

**DATA CENTER RELOCATION PROJECT OVERSIGHT REPORT FOR FEBRUARY 2009**

**CURRENT RISK RATING** ▼

Attention is needed to address the budget deficit and current risks described below.



**PROJECT DESCRIPTION**

The Data Center Relocation Project will create a dedicated King County facility in leased space at the Sabey Data Center in Tukwila to replace the county's existing data center in the Seattle Metropolitan Tower (SMT). 8,080 square feet (sf) space is being developed to house 60% of the county's data network systems, with room for expansion. The project includes establishing new fiber optic connections, relocating staff and existing IT network equipment from SMT, and purchase of new equipment as needed. It is being managed by the Facilities Management Division (FMD) and the Office of Information Resources Management (OIRM). Build-to-suit, design-build, and county-force delivery methods are being used. The project is currently in implementation.

**PROJECT STATUS** (● = No Current Concerns ▼ = Attention Needed ◆ = Corrective Action Needed)

● **SCOPE:**

The baseline scope shows: construction of 7,500 sf of data center space, 580 sf of storage, and 3,982 sf of office space; installation of redundant fiber lines connecting to the county's existing wide area network core in downtown Seattle; and the installation of new or relocated IT network equipment. The office space was removed from scope prior to construction to save \$ 1,322,318 in rent over the life of the lease.

● **SCHEDULE:** (Completion Dates)

<u>Activity</u>	<u>Approved Schedule</u>	<u>Current Forecast</u>	<u>Comment</u>
Design	11/21/08	Complete	Completed On Schedule
Construction	04/10/09	04/10/09<	Ahead of schedule
Phased IT Equipment Relocation	10/25/09	10/25/09	On Schedule
Permanent Fiber Line Installation	04/06/10	04/06/10	On Schedule

▼ **BUDGET:**

<u>Project</u>	<u>LTD Appropriations</u>	<u>LTD Expenses</u>	<u>Est. Cost at Completion</u>	<u>Est. Balance at Completion</u>
FMD	10,756,213	1,073,089	10,736,688	19,525
OIRM	6,891,293	258,780	8,372,785	(1,481,492)
Contingency	1,238,607	0	1,163,658	74,949
<b>Total</b>	<b>\$18,886,113</b>	<b>\$1,331,869</b>	<b>\$20,273,131</b>	<b>(\$1,387,018)</b>

▼ **CURRENT RISKS AND ISSUES:**

Submission and approval of a supplemental appropriation is urgently needed. The current appropriation, as anticipated, is not sufficient to complete the project. The project is likely to run out of money by late summer unless additional funding is obtained, which could lead to schedule delays.

For detailed information regarding this project, see the following pages.

**King County Auditor's Office – Cheryle Broom, County Auditor**

*The King County Auditor's Office was created in 1969 by the King County Home Rule Charter as an independent agency within the legislative branch of county government. Its mission is to promote public trust in King County Government by providing audits and other services that improve performance, accountability and transparency.*

**Capital Projects Oversight Program – Tina Rogers, Manager**

*The Capital Projects Oversight Program (CPO) was established within the Auditor's Office by the Metropolitan King County Council through Ordinance 16725 in 2007. Its goal is to promote the delivery of capital projects in accordance with the council approved scope, schedule, and budget; and, to provide timely and accurate capital project reporting.*

CPO oversight reports are available on the Auditor's Web site ([www.kingcounty.gov/operations/auditor/reports](http://www.kingcounty.gov/operations/auditor/reports)) under the year of publication. Copies of reports can also be requested by mail at 516 Third Avenue, Rm. W-1033, Seattle, WA 98104, or by phone at 206-296-1655.

**ALTERNATIVE FORMATS AVAILABLE UPON REQUEST  
CONTACT 206-296-1655 OR TTY 206-296-1024**

## **INTRODUCTION**

This is the fifth monthly oversight report prepared for and submitted to the Government Accountability and Oversight Committee by the Capital Projects Oversight Program on the status of the scope, schedule, budget, and risk for the Data Center Relocation project. Oversight is conducted through monthly meetings with the project team members from FMD (acting as the lead agency for the project) and OIRM (who manage the facility). Information has also been obtained through site visits and direct contact with Data Center staff. We are changing the format of the oversight report starting this month to provide a high-level summary of the current project status on the cover page. FMD and OIRM produce a separate monthly project status report and their update for February is attached.

## **PROJECT STATUS UPDATE**

### **Scope**

No new scope changes were considered in February. As described in the December 2008 report, an amendment to the Data Center lease has been agreed to in principle with the landlord to remove 3,982 square feet (sf) of office space. This will result in \$1,322,318 in rent savings over the life of the lease. The OIRM staff originally planned to occupy this office space will utilize existing OIRM space in the Chinook Building instead. The remaining Data Center space, including work space for the necessary on-site operators, is not altered by this scope change. The County Executive will notify council of the intent to modify the lease by separate letter. No schedule for finalizing the lease amendment has been given.

### **Schedule**

The baseline schedule for the project remained unchanged during February. As reported earlier, it shows: commissioning of the data center on May 22, 2009; finishing the physical move of county equipment from Seattle to Tukwila on October 12, 2009; and completion of the secondary fiber installation by April 6, 2010. The project team continues to report that the project is on track to meet these milestones on or before the baseline schedule dates. We have requested additional information regarding the schedule impact, if any, associated with the projected delivery and installation date for the refurbished mainframe computer. Based on the information available at this time, we do not have any major schedule concerns, unless cash-flow constraints discussed in the Risk section below cause the project team to delay activities on the critical path.

As was reported last month, the relocation consultant has started working on the development of the high-level move strategy for the project. This will be followed by the development of detailed move plan for the mainframe computer and servers included in the project, which is scheduled to be completed by July 17, 2009. These deliverables will provide independent verification of the baseline schedule. We will monitor the results of the relocation consultant's work and report on the adjustments, if any, that they recommend to the project schedule.

An ongoing focus of oversight will be to understand and report on the cost impacts of any schedule delays which develop and to recommend mitigation strategies, if needed, to the project team for consideration.

## **Budget**

This project has a budget of \$18,886,113 based on the current appropriations. This includes \$1,238,607 in contingency funds. Through February, the project expenditures total \$1,331,869 or approximately 7.05% of the approved budget allocation. These expenditures do not include any tenant improvement costs which are due in one lump-sum payment to the landlord upon substantial completion of construction.

As reported for January, the county's cost for landlord provided tenant improvements has increased by \$241,527 over the \$9,500,000 specified in the lease agreement. This amount was negotiated by the project team in response to scope of work changes claimed by the landlord. We are researching this issue and will report on our findings in a future oversight report. The lease amendment memorializing this cost adjustment is pending.

The project team continues to forecast a \$1,387,018 deficit at project completion unless a 2009 supplemental budget increase is approved. This amount is equal to the estimated 2009 appropriation anticipated by the project team and reported in the staff report to council as part of the 2008 appropriation request. The project team is working with the Office of Management and Budget (OMB) on the 2009 supplemental budget request, which they anticipate will be transmitted to council in May.

## **RISK**

As first reported for January, the project continues to face a significant, but resolvable, budget risk which has potential to impact the schedule. The current project appropriation, as anticipated, is not sufficient to pay for the project through completion even if all available contingency is used. The project team anticipates transmittal of a supplemental budget request to council in May.

We believe that submitting the supplemental appropriation request this late is a risky strategy. Because of the time ordinarily needed to review and schedule supplemental budget requests for council consideration, the project could potentially run out of money before council acts to appropriate additional funds. The cash flow estimates of anticipated expenditures shown on page 6 of the attached report indicate that the project will have expended all of the appropriated funds by late summer. This could put the relocation schedule at risk if the project needs to be delayed while awaiting additional appropriation.

## **RECOMMENDATION**

As stated in the January report, we continue to recommend that the County Executive submit the supplemental 2009 budget appropriation request to council as soon as possible. The submittal should be based on the best available information on the forecast project costs at completion.

We further recommend that documentation of the assumptions used in developing the estimate be provided to our office, so that we can evaluate and comment upon the adequacy of the project contingency available to support the remainder of the project.

Additional actions may be needed to mitigate the impacts of potential cash-flow constraints on project delivery. We will continue to monitor the cash-flow and schedule projections and the schedule for action on the appropriation request and make additional recommendations if needed. There are no additional recommendations at this time.

## **ACKNOWLEDGEMENTS**

We appreciate the collaborative efforts of FMD, OIRM, and OMB in providing for effective oversight of the Data Center Relocation project consistent with council intent. This report was prepared by a team from the King County Auditor's Office, including Ron Perry, Tina Rogers, and Tom Wood. No formal presentation of this monthly report has been scheduled for the Government Accountability and Oversight Committee. Should you have questions or comments on the report, please contact Tina Rogers, the Capital Projects Oversight Manager or Ron Perry, Deputy County Auditor.

## **DISTRIBUTION**

King County Government Accountability and Oversight Committee

cc: Metropolitan King County Councilmembers  
Kurt Triplett, Interim County Executive  
David Martinez, County Chief Information Officer, Office of Information Resource Management  
Jim Buck, County Administrative Officer Designee, Department of Executive Services (DES)  
Bob Cowan, Budget Office Director, King County Executive Office  
Kathy Brown, Director Facilities Management Division  
Saroja Reddy, Policy Staff Director, King County Council  
Mike Alvine, Senior Principal Legislative Analyst  
Mark Melroy, Senior Principal Legislative Analyst

## **ATTACHMENT**

FMD and OIRM Monthly Data Center Relocation Report for February 2009

# DATA CENTER RELOCATION

Facilities Management Division & Office of Information Resource Management  
February 2009 Monthly Report



## Project Summary

The Data Center Relocation Project will create a dedicated King County facility in the new Sabey Data Center located in Tukwila, Washington. The project will develop approximately 7,500 s.f. of data space and 580 s.f. of storage. The total budget is \$18.8 million which includes \$9.9 million for tenant improvements. The Data Center currently resides in leased space in the Seattle Municipal Tower. Through April 2010 the Facilities Management Division, Office of Information Management and the Sabey Company will collaborate on designing, constructing, equipping and relocating approximately 60% of King County government's IT equipment and Data systems to this new, state-of-the-art facility. The facility has additional capacity to house all King County's 'Other Elected' IT systems. In addition, the project will provide 2 diversely routed, secure fiber networks to serve as redundant connections between the Data Center and King County's wide area network 'cores' in downtown Seattle. This new fiber line system will accommodate 100% of today's IT needs with capacity for growth.



**King County**

### Progress Highlights

- 100% Construction Documents submitted for approval. Construction is proceeding.
- Mainframe move risk reduced through life-cycle replacement program, and coordination of relocation events.
- A 2009 supplemental budget request is planned for early 2<sup>nd</sup> quarter of 2009.
- Fiber infrastructure by City crews continues on schedule.
- There were no new project risk items identified in the month of February.

### Feature of the month **Tenant Improvement**

Data Center Tenant Improvements are based on 'Essential Performance Criteria' developed in collaboration with OIRM management, Operations staff and Engineering Design consultants. A preliminary design was priced by Sabey Data Center and became the Approved Plans included in a build-to suit lease.

#### **Design features**

Data Centers supporting critical public information systems are typically designed as 24/7, disaster survivable facilities. This operational program requirement normally dictates fully redundant power, communications and cooling systems, which often doubles the cost for this type of facility. The former KC Data Center did not provide redundant systems and was vulnerable to power and building failures. In addition to disaster survivability this facility provides the following leading edge features:

- ⊕ Provides true redundancy of all systems, including generator fuel.
- ⊕ Air economizer cooling will operate at significantly reduced utility costs.
- ⊕ New heat capture technology provides uniform cooling environment.
- ⊕ Flexible design accommodates Legacy data equipment and standardized cabinet mounted servers.
- ⊕ Diverse network pathways and entrances. (See January feature)
- ⊕ Landlord plus King County security layers.
- ⊕ Located away from downtown risk events.

#### **Alternative Delivery Process**

After considerable study, a build-to-suit lease with options to extend up to 30 years, was selected over the typical 4-6 year planning process and enormous capital investment. This alternative was shown to provide the greatest fiscal and technological flexibility, for a IT organization in transition

Information technology systems and equipment have short life-cycles relative to the lengthy capital planning & implementation process for public buildings. This incongruity creates a risk of an outdated facility unless the building systems as well as it's operation remain flexible, and responsive to IT change. Therefore, the build-to-suit lease was found to be cost beneficial for this type of Facility.

Project Milestone Chronology

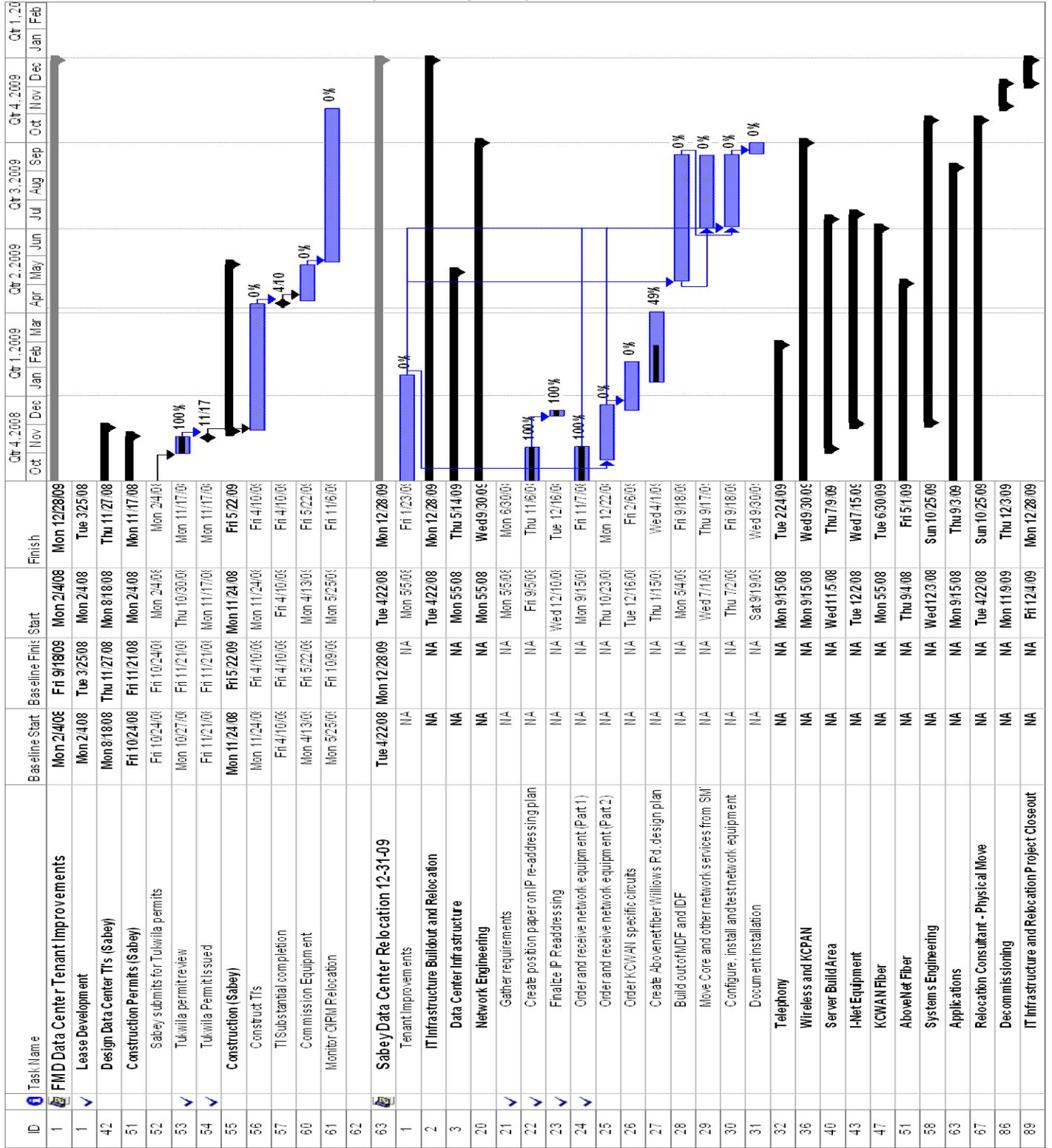
- July 2008 Data Center Legislation Approved
- August 2008 King County Lease with the Sabey Data Center LLC
- August 2008 Sazan Contract – CM and Technical Consultant
- October 2008 Monthly Reporting to Auditor's Office and County Council
- November 2008 MOU Between FMD, OIRM and the Budget Office
- November 2008 Contingency Review Process established
- November 2008 Responsibility Matrix established
- December 2008 Relocation Consultant Contract Finalized
- January 2009 Conditional design approval granted
- February 2009 100% Construction Documents submitted

Summary Schedule

% Complete	Activity	Baseline		Actual		Current Forecast	
		Start	Finish	Start	Finish	Start	Finish
100%	Lease Development	2/4/08	8/15/08	2/4/08	8/15/08		
100%	Design TI's	8/18/08	11/21/08	8/18/08	11/12/08		
100%	Permits	10/24/08	11/21/08	10/30/08	11/18/08		
75%	Construct TI's	11/24/08	4/10/09	11/19/08			3/31/09
0%	Commissioning	4/13/09	5/22/09			4/2/09	4/24/08
70%	Data Center Infrastructure	5/5/08	5/11/09	5/5/08			5/14/09
40%	Network Engineering	5/5/08	9/30/09	5/5/08			10/20/09
10%	Telephony	9/15/08	6/22/09	9/15/08			6/24/09
10%	Wireless & KCPAN	9/15/08	10/7/09	9/15/08			9/30/09
40%	Server Build Area	11/12/08	7/25/09	11/15/08			7/9/09
60%	I-Net Equipment	3/9/09	6/29/09			3/13/09	7/15/09
70%	KCWAN Fiber-Primary Line	5/5/08	6/15/09	5/5/08			6/30/09
40%	KCWAN Fiber-Secondary Line	5/5/08	4/6/10	5/5/08			4/6/10
80%	Temporary Fiber (AboveNet)	9/4/08	4/30/09	9/4/08			5/1/09
20%	Systems Engineering	12/3/08	9/23/09	12/3/08			10/25/09
20%	Applications	9/15/08	8/10/09	9/15/08			9/3/09
20%	Relocation Consultant Physical	4/22/08	10/12/09	4/22/08			10/25/09

**Schedule Detail:**

Tenant Improvement work is on track according to Sabey's proposed construction schedule. Contractor anticipates early completion of TI.



**Budget Detail**

Budget expenditures are tracking consistently with the schedule and planned expenditure levels.

Contingency

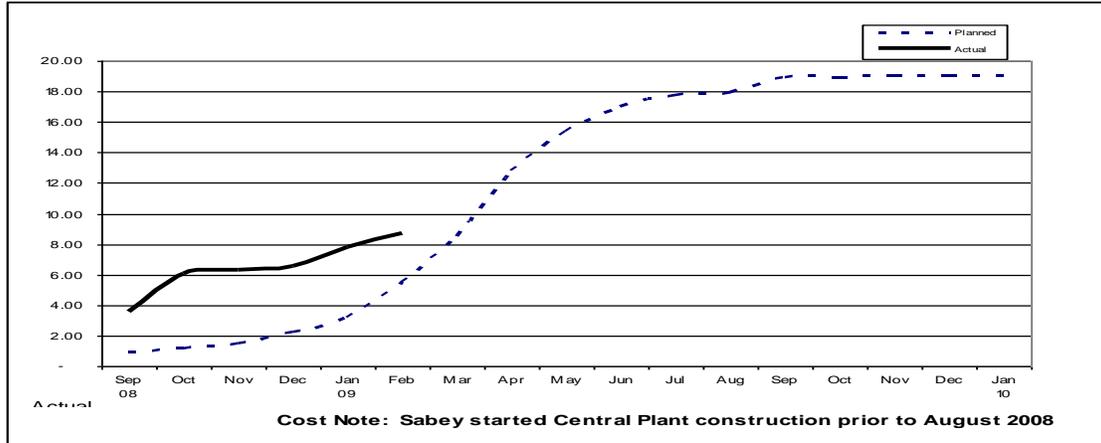
Contingency Budget	\$1,238,607
Proposed transfer to project 377219 in 09 Supplemental	\$ (74,949)
Subtotal (Estimate to complete)	\$1,163,658
Pending items	\$ (241,527)
Contingency available	\$ 922,031

Contingency has not been utilized for items anticipated to be included in the planned 2009 supplemental appropriation request. The contingency available in relation to remaining cost risk is being continuously monitored.

A supplemental appropriation request currently estimated at \$1,387,018 is planned for May 2009.

Cost Element	Description	Current Budget	Expenditures	Encumbrances	Current Balance	Estimate to Complete	Estimate at Completion	Projected Balance
<b>395657</b>	<b>FMD Data Center Relocation</b>							
001	Design	646,580	527,781	118,799	-	10,000	656,580	(10,000)
003	Construction	9,632,053	10,587	-	9,621,466	9,500,000	9,510,587	121,466
004	Equipment/Furnishings	268,984	268,983		1	-	268,983	1
005	Contingency				-	-	-	-
006	1% for Art				-	-	-	-
007	County Force Design				-	-	-	-
009	Project Management	208,596	265,738	-	(57,142)	34,800	300,538	(91,942)
	<b>Totals</b>	<b>\$ 10,756,213</b>	<b>\$ 1,073,089</b>	<b>\$ 118,799</b>	<b>\$ 9,564,325</b>	<b>\$ 9,544,800</b>	<b>\$ 10,736,688</b>	<b>\$ 19,525</b>
<b>377219</b>	<b>OIRM Data Center Relocation</b>							
101	Data center Infrastructure	730,936	-	-	730,936	565,447	565,447	165,489
102	Network Engineering	1,883,060	125,088	1,609,934	148,038	92,813	1,827,835	55,225
103	Telephony	28,276	-	2,489	25,786	26,721	29,210	(935)
104	Wireless & KCPAN	5,914	-	5,431	483	-	5,431	483
105	Server Build Area	10,890	-	-	10,890	-	-	10,890
106	I-Net Equipment	107,101	-	-	107,101	107,691	107,691	(590)
107	KCWAN Fiber	1,839,866	24,257	-	1,815,609	1,825,746	1,850,003	(10,137)
108	Abovenet Fiber	704,861	-	1,478,859	(773,998)	-	1,478,859	(773,998)
109	Systems Engineering	-	-	-	-	136,875	136,875	(136,875)
110	Relocation Consultant	1,000,000	-	1,366,404	(366,404)	-	1,366,404	(366,404)
111	OIRM Labor	580,390	109,435	2,762	468,193	892,833	1,005,030	(424,640)
	<b>Totals</b>	<b>\$ 6,891,293</b>	<b>\$ 258,780</b>	<b>\$ 4,465,879</b>	<b>\$ 2,166,634</b>	<b>\$ 3,648,126</b>	<b>\$ 8,372,785</b>	<b>\$ (1,481,492)</b>
<b>377220</b>	<b>OIRM Data Center Contingency</b>							
005	Contingency on 377219 budg	1,238,607	-	-	1,238,607	1,163,658	1,163,658	74,949
	<b>Grand Total All Projects</b>	<b>18,886,113</b>	<b>1,331,869</b>	<b>4,584,678</b>	<b>12,969,566</b>	<b>14,356,584</b>	<b>20,273,131</b>	<b>(1,387,018)</b>

### Cashflow: Actual Versus Planned Expenditure



- ⊕ Original legislation included a supplemental appropriation in 2009.
- ⊕ Expenditures reported from IBIS/ARMS as of 30<sup>th</sup> each month
- ⊕ Cashflow will be refined as new encumbrance data from consultants is received. .

### Planned Contract Listing

Description of each contract	Estimated Amount	Estimated Timeframe	Possible Vendor List
The contract would focus on consulting services for planning, scheduling and executing the relocation of the King County Enterprise Data Center. A sole source waiver has been received	\$1.5M	12/08 - 12/09	HP
Blanking panels and shelving for cabinets, power cords, patch cables, horizontal power, MDF caging	\$33,000	1/09-6/09	Graybar
Digital KVM and associated equipment, console controllers	\$324,000	1/09-6/09	Net IG (Carlyle)
Network switches	\$1.7M	3/09-8/09	Cisco
I-Net switch	\$86,000	3/09-6/09	Verizon (Marconi)
Other move related expense (e.g., surplus)	\$20,000	9/09-10/09	Emerald City Movers
Mainframe processor	\$240,000	7/09 – 10/09	IBM
Telephony, voice circuits	16,500	8/09 - 12/09	Qwest
Telephone testing	\$10,500	8/09 – 12/09	Cochran electric
Decommissioning of SMT	TBD	9/09-12/09	DoIT (City of Seattle usually requests their own inside staff)
Decommissioning Fortress Co-location (Auxiliary Server Room I and II)	TBD	9/09-10/09	Fortress
Closeout of lease at Fortress Co-location	TBD	9/09	Fortress with assistance of FMD
Seed equipment for distributed moves requiring minimal downtime	\$170,400	5/09 – 10/09	HP, Dell
Construction Management and Design Oversight.	\$197,000	09/08 – 07/09	Sazan Group Inc.
'Tenant Contribution' to lease Tenant Improvement	\$9,500,000	5/09 – 6/09	Sabey Data Center