County): 2.3%
- Engineering Cost Annual Average Inflation (King and Pierce counties): 3.5%
- Engineering Cost Annual Average Inflation (Snohomish County): 1.9%
- Right of Way Cost Annual Average Inflation (all counties): 7.0%

### Borrowing Rates

- Bond Interest Rate (level-loaded): 6.00%
- Bond Interest Rate (interest-only first 5 years): 6.25%

### Bonding

- Bond Term (level-loaded): 30 years of principal and interest payments.
- Bond Term (interest-only first 5 years): First 5 years include interest only payments followed by 25 years of principal and interest payments.
- Bond Issuance Costs: 1.5% of Par Value
- Gross Debt Service Coverage Ratio: >1.25
- Debt Service Reserves: 6 months of debt service

### Administrative Costs

- Annual RTID administrative costs: \$2 million in 2008, later years are inflated by the Implicit price deflator for personal consumption as forecasted by Global Insight in February 2007.
- DOL and DOR Tax Collection Costs: up to 1% of tax revenue

### Other

- Interest Earnings Rate: 4.0%

## Financial Modeling Results

The table below presents a summary of the projected sources and uses from the RTID 20-year investment plan (2008-2027). The financial plan is based upon the policies, contingencies, and assumptions described in this document including the capital plan recommended in the most current 20-year investment plan presented to the RTID executive board on May 31, 2007 and maintaining adequate debt service coverage ratios and reserves.

Detailed modeling results are included in Appendix C, Financial Plan Assumptions.

### RTID 2007 Financial Plan – Twenty-Year Investment Plan

#### Sources & Uses of Funds 2008-2027

(data displayed in millions of nominal dollars)

	King	Pierce	Snohomish	Tri-County
<b>Sources of Funds</b>				
Tax Revenue				
Sound Transit Area	4,492	1,532	1,026	7,051
Expansion Area			419	419
Subtotal Tax Revenue	4,492	1,532	1,445	7,470
Sales Tax Transfers	395	83	90	568
Bond Proceeds	3,540	1,369	1,407	6,316
Interest Earnings	76	45	35	156
<b>Total Sources of Funds</b>	<b>8,503</b>	<b>3,030</b>	<b>2,976</b>	<b>14,510</b>
<b>Uses of Funds</b>				
Administration	115	40	39	194
Debt Service	2,831	879	790	4,500
Project Expenditures	5,380	2,047	2,092	9,519
<b>Total Uses of Funds</b>	<b>8,325</b>	<b>2,967</b>	<b>2,921</b>	<b>14,213</b>
Balance Before Debt Service	178	64	55	297
Debt Service Reserve	139	52	54	245
<b>Balance After Debt Service Reserve</b>	<b>39</b>	<b>12</b>	<b>1</b>	<b>53</b>

## Financial Risks

In order to gauge the vulnerability, the RTID financial plan considered the following risks:

### Local Tax Revenue Growth

The RTID financial plan relies on an independent forecast of its local tax bases. The forecast does not anticipate another recession in the near term. Long-term economic forecasts are inherently uncertain and actual economic growth in the region could still be lower than the revised forecast, especially if we experience a period of stagflation on the path to full economy recovery. If revenue growth were below the revised forecast, RTID's near-term

revenue collections as well as its long-term bonding capacity would be reduced. A stress test was made to the financial plan model to analyze its sensitivity to changes in the economy. To test the RTID's financial plan sensitivity to alternative revenue projections, a typical business cycle of expansion and contraction was imposed over the long-term trends used in the base analysis. A seven-year business cycle was derived from historical information that reflects an expansionary time period and a recessionary time period. This business cycle was repeated throughout the forecast of 2008 to 2027. To significantly stress the financial plan, the first two-year recessionary cycle began in 2008. The financial plan model was able to manage the cash flow with the impact of the stress test requiring an increase to bond proceeds of \$63 million over the 20-year investment period. This increase in bonds decreased the lowest debt service coverage ratio by 0.06%.

## **Inflation**

Inflation estimates impact both the sources and uses of the financial plan. The RTID financial plan is required to present costs in both current year dollars and year-of-expenditure dollars (YOE). Current year for purposes of this report is 2006 because that is when cost estimates were completed. The revenue and expenditure detail tables in Appendix C display both current year dollars and YOE dollars allowing for an easy comparison between the RTID (roads) and *Sound Transit 2* (transit) funding packages.

The Puget Sound region has experienced a relatively mild period of price increases for general goods and services. For example, the Consumer Price Index (CPI) grew at 1.9% in 2002, 1.6% in 2003, and 1.2% in 2004. However, higher energy prices due to an escalation of the conflicts in the Middle East, the disruption of supply due to natural disasters such as hurricanes Katrina and Wilma, and continued rapid growth of the Chinese and Indian economies have resulted in recent spikes of inflation on construction materials.

## **Interest Rates**

The financial model assumes that the agency can, on average, borrow at 6.0% interest rate for its long-term bonds. If interest rates were to rise substantially from the current levels and remain at those levels for a prolonged period, the agency's borrowing costs would rise and there would be a corresponding increase in its debt service and a reduction in its total financial capacity. Interest rates are currently relatively low, but the Federal Reserve Board over the last several years has increased the federal funds rate in an effort to reduce the risk of inflation.

## **Management**

To manage the risk of revenue collections becoming lower than forecasted amounts, significant cost increases, or interest rate increases, RTID will:

- Guard against any proposed legislation that would erode the tax base;
- Review policy decisions regarding cash reserve levels;
- Continuously monitor trends in tax collections and update the financial model used to develop the long-term revenue forecasts in order to provide an early warning for potential issues.
- Seek the financial advice of its expert panel of investment bankers and financial consultants and;
- Continuously monitor trends in the bond market and update the financial plan in order to provide an early warning for potential issues.

## VIII. SR 520 Funding Strategy

### Summary

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**T**his funding strategy includes a menu of financing elements that will provide sufficient funds to replace the SR 520 bridge and make the necessary connections between I-5 and I-405. Of course not all of the options presented here will be used; this funding strategy provides a sound foundation for moving ahead while design and engineering work continue to refine the project cost estimates. This funding strategy moves the state and region forward in another important step toward replacing the SR 520 bridge.

### A. Background

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Thousands of citizens depend on SR 520 every day. The corridor connects large employment centers, including the University of Washington and Microsoft. It is an economic lifeline for the Puget Sound region and Washington State. The 42-year-old structure is vulnerable to failure and must be replaced. With the replacement of the bridge deck, additional improvements are necessary to make connections functional through dense urban areas, address community needs, and to address sensitive environmental conditions between I-5 and I-405. The complexity of this project requires close collaboration between local, regional, state, and federal officials.

In 2006, the Washington State legislature instructed the Regional Transportation Investment District (RTID) to:

*"...develop and include in the regional transportation investment plan a funding proposal for the state route number 520 bridge replacement and HOV project that assures full project funding for seismic safety and corridor connectivity on state route number 520 between Interstate 5 and Interstate 405." ESHB 2871.*

### B. Situation Today

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#### Project Definition

The Washington State Legislature has defined the project as a six-lane configuration with four general-purpose lanes, two HOV lanes, and with the ability to accommodate high capacity transit (ESSB 6099). A mediator will work with interested parties to develop a Project Impact Plan that addresses impacts of the project on Seattle neighborhoods, parks and the University of Washington. ESSB 6099 also sets forth a process for integrating high capacity transit, highway, and bus transit planning in this corridor.

The Seattle City Council on April 23, 2007, passed a resolution that describes the city's priorities for the six-lane bridge replacement.

The State of Washington and local jurisdictions on the east side of Lake Washington support corridor connections and the mitigation described in SR 520 project environmental documents. These include connections to a multi-use path on highway lids between Medina and Clyde Hill, and improved transit access to SR 520.



## Project Costs and Future Action

WSDOT has updated project costs that were reviewed by an expert review panel in the fall of 2006. The current cost estimate for the entire six-lane corridor from I-5 to I-405 ranges between \$3.9 billion and \$4.4 billion. Construction is expected to be staged so that the pontoons necessary for the bridge replacement will be started in 2008; the SR 520 bridge replacement is currently scheduled for 2011-2018.

The City of Seattle, the RTID executive board, environmentalists, and neighborhood activists, have asked the State DOT to revisit engineering road standards and to use context-sensitive design in this corridor similar to that used by other states. Revisiting design standards and conducting value engineering may reduce project costs and at a minimum protect the public from unexpected cost increases. The Governor's expert review panel report in 2006 also recommended that value engineering be conducted on this project.

## Identified Funding

The State of Washington has designated \$560 million for the project and has also created a funding pool of up to \$1 billion for the SR 520 corridor project between I-5 and I-405 and for the Alaskan Way viaduct replacement.

The State of Washington has prioritized its federal bridge and transit funds through 2021 to the SR 520 corridor in the currently adopted 16-year spending plan associated with the state transportation budget and the Legislative Evaluation and Accountability Program committee (LEAP) transportation project list.

Since at least 2003, tolling has been contemplated as an essential revenue source to both finance bridge construction and to manage reliable system performance. Used as revenue to support repayment of bonds, tolls have been estimated to provide \$700 million - \$1.2 billion for the project. Several technical studies and a recent finance study have been completed to assess the feasibility of tolling in this corridor and the impact of traffic diversion on I-90. The United States Department of Transportation, Urban Partnership, is considering designating this corridor for congestion relief funds and technology investments to facilitate future tolling.

The *Roads & Transit* plan to be presented to the voters this fall will include \$1.1 billion in the RTID plan to finance construction in this corridor.

In addition, viable bonding options could strengthen the regional district's financing; result in lower interest costs and thus more funding for the project. For example, state or federal backing of regional bonds for King County projects could reduce financing costs by up to \$200 million. These funds could then pay for direct project costs. The federal government leverages regionally significant projects by providing credit assistance in the form of loans, loan guarantees and stand-by lines of credit through its Transportation Infrastructure Finance and Innovation Act (TIFIA) program. TIFIA currently has \$2 billion in active credit agreements.

RTID authority includes a provision to transfer sales tax on construction of the transportation projects it funds to reinvest in the project. Extending this provision for other mega projects in the region would allow the state to transfer gas tax funding to SR 520. For example, the sales tax transfer for construction costs on I-405 and the Alaskan Way Viaduct could save those projects \$140 million. That \$140 million in gas taxes currently pledged to those projects could then be transferred to SR 520.

### C. Principles to Move Forward on SR 520

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The following principles underlie this financial strategy and will guide future actions on the SR 520 corridor by the RTID board:

- The six-lane bridge configuration has been decided. Design standards will be responsive to the context, setting, value engineering and cost savings.
- The choice of Montlake or Pacific interchange will be selected before construction begins, except for pontoon construction.
- Mitigation is inseparable from construction of the bridge replacement and connections on both sides of Lake Washington.
- Until construction is completed, the public will be protected from safety hazards by continuing to manage bridge closures and the assurance of full corridor funding.
- Future tolling in the corridor, which will be set by the State of Washington, will be comparable to tolls on the Tacoma Narrows bridge, reinvested in the corridor, and managed to ensure reliable system performance.
- The region will work with the state to optimize regional revenue by maximizing the financing structure to benefit direct project investment and reduce financing costs. Examples include backing of regional bonds through state or federal programs. This will allow the state, in partnership with the federal government and the region, to fully fund the SR 520 corridor without raising new state taxes for the project.
- The region will maintain maximum flexibility in developing the legal authorizations governing its debt so that it retains options for future financing structures. It is too early to determine the optimal mix of borrowing mechanisms.
- The state will consider transferring sales tax from other transportation mega-projects, thus freeing gas taxes to be transferred to the SR 520 project.
- Project cost estimates will be updated and reviewed at key benchmarks during design, engineering, and bid preparation to ensure value engineering is used and that costs are controlled.

A vote for the *Roads & Transit* plan is a vote for bridge replacement. Without regional funding the state will need to raise an additional \$1.1 billion for replacing the bridge deck and making the connections between I-5 and I-405.

Funding Sources (2007-2020)	Low range	High range	Status	Assumptions
State Gas Tax	560.0	560.0	Legislatively enacted	Pre-existing and 2003-2005 gas tax
Federal Funds to date	1	1	Received	
Allocation from State Pooled Funds	600.0	1,000.0	2007-09 Budget Conference Report	2007 Transportation Budget provides access to a \$1 billion pool of funds for either the AWV or SR 520 Bridge. Since the viaduct's total state funding is limited, the range of funds available from this pool to SR 520 is from \$600 million to \$1 billion.
Federal FHWA Bridge Funds	110.0	110.0	2007-09 Budget Conference Report	State is estimated to receive \$2 billion in bridge funds statewide over 16-year finance plan period.
Federal FTA Funds	200.0	200.0	2007-09 Budget Conference Report	FTA funds may be increased if the region's Federal Urban Partnership grant is approved.
Roads & Transit Plan	1,100.0	1,100.0	Included in ballot measure	
Tolling	700.0	1,200.0	Feasibility Studies: 2004 Parsons Brinckerhoff; Transportation Commission (2006 Cambridge Systematics); WSDOT; State Treasurer; USDOT Urban Partnership Application	State policy includes identification of potential tolling corridors in the region, including SR 520. LEAP 2006-07 Capital Finance Study; Regional Transportation Commission final report; HB 1094 and SB 5412 (2007 Legislature). A 2004 PB Study assumed variable \$0.75-4.60 toll with average of \$3.07 would support approx. \$1 billion in financing. Updated study in 2007 assumed \$1.00-5.00 tolls in 2019 dollars. The Tacoma Narrows Bridge toll in 2018 dollars is approximately \$6.00. Diversion is expected to be 12% with both bridges tolled and 30% with one bridge tolled.
Minimized Financing Cost	0	200.0	RTID statute 36.120.130 allows the RTID to use its revenues to back bonds issued by the state of Washington or other lead agencies.	Lowering interest costs on debt would allow RTID to spend more of its tax dollars on investment and less on interest payments. Federal programs such as the Transportation Infrastructure Finance and Innovation Act (TIFIA) leverage federal resources to projects of regional significance.
Sales Tax Transfer	0.0	140.0	Existing statute allows RTID funded projects to transfer sales tax on construction back to the project generating the sales tax.	Extension of this provision to other regionally significant mega-projects would allow state gas taxes to be transferred to SR 520.
<b>Total Funding</b>	<b>Low range \$3.3 B</b>	<b>High range \$4.5 B</b>		<b>Most likely cost estimate for six-lanes with Montlake Interchange: \$3,900; With Pacific Interchange \$4,380.</b>

## D. Legislative Responsibility for the RTID and the Financial Strategy Intent & Principles

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In 2006 the state amended the authorizing statute for regional transportation investment districts to include the following regarding the SR 520 project:

*The planning committee must develop and include in the regional transportation investment plan a funding proposal for the state route number 520 bridge replacement and HOV project that assures full project funding for seismic safety and corridor connectivity on state route 520 between Interstate 5 and Interstate 405. (RCW 36.120.045)*

The strategy described in this report is the recommendation to be acted upon by the Regional Transportation Investment District planning committee to fulfill this requirement.

This strategy shows that there are sufficient funds identified to assure full project funding for seismic safety and corridor connectivity on SR 520 between I-5 and I-405. Further, the strategy meets the requirements of RCW 36.12.040, that states:

*The overall plan must leverage the district's financial contributions so that federal, state, local and other revenue sources continue to fund major congestion relief and transportation capacity improvement projects in each county and the district. A combination of local, state, and federal revenues may be necessary to pay for transportation projects, and the planning committee shall consider all of these revenue sources in developing a plan.*

## E. Situation Today: State and Local Progress

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### State Defines Project in ESSB 6099: SR 520 Legislation

The Washington State Legislature through legislation (ESSB 6099) has defined a six-lane configuration with four general-purpose lanes, two HOV lanes, and the ability to accommodate high capacity transit. A mediator will work with interested parties to develop a Project Impact Plan that addresses impacts of the project on Seattle neighborhoods, parks and the University of Washington. SB 6099 also sets forth a process for integrating high capacity transit, highway, and bus transit planning in this corridor. A finance plan must also be prepared and submitted to the Governor and the legislature's Joint Transportation Committee by January 1, 2008. That plan must include state and federal funding, at least \$1 billion in regional contributions, and revenue from tolling.

This *financial strategy* is a significant component of that *financial plan*.

### Local Jurisdiction Resolutions

The Seattle City Council on April 23, 2007, passed a resolution that lays out the city's priorities for the six-lane bridge replacement.

Local jurisdictions on the eastside of Lake Washington and the State of Washington support corridor connections and the mitigation described in SR 520 project environmental documents. These include connections to a multi-use path on highway lids between Medina and Clyde Hill and improved transit access to SR 520.

## F. Project Costs and Future Actions

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WSDOT has conducted project cost updates and current cost estimate for the six-lane corridor from I-5 to I-405 ranges between \$3.9 billion and \$4.4 billion. Construction of piers necessary for the bridge replacement will be started concurrently with the final design and mitigation efforts. The SR 520 bridge replacement construction is currently scheduled for 2011-2018.

The City of Seattle, the RTID executive board, environmentalists, and neighborhood activists have asked the State DOT to revisit engineering road standards and to use context sensitive design in this corridor similar to that used by other states. Revisiting design standards and conducting value engineering can reduce project costs and at a minimum protect the public from unexpected cost increases. The governor's expert review panel report in 2006 recommended that value engineering be conducted on this project.

The following excerpt is from Governor Chris Gregoire's findings and conclusions report on SR 520, December 15, 2006:

*In 2006, the Legislature directed the Governor, along with the Chairs of the Senate and House Transportation committees and the Secretary of Transportation, to form an Expert Review Panel to review the funding and implementation plans for the SR 520 Bridge Replacement and HOV Project to determine if they were reasonable and feasible. The law provided the panel should include experts in relevant fields, such as planning, engineering, finance, law, the environment, emerging transportation technologies, geography, and economics.*

*The Expert Review Panel found the project implementation plan comprehensive and sufficient for the level of design development, noting the SR 520 project design and construction plans are still in the preliminary stages.*

*WSDOT has estimated costs for a Four-Lane Alternative, a base Six-Lane Alternative, and a Six-Lane Alternative with the Pacific Street Interchange design option. The cost estimate for the Six-Lane with Pacific Interchange also includes the removal of the Montlake freeway transit stop, relocation of the bike/pedestrian path to the north of the highway on the Eastside, and improvements to the South Kirkland Park and Ride at 108th Avenue NE.*

*The most recent project cost estimates were prepared in response to comments made in the September 1, 2006, Expert Review Panel report. The Expert Review Panel reviewed the project finance and implementation plans to determine if the key assumptions upon which they were based were feasible and sufficient.*

*The Panel found that the Cost Estimate Validation Process used by WSDOT to develop the cost estimates is a valid methodology for evaluating the variability of cost and schedule predictions due to unforeseen risks and opportunities. The Panel also commented that this cost estimate methodology represents a "best practice" and is gaining popularity nationally. However, the Panel noted that the cost estimates did not consider the recent worldwide construction cost inflation increases, and that the general inflation rate applied to the estimates was too low. The panel also observed that both projects are in a very early stage of design.*

*As a result, the Panel recommended that WSDOT broaden the cost estimate range to acknowledge that there are unknown issues at such an early design phase, and at the same time the panel recommended that for budgeting purposes the cost that had a 60% confidence level of not being exceeded should be used. This figure has been labeled as "the most likely cost." Finally, the Panel also recommended that the project cost estimates be updated when approximately 15-20% design engineering work is completed.*

*In response to the Expert Review Panel's findings and the Governor's request, WSDOT completed a cost reevaluation of the project alternatives that considered new information about the likely impact of recent worldwide construction cost inflation on project costs, and effects of increased construction costs that have resulted from the activity to address Hurricane Katrina damage, which occurred after original cost estimates.*

*The reevaluation found that the most likely cost for the base Six-Lane Alternative (4 General and 2 HOV Lanes) is \$3.90 billion.*

*The reevaluation found that the most likely cost for the Six-Lane Alternative (4 General and 2 HOV Lanes) with the Pacific Street Interchange is \$4.38 billion.*

*Panel members participated in the cost reevaluation and found that "these new cost ranges more accurately reflect the uncertainty associated with both projects at this early stage of design."*

*The Expert Review Panel found that after the project has reached 15 to 20 percent design, cost estimates should be updated.*

## G. Identified Funding

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### State Transportation Budget 2007-09

To reserve adequate funding for the SR 520 bridge, the 2007-09 *Transportation Budget Conference Report* identifies funds consisting of:

- \$560 million in state funds;
- \$110 million in federal bridge funds;
- \$200 million in federal transit funds expected to be allocated by the Puget Sound Regional Council;
- Access to a \$1 billion pool of funds earmarked exclusively for either the Alaskan Way viaduct or SR 520 bridge. Since the viaduct's total state funding is limited, the range of additional funds available from this pool to SR 520 is from \$600 million to \$1 billion.

Sources identified in the 2007-09 State transportation budget range from \$900 million to \$1.3 billion.

The conference report goes on to state:

*It is expected that revenues from RTID, tolling and other funding mechanisms will be used to fund the remainder of the project's cost.*

### Regional Contribution

The *Roads & Transit* plan to be presented to the voters this fall by the Regional Transportation Investment District (RTID) will include \$1.1 billion to finance construction in this corridor. In addition, optimizing the financing structure could also reduce interest costs by up to \$200 million. Those interest savings could be spent on direct project costs rather than finance charges.

State sales tax transfer for construction costs on I-405 and the Alaskan Way viaduct would yield up to \$140 million in savings for those projects. This would allow the transfer of gas taxes, now dedicated to those projects, to SR 520.

### Tolling Assumptions

Since at least 2003, tolling has been contemplated as an essential revenue source to both finance bridge construction and to manage reliable system performance. Used as revenue to support repayment of bonds, tolls have been estimated to provide \$700 million - \$1.2 billion for the SR 520 project. Several technical studies and a recent finance study have been completed to assess the feasibility of tolling in this corridor, and the relationship to I-90 and traffic diversion.

A report prepared for the Office of the State Treasurer by Seattle-Northwest Securities Corporation and Montague DeRose and Associates, LLC (March 28, 2007) presents several tolling scenarios that the state might consider. Tolls, when bonded, could contribute from \$1.28 billion to \$2.85 billion, depending on the assumptions used for when tolls are imposed and whether or not both SR 520 and I-90 are tolled. (See page 29 of the Treasurer's report).

At the time the Treasurer's report was issued it showed \$1.4 billion as unfunded if only SR 520 is tolled. This report was issued prior to approval of the 2007-09 State transportation budget that identifies between \$900 million and \$1.3 billion in state and federal funds. The Treasurer's report stated:

*Regardless of the bonding vehicle (s) chosen, in order to be financially feasible, the state must elect either to 1) toll both the SR 520 and I-90 bridges or 2) contribute additional funds to the project construction costs. Without additional funding, some tolling of both bridges will be likely prior to completion of the project.*

The legislature's budget for 2007-09 and the associated spending plan identified up to \$1.3 billion of the Treasurer's identified shortfall in the scenario that assumes tolling only SR 520.

One goal in determining tolling feasibility is minimizing traffic diversion to non-toll highways to avoid impacting traffic in other corridors and to keep tolls affordable. A technical memorandum prepared by Parsons Brinckerhoff for WSDOT in May 2007 assessed toll rates and traffic diversion under a variety of scenarios. Assuming tolls only on SR 520, imposed after bridge completion in 2018 and using variable rate tolling, the weighted average toll rate in 2018 dollars would be \$3.07 each way, or \$6.14 round-trip. This is comparable to the forecasted toll charge at the Tacoma Narrows bridge in 2018.

The United States Department of Transportation (USDOT), Urban Partnership, is considering designating this corridor for congestion relief funds and technology investments to facilitate future tolling. A grant application submitted by King County, PSRC, and WSDOT is pending with USDOT.

RTID will coordinate with the state on future tolling in the region. State law (RCW 36.120.050) states:

*The (RTID) planning committee may recommend the imposition or authorization of vehicle tolls on new or reconstructed local or regional arterials or state or federal highways within the boundaries of the district if the following conditions are met:*

*Any such tolls must be approved by the state transportation commission or its successor statewide tolling authority; the regional plan must identify the facilities that may be tolled; and unless otherwise specified by law the department (WSDOT) shall administer the collection of vehicle tolls on designated facilities and the state transportation commission or its successor shall be the tolling authority.*

### **Sales Tax Transfer on Initial Construction for RTID projects**

The legislation creating the Regional Transportation Investment District included a mechanism for sales tax paid on the initial construction of RTID projects to be transferred back to the project to defray costs. This section of law was codified in RCW 82.32.470 (1) and states:

*The tax imposed and collected under chapters 82.08 and 82.12 RCW, less any credits allowed under chapter 82.14 RCW, on initial construction for a transportation project to be constructed under chapter 36.120 RCW, must be transferred to the transportation project to defray costs or pay debt service on that transportation project. In the case of a toll project, this transfer or credit must be used to lower the overall cost of the project and thereby the corresponding tolls.*

This provision could be extended to other mega-projects in the region not currently in the RTID program such as the Alaskan Way viaduct replacement and I-405 corridor improvements. Those projects could save \$140 million by extending this provision. That savings would allow the transfer of a corresponding amount of gas tax now dedicated to those projects. Approximately \$140 million could then be transferred to SR 520 construction costs.

### **Minimized Financial Costs**

State law provides authorization for the district to work with the state to issue debt. RCW 36.120.130 states:

*The district may enter into agreements with...the State of Washington, when authorized by the plan, to pledge taxes or other revenues of the district for the purpose of paying in part or whole principal and interest on bonds issued by ... the state of Washington. The agreements pledging revenue and taxes shall be binding in their terms, but not to exceed thirty years, and no taxes pledged by an agreement may be eliminated or modified if it would impair the pledge in any agreement.*

Further RCW 36.120.200 establishes:

*The regional transportation investment district account is created in the custody of the state treasurer. The purpose of this account is to act as an account into which may be deposited state money, if any, that may be used in conjunction with district money to fund transportation projects.*

RTID may issue bonds pursuant to RCW 36.120.130, payable from sales taxes and MVET. Because the RTID bonds would be paid only from the two excise taxes, including sales taxes that tend to fluctuate in response to seasonal and economic cycles, the bond market (and the proxies for the bond market in the form of the bond insurance companies and ratings agencies) may require RTID to make relatively conservative assumptions in connection with the issuance of its bonds. These conservative assumptions are embedded in the financial plan for RTID.

Given that the purpose of RTID is to provide funding for state highways, the state is a potential source of assistance to reduce interest rates and thereby contribute more regional funds to direct project costs. State credit support could take the form of either state bonds or a state guarantee. The state could issue bonds to directly finance RTID improvements that the state itself could fund, and the RTID taxes could be pledged to the state for repayment of the bonds.

RTID will work with the Washington State Treasurer's office to explore ways to leverage the district's revenue using tools such as credit support, credit enhancements, state bonds, or state guarantees. Other tools will also be explored as identified by the State Treasurer.



State debt issuance requires 60% approval of state house and senate or 50% approval and voter consent. [*Washington State Constitution*, Article VIII, Section 1(i)]. State bonds payable directly or indirectly from “general state revenues” are subject to both constitutional and statutory debt limits.<sup>2</sup>

The state may issue motor vehicle fuel tax bonds for state highway purposes, which are further secured by a pledge of the full faith, credit and taxing power of the state, without incurring “debt”. State motor vehicle fuel tax bonds are not subject to either the constitutional or statutory debt limit.

Although the state may pledge its full faith and credit to its motor vehicle fuel tax bonds without consuming state debt capacity, the constitution and statutes require that the legislature provide sufficient revenues from motor vehicle fuel taxes to pay debt service on motor vehicle fuel tax bonds.

If the state issues motor vehicle fuel tax bonds to pay for RTID projects, the state would need to provide for motor vehicle fuel taxes to pay the bonds even though RTID would in fact reimburse the state for debt service on the bonds. Issuing motor vehicle fuel tax bonds may, as a practical matter, impact the availability of motor vehicle fuel taxes to be pledged to other state motor vehicle fuel tax bonds. The RTID projects would also need to qualify as a proper expenditure for state motor vehicle fuel taxes.

This action would require approval by the state finance committee composed of Governor, Lieutenant Governor, and State Treasurer.

The State Treasurer’s report on SR 520 notes that it is too early to refine the plan of finance, or to determine the optimal mix or sequencing of general obligation (GO)/motor vehicle excise tax (MVFT) bonds and revenue bonds:

*...there are some planning level enhancements which can be considered at this time. The state may have the opportunity to reduce overall borrowing costs by implementing a program that includes interim financing. This would involve the use of a short-term GO/MVFT borrowing facility (interim loan or commercial paper) in the early stages of construction. We estimate that the aggregate overall debt service cost savings for such a program as compared to issuing 30-year GO/MVFT bonds, would be over \$500 million.*

(page 18 and Appendix B: Treasurer’s report on SR 520 funding alternatives).

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<sup>2</sup> The statutory exemption provides as follows: “A pledge of the full faith, credit, and taxing power of the state to guarantee the payment of any obligation payable from any of revenues received from any of the following sources: (a) the fees collected by the state as license fees for motor vehicles; (b) excise taxes collected by the state on the sale, distribution, or use of motor vehicle fuel; and (c) interest on the permanent common school fund: PROVIDED, That the legislature shall, at all times, provide sufficient revenues from such sources to pay the principal and interest due on all obligations for which said source of revenue is pledged. RCW 39.42.080.

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# Appendix B: Construction Mitigation Approach

## WSDOT's approach to construction mitigation

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**W**ith the advent of the 2003 Nickel Program and the 2005 Transportation Partnership Act, WSDOT began to develop a scalable construction mitigation program that keeps people moving during construction. This will be done largely through transportation demand management (TDM), and, in certain corridors, increased transit service.

WSDOT developed a computer model to identify mitigation needs for transportation construction projects. Factors used to determine the need include speed and volume of traffic on affected corridors, the availability of public transportation, the origin and destination of trips, single occupant vehicle ratio on the corridor, and land uses surrounding the corridor.

In WSDOT's methodology, new corridors will not require mitigation.

For the corridors requiring construction mitigation, WSDOT uses the best available data to estimate the impact of construction on overall travel, including the number of trips affected and needing to be mitigated. The best estimates on the timing and duration of construction, the number of lanes to be closed by time of day and direction of travel, whether or not HOV lanes will remain open or be available, whether or not lanes will be narrowed, and other construction impacts as well as policy directives will also be factors. WSDOT uses this data and these factors to model the best estimate of the number of trips that will be impacted by construction, as well as the impacts that can be managed or mitigated.

Of those impacts that can be mitigated, WSDOT will determine how best to mitigate through maintaining or replacing roadway capacity, or through shifting the trip (geographically, temporally, modally). Public information and outreach will be provided to the travelers in that area about the best strategy mix for maintaining mobility.

WSDOT has also assigned costs to various types of replacement trips. Generally speaking, TDM measures are less costly on a per-trip basis than the provision of additional transit service. Specific costs will vary by corridor.

WSDOT proposes to use these TDM strategies to affect travel choice:

- Maintain roadway capacity with increased bus service, maximize HOV use, and enhance incident response.
- Shift trips to transit and HOV with park & ride enhancements, as well as through efforts to affect when and where travel occurs.
- Engage and inform the public through expanded highway real-time travel information.
- Target outreach to specific geographic and trip markets to ensure the most people have good information about the situation and their travel options.

## Sizing transit service for construction mitigation projects

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The transit mitigation program should be sized to meet anticipated demand. Individual services should be sized to remain cost-effective, and the total program should not exceed transit capacity limits. Additionally, public information and outreach, as well as the approach taken to managing project construction, will impact demand for transit service during the construction period.

The following factors provide a basis for determining the proper size of a transit mitigation program:

- Severity and duration of construction–related congestion.
- Strength of underlying transit market—the success of transit as a mitigation strategy will be proportionate to the underlying fit and attractiveness of transit in the corridor.
- Change in relative travel time between transit and driving—in some corridors, if travel time for single-occupant vehicles erodes, and travel time for transit remains the same or improves, incremental transit ridership will rise.
- Likely effectiveness of cost and incentive programs— marketing and transit incentive programs may provide incremental increases in transit ridership. Data from other mitigation programs should be used to determine effectiveness.
- Capacity constraints—recognize that there are reasonable limits to the amount of transit service that can be added to an existing system or within a specific time period.

Transit's effectiveness as a mitigation strategy improves when the following conditions are met:

- Speed and reliability—transit provides a faster and more reliable trip than driving. HOV lanes must remain available and managed, or an alternate route provided for transit.
- Incentives—rider incentives should include subsidized transit passes, parking management, and tolls
- Fleet and base capacity—both must be sufficient and commensurate with the anticipated service growth.
- Funding and capacity—for operating additional transit service hours, as well as for fleet and base expansion that may be necessary.

## Transit mitigation service principles

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The general principles guiding transit service as a construction mitigation strategy are identified below:

- **Enhance existing service.** Enhancing existing services will be more effective and will have longer lasting benefits than new services. It takes time to build ridership on any transit route, and to build awareness of the service among potential customers. It is also faster to implement an increase in existing service rather than establishing a new service or route, since customer service information and driver training materials exist, facilities are in place, and there is already a knowledgeable customer base from which to build additional ridership. Customers gained on existing transit services during the mitigation period are more likely to continue riding transit once the construction period is over.
- **Increase the use of existing capacity.** Beginning in 2009 with the opening of Sound Transit light rail, there will be significant added capacity in the transit system. Timing project construction to take advantage of this added transit capacity in commuter rail and light rail will place transit in a better position to play a large role in construction mitigation. To be successful, feeder bus routes and park & ride access must already be in place and sufficient to allow potential riders to access the system. Where capacity also exists on the local and express bus system, it can be used more effectively if targeted marketing and incentive programs are implemented.
- **Keep transit mitigation service and programs simple.** Additional services should be simple to understand for potential riders. Short and direct services to well-known sites will be more effective than complicated, customized services.

## Constraints on transit capacity for mitigation

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- **Growth in service hours.** New transit service can only be added incrementally. The rate of service growth is limited by the ability to hire and train drivers. For King County Metro, this is estimated to be an additional 100,000 to 125,000 hours per year maximum.
- **Availability of fleet.** A determination must be made early in the mitigation planning process whether to purchase new buses for transit service. A new bus is a twelve-year investment for a transit operator, so it must be decided whether the investment is worth the added service needed for mitigation. Alternately, extending the service life of the existing fleet is another option. Both of these strategies will have capital and operating costs to the operator.
- **Base capacity.** The most significant capacity constraint for the transit operators is at the operating bases. Providing transit mitigation service will likely require an investment in additional capacity at several existing operating bases, either temporarily or permanently.

The above constraints for transit service must be kept in mind as construction schedules and mitigation programs are developed. One concern that transit operators have expressed is the potential for significant spikes and troughs in the construction program, where overlapping construction projects could overwhelm transit's ability to provide sufficient fleet, operators, and base capacity for the demand in the spike periods.

## Construction mitigation costs and financing

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**Determining costs.** As part of its needs identification, WSDOT determines the number of trips that will be impacted by a specific construction project, and then determines how many of those trips can reasonably be mitigated. WSDOT assigns costs for each trip to be mitigated, depending on the type of mitigation provided, typically transit or demand management. The percentage targets that WSDOT assigns for transit and demand management mitigation will depend both on the presumed effectiveness of that measure, as well as the cost per trip to mitigate. Transit service tends to be more productive (and less costly) when the service carries passengers in both directions, and there is frequent passenger turnover. Long-haul, single-direction, single-seat passenger trips are the most costly to deliver.

**Construction mitigation allotments in project budgets and RTID finance.** There is no requirement for, and thus no plan for, a certain percentage of RTID funds to be allocated for mitigation. RTID estimates for mitigation have been determined at the corridor level for planning purposes, and are included in the proposed RTID budget for each county, and not on a project-by-project basis. This will allow flexibility in the program and an ability to optimize resources, as mitigation needs will vary by corridor, and may change as project scopes are resolved, and project construction schedules are determined.

## Sample corridor mitigation program: I-405

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WSDOT has performed a sample analysis for mitigation by examining one segment of southbound I-405 during the 7 am – 8 am morning rush period, during the proposed period of construction of this project. WSDOT's model has determined that throughput in the general-purpose lanes, normally at 2200 cars for this one-hour period, would be reduced to 1720. The HOV lanes, however, would have capacity for an additional 170 vehicles per hour. WSDOT's mitigation goal would be to shift the people traveling in at least 375 vehicles per hour from the general-purpose lanes to other means.

The mitigation strategies in this example include:

- Expanded real-time travel information along the corridor for personal vehicles and transit.
- Increased incident response services.
- Increased use of vanpool and carpools.
- Increased use of van sharing.
- Coordinated communications with employers, business organizations, property managers, transportation coordinators, and residential communities.

Transit's role in mitigation in this corridor could be significant, as long as HOV lane performance is maintained throughout the construction period. Transit could carry a large share of commuters heading toward activity centers, especially Bellevue, Renton, and Overlake. For example, some I-405 routes from the Renton Highlands could be re-routed to use the Sunset Highway and I-5 instead of I-405 and I-90.

Transit operators could also do the following:

- Expand existing Sound Transit regional express service.
- Provide express services targeted to corridor activity centers.
- Provide additional service on Coal Creek Parkway.
- Add feeder bus service to enhance access to Sounder commuter rail.

