

# KING COUNTY AUDITOR'S OFFICE

#### CAPITAL PROJECTS OVERSIGHT PROGRAM

## DATA CENTER RELOCATION PROJECT OVERSIGHT REPORT FOR MAY 2009

**CURRENT RISK RATING** A supplemental appropriation is needed to complete this project. Potential cash flow problems may occur if supplemental funding is not available by fall. This could lead to schedule delays.



#### **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. The new facility will house approximately 50% of the county's data network systems, with room for expansion. Project delivery 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.



The baseline scope includes: construction of 7,500 square feet (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 wide area network core in downtown Seattle; installation of new or relocated IT network equipment; and data center staff relocation. The office space was removed from scope prior to construction to save \$1,322,318 in rent over the life of the lease.

# **▼ SCHEDULE\*** (\*See "Issues and Risk" section below)

<u>Milestone</u>	Approved Schedule	Current Forecast	<u>Comment</u>
Design	11/21/08	Complete	Completed on schedule
Construction	04/10/09	03/31/09	Completed early
Phased IT Equipment Installation	10/25/09	10/25/09	On schedule
Decommissioning SMT	12/15/09	12/15//09	On schedule
Phased Fiber Line Installation	04/06/10	03/26/10	On schedule

# **▽** BUDGET

Project	Budget Appropriations <sup>1</sup>	Expenditures thru 5/31/09 <sup>2</sup>	% of Budget Expended	Forecast Cost at Completion <sup>3</sup>	Forecast Balance at Completion
FMD	10,756,213	10,642,639	99%	10,756,213	0
OIRM	6,917,613	597,623	9%	8,174,417	(1,256,804)
Contingency	1,238,607	0	0%	1,368,820	(130,213)
Total	\$18,912,433	\$11,240,262	59%	\$20,299,450	(\$1,387,017)

Notes: 1 - Thru Ordinance 16564, which was approved 06/22/09. 2 - Does not include encumbrances. 3 - Includes \$ 26,320 for CPO oversight costs per Ordinance 16564.

#### **▽** Issues and Risks

Although additional funding will be needed as soon as fall to complete this project, the supplemental appropriation request was not submitted until July 15, 2009. This creates a risk that the project will run out of money before council acts to appropriate additional funds. This 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 15652 in 2006. 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 (<a href="www.kingcounty.gov/operations/auditor/reports">www.kingcounty.gov/operations/auditor/reports</a>) 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 eighth monthly oversight report prepared for and submitted to council by the Capital Projects Oversight Program (CPO) 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 and OIRM and representatives from the Office of Management and Budget (OMB), who are assisting with the budget. Information has also been obtained through site visits and direct contact with Data Center staff. FMD and OIRM produce a separate monthly progress report and their update for May is attached. We provided a briefing about this project to the Government Accountability and Oversight Committee on July 8, 2009. We also plan on briefing the Budget and Fiscal Management Committee prior to consideration of the supplemental appropriation request submitted to council on July 15, 2009.

## **PROJECT STATUS UPDATE**

## Scope

No new scope changes were considered in May. As mentioned 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. This did not reduce the county's tenant improvement costs. 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 executive will notify council of the intent to modify the lease by separate letter. The lease amendment will also include leasing a temporary fiber connection through the landlord for twelve months. The original budget anticipated leasing this temporary line for nine months to provide redundant access to the county's wide area network (KCWAN) core in downtown Seattle while the installation of the county's permanent secondary KCWAN fiber line is being completed. However, only a twelve month lease was available. The additional three months required will cost \$ 536,089 and is being charged to the project contingency budget. The landlord has contracted with AboveNet for this connection.

#### **Schedule**

There were no schedule changes in May. Commissioning of the Data Center was completed on May 15, 2009. OIRM's relocation consultant has completed the high-level move strategy for the project. The detailed relocation plan for the servers was completed early on June 26, 2009. The following six relocation dates have been identified based on agency input: July 18th; August 8th; August 22nd; September 19th; October 3rd; and, October 24th.

The relocation consultant's work provides independent verification of the baseline schedule. We are in the process of validating its relocation plan and will report on the results of our review when the June 2009 oversight report is published.

Based on the information available at this time, we do not have any major schedule concerns, unless cash-flow constraints discussed in the Issues and Risks section below cause the project team to delay activities on the critical path. An ongoing focus of oversight will be to understand and report on the cost impacts of any schedule delays which may develop and to recommend mitigation strategies, if needed, to the project team for consideration.

## **Budget**

Enactment of a previously planned \$1,387,017 supplemental appropriation request is needed to fund the Data Center through completion. Although cash flow issues may develop as soon as fall 2009 without additional funding, the supplemental appropriation request was not submitted to council until July 15, 2009. This creates a risk that the project may run out of money before council acts, which could lead to schedule delays. The need for a supplemental appropriation was anticipated in the executive's May 22, 2008 project proposal to council, which divided the data center relocation into "Phase I" and "Phase II" budget requests. Ordinance 2008-0309 funding the executive's Phase I budget request was passed on July 21, 2008 (Enactment No. 16214).

As detailed below, \$18,912,433 is currently appropriated for the Data Center, divided across three interrelated project numbers. The figures shown reflect the budget actions included in Ordinance 16564, which was passed by council on June 22, 2009 and enacted by the executive on June 30, 2009. Ordinance 16564 is not reflected in the budget data provided by FMD and OIRM in their May 2009 project status report:

Project No.	Project Name	Project Scope	Net Appropriations To Date
395657	FMD Data Center Relocation	Tenant Improvements	\$10,756,213
377219	OIRM Data Center Relocation	Computer Networking Equipment Purchase and Relocation; Data Center Staff Relocation	\$ 6,917,613 <sup>1</sup>
377220	OIRM Data Center Contingency	Contingency Budget	\$ 1,238,607
	\$18,912,433		

Note: 1 - This includes \$ 26,320 added by Ordinance 16564 to fund CPO's independent oversight costs for 2009. Although this was never reflected in the project budget, Ordinance 16564 also disappropriated \$ 12,919,007 erroneously assigned to Project 377219 and appropriated it to ABT Contingency Project 377222 where it was meant to go.

Through May, the project expenditures total \$11,240,262, or approximately 59% of the current appropriation total. These expenditures include a \$ 9,500,000 lump-sum payment to the landlord, which was due upon substantial completion of construction per the lease agreement. In addition to this preagreed lump-sum amount, the project oversight panels (Sponsors, Contingency Review & Project Review Board) approved the payment of \$ 341,527 in additional tenant improvement charges to the landlord. This includes \$ 100,000 in security system improvements (part of the original budget request) and \$ 241,527 in electrical and cabling systems work. The security system improvements are being charged to the OIRM project budget. The electrical and cabling systems revisions represent a 2.54% increase to the tenant improvement costs originally agreed to with the landlord and are being charged to the contingency budget. Because these revisions were made prior to construction, additional costs were kept to a minimum. Several "lessons learned" from these cost increases were documented in our April 2009 report.

## **Issues and Risks**

As first reported in the January 2009 oversight report, the "Phase II" supplemental appropriation outlined in the executive's original 2008 budget request will be needed. Without this supplemental, the current project appropriation will not be sufficient to pay for the Data Center through completion, even if all

available contingency is used. We have been formally recommending that the necessary supplemental appropriation request be submitted to council as soon as possible since April 22, 2009.

The supplemental appropriation request was submitted by the executive on July 15, 2009. 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. This could put the relocation schedule at risk if the project needs to be delayed while awaiting additional funds.

Because the executive chose to withhold the details behind its current cost forecast for the project until after the supplemental appropriation request was submitted, CPO has not yet had an opportunity to validate the cash-flow assumptions behind it. We will be reviewing these assumptions in detail and will report any concerns we have to council. We will also continue to monitor the project's expenditures and encumbrances on a monthly basis to continuously assess the project team's assumptions.

#### RECOMMENDATIONS

As first stated in the February 2009 report, we continue to recommend that documentation of the assumptions used in developing the supplemental appropriation request be provided to CPO for independent assessment. We are in the process of obtaining this information.

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. Should you have questions or comments on the report, please contact Tom Wood, the Capital Projects Oversight Analyst or Tina Rogers, the Capital Projects Oversight Program Manager.

## **DISTRIBUTION**

King County Government Accountability and Oversight Committee

cc: Metropolitan King County Councilmembers

Kurt Triplett, King 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, Director, Office of Management and Budget

Kathy Brown, Director, Facilities Management Division

Saroja Reddy, Policy Staff Director, King County Council

Mike Alvine, Senior Principal Legislative Analyst, King County Council

Mark Melroy, Senior Principal Legislative Analyst, King County Council

## **ATTACHMENT**

Data Center Relocation – May 2009 Report\* (\*Jointly issued by FMD and OIRM)

# DATA CENTER RELOCATION

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



Hot aisle & High voltage distribution panel - King County Data Center

#### **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 Agencies IT systems. In addition, the project will provide two 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.

#### **Progress Highlights**

- Building commissioning completed Tukwila issued Final Certificate of Occupancy
- · All network installations proceeding as planned.

## 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
 March 2009 Temporary Certificate of Occupancy issued
 April 2009 FMD issued substantial completion notice
 April 2009 Temporary Fiber completed (Abovenet)
 April 2009 High level relocation plan completed

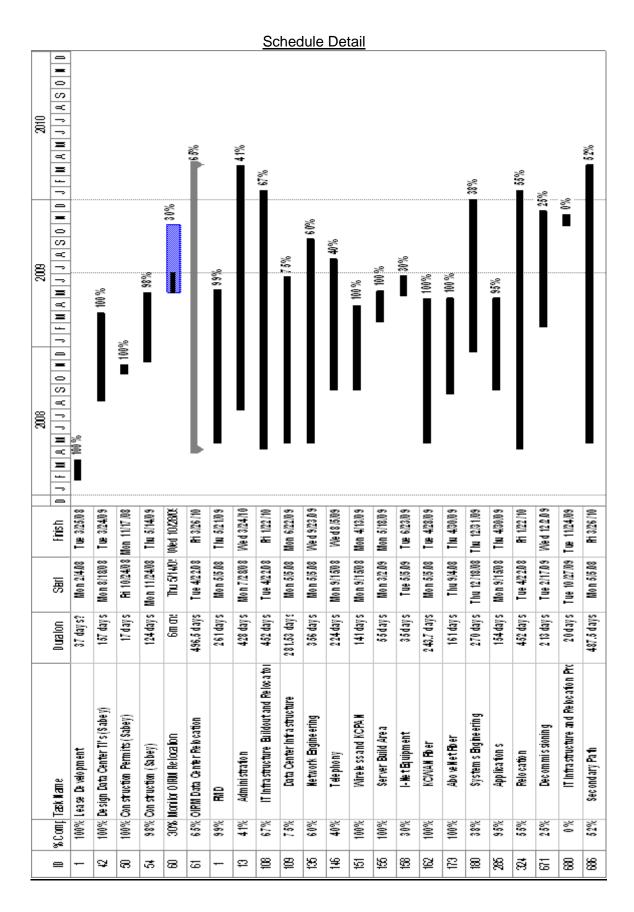
May 2009 Commissioning of building systems completed successfully.

May 2009 Primary Fiber link completed.

## Summary Schedule

Schedule I	Jpdate:	5/30/09					
%	Activity	Baseline		Actual		Current Forecast	
Complete		Start	Finish	Start	Finish	Start	Finish
100%	Lease Development	2/4/08	8/15/08	2/4/08	8/15/08		
100%	Design Tl'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		
100%	Construct TI's	11/24/08	4/10/09	11/19/08	4/21/09		
98%	Commissioning	4/13/09	5/22/09	4/2/09	5/15/09		
75%	Data Center Infrastructure	5/5/08	5/11/09	5/5/08			6/22/09
60%	Network Engineering	5/5/08	9/30/09	5/5/08			9/23/09
40%	Telephony	9/15/08	6/22/09	9/15/08			8/5/09
100%	Wireless & KCPAN	9/15/08	10/7/09	9/15/08	4/13/09		
100%	Server Build Area	11/12/08	7/25/09	11/15/08	5/18/09		
30%	I-Net Equipment	3/9/09	6/29/09	5/5/09			6/23/09
100%	KCWAN Fiber-Primary Line	5/5/08	6/15/09	5/5/08	4/28/09		
55%	KCWAN Fiber-Secondary Line	5/5/08	4/6/10	5/5/08			3/26/10
100%	Temporary Fiber (AboveNet)	9/4/08	4/30/09	9/4/08	4/30/09		
35%	Systems Engineering	12/3/08	9/23/09	12/3/08			12/30/09
100%	Applications	9/15/08	8/10/09	9/15/08	4/30/09		
55%	Relocation Consultant Physical	4/22/08	10/12/09	4/22/08			10/25/09

Note: Items in bold indicate a change from the April 2009 Report



#### **Budget Detail**

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

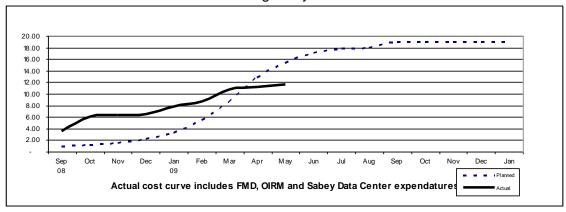
#### Contingency

Contingency Budget	\$1,238,607
Approved items	\$ (241,527)
Pending items	\$ (536,089)
Contingency available	\$ 460,991

- 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.
- 2. A supplemental appropriation request currently estimated at \$1,387,018 is planned for June 2009.
- 3. 2008 fourteenth month carryover budget was revised to align with 395657 project needs.

Cost Element	Description	Current Budget	Expenditures	Encumbrances	Current Balance	Estimate to Complete	Estimate at Completion	Projected Balance
Element	FMD Data Center Relocation	Buugei			Dalatice	Complete	Completion	Dalalice
	I MD Data Center Relocation							
395657								
001	Design	646,580	564,142	82,428	10	10	646,580	-
003	Construction	9,575,529	9,510,587	-	64,942	-	9,510,587	64,942
004	Equipment/Furnishings	268,984	268,984		-	-	268,984	-
005	Contingency				-	-	-	-
006	1% for Art				-	-	-	-
007	County Force Design				-	-	-	-
009	Project Management	265,120	298,926	-	(33,806)	31,136	330,062	(64,942)
	Totals	\$ 10,756,213	\$ 10,642,639	\$ 82,428	\$ 31,146	\$ 31,146	\$ 10,756,213	\$ -
377219	OIRM Data Center Relocation							
101	Data center Infrastructure	730,936	0	489,674	241,262	241,262	730,936	(1)
102	Network Engineering	1,883,060	125.394	1,612,576	145.090	145,090	1,883,060	- '
103	Telephony	28,276	-	2,489	25,787	34,178	36,667	(8,391)
104	Wireless & KCPAN	5,914	-	5,431	483	483	5,914	-
105	Server Build Area	10,890	-	-	10,890	0	-	10,890
106	I-Net Equipment	107,101	-	-	107,101	107,101	107,101	-
107	KCWAN Fiber	1,839,866	33.611		1,806,255	1,806,255	1,839,866	-
108	Abovenet Fiber	704,861	-	1,063,619	(358,758)	-	1,063,619	(358.758)
109	Systems Engineering	-	-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-	109,500	109.500	(109,500)
110	Relocation Consultant	1,000,000	118,500	1,247,904	(366,404)	-	1,366,404	(366,404)
111	OIRM Labor	580,390	320,188	60.167	200,035	624.675	1,005,030	(424,640)
112	Misc.	,	,	, .	,	, , -	, ,	, , , , , ,
		\$ 6,891,294	\$ 597,693	\$ 4,481,860	\$ 1,811,741	\$ 3,068,544	\$ 8,148,097	\$ (1,256,804)
377220	OIRM Data Center Contingency							
	Tenant Impr. Design Revisions			241,527				
108	Above Net Fiber			538,091				
	/ NOTO HOLL IDOI	\$ 1,238,607	\$ -	\$ 779,618	\$ 458,989	\$ 589,202	1,368,820	(130,213)
		40.000	11.010.533					(4 00= 0:-)
	Grand Total All Projects	18,886,114	11,240,332	5,343,906	2,301,876	3,688,892	20,273,130	(1,387,017)

# Cashflow: Actual Versus Planned Expenditure Through May 2009



- Original legislation included a supplemental appropriation in 2009. ARMS Expenditures reported as of the 30<sup>th</sup> of reporting month IBIS Expenditures reported as of the 20<sup>th</sup> of month following reporting month
- Planned Cashflow distributed 9.5M lumpsum TI payment over Design & Constn period, To indicate earned value.
- May expenditures lagging due to invoices not 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 –