

In House Data Center Project Charter



Multnomah County
Facilities and Property Management and
Office of Information Technology
August 26, 2010

Project Name:

Multnomah County In House Data Center – (Proposed location: Basement of East County Courts Facility)

Project Description:

Multnomah County will build an approximately 1,000 square foot data center to house critical telecommunications and computing infrastructure and related disaster recovery capabilities. Additionally, there will approximately 1,000 sq. ft. for staff (four cubicles), a small break area, and one staff restroom. The data center and related facilities will be located in the basement of the new ECC facility.

Stakeholders or Sponsors:

Stakeholders: ECC Project Oversight Committee
MC Departments
Office of Information Technology (OIT)

Sponsor: Office of Information Technology

Departments Affected: All Multnomah County Departments
Facilities and Property Mangement, DCM

Goals and Objectives:

Why is this project being done: Multnomah County must replace its existing Data Center located in the basement of the Penumbra Kelly Building at 4747 E Burnside because the services provided are currently at risk due to the age, design, and capacity of the facility and the underlying equipment. The facility houses critical telecommunications, computing, and data storage infrastructure that supports the County's networks and business applications that are the backbone of the IT services provided to employees and citizens.

What will the project achieve: Provide an efficient, dense "green" data center that is adequate to house approximately 50% of county's business applications and 10% of new disaster recovery capability.

Data Center Design: Where appropriate, and as designed in the overall ECC facility, the date center will use appropriate data center "green" technologies. The

design will be consistent with the sustainability goals of Multnomah County whenever possible and cost effective.

Schedule:

The data center will be an integrated facility in the basement of the ECC facility. Thus, the schedule is consistent and integrated with the schedule for the construction of the ECC facility.

Goals of Involved Parties:

ECC Oversight Committee / MC Departments/OIT follows:

- ECC Oversight Committee
Construct a new county-owned data center per the approval of the business case in November, 2009. House the data center and related staff space in the basement of the new ECC facility to leverage and maximize the space and resources already deployed on this ECC project.
- MC Departments:
Secure, efficient data center facility to house the County's critical business applications and the associated telecommunications and computing equipment, as well as, the corresponding disaster recovery capabilities for prioritized critical business applications and equipment.
- OIT:
All of the above.

Key County Personnel Resources:

Planning: Sherry Swackhamer, Gary Wohlers, Dan Gorton, PlanNet (consultant); Steven Cruzen; Peggidy Coffman Yates, John Lindenthal

Project Manager: Steven Cruzen, SOJ
Peggidy Coffman Yates, MC

Property Manager: TBD

Deliverables:

A fully functional data center and staff space located in the basement of the ECC facility including power, HVAC, zoning partitions, server racks, redundant UPS devices, and redundant connectivity, per the final design documents and related modifications, if appropriate.

Project Schedule:

Please see Appendix D in FAC-1. Project schedule will be integrated with the ECC construction schedule.

Budget (in millions):

Hard Costs: Building and Site Development:	\$	1.390 M
Soft Costs: Professional Fees, Regulatory Fees, and Misc.*:		.250
Project Contingency**:		.300
Total:	\$	1.940 M

* 2% for Art and 1-1/2% solar.

**Estimating contingency @ 12% and construction contingency @ 8% of Building and Site Development costs; soft cost contingency @ 5% of soft costs

These cost estimates are conservative; they reflect a footprint larger than required. They are based on 2,400 square feet. The Data Center and the adjacent staff work areas, storage and UPS will be closer to a total of 2,000 square feet. Design and cost revisions are in process.

Funding Plan:

Funding for the project is provided by a full faith and credit bond approved by the Board on December 3, 2009 (by Resolution 09-148) based on the business case presented on November 5, 2009.

Benefits:

The new data center will provide a secure, efficient facility to house the County's critical telecommunications and computing equipment and related staff space. In addition, disaster recovery capabilities not currently available will be added. The new environment will maximize the use of the new ECC facility and position the county to take advantage of "green" technologies that reduce long-term operational costs through energy efficiency.

Constraints:

The budget for the total data center project is \$3.5 M. The data center build portion of the project is currently estimated at \$1.950 M. The co-location portion of the project may be impacted, should the data center build project exceed the current estimate.

Risks and Concerns:

The data center project (and staff space) in the basement of the ECC facility are incorporated into the life of a current construction project that does not yet have long-term approval. The final decision for the ECC facility will be made in October 2010. Should the ECC project not be approved, OIT has a contingency plan to build the data center in an existing county facility Multnomah County East. In addition, since the data center is part of a new construction project, there could be cost overruns for the overall facility that add costs to the data center project and are not in the control of OIT. Locating in the basement of the facility may present ground water issues and may limit the ability to use "green" cooling technologies.

The advantages of building the data center in the ECC facility outweigh the risks. The major risk is cost and schedule overruns of new construction. Since there is already a strong oversight committee in place and a conservative approach to managing the design, estimating and construction, we believe this risk can be

successfully managed by integrating IT into these structures. We believe the county will get the most from a sustainability, design and operating efficiency perspective by locating the data center in the ECC facility.

Location of Project Site:

East County Courts Facility
185th and Stark
Gresham, OR

Map of Project Location:

Please see Appendix B in FAC-1.

Scope of Work:

Multnomah County will build an approximately 1,000 square foot data center to house critical telecommunications, computing, and storage infrastructure and related disaster recovery capabilities. Additionally, there will approximately 1,000 sq. ft. for staff (four cubicles), a small break area, and one staff restroom. The data center and related space is proposed to be located in the basement of the new ECC facility and follow the specific design and construction schedule defined for the overall ECC project.

Project History:

History of Multnomah County Data Center Project

On November 5, 2010 the Office of Information Technology (IT) presented a business case to the Board of County Commissioners for an improved Data Center and to add disaster recovery capability.

On December 3, 2009 the Board of County Commissioners approved (by Resolution 09-148) \$3 million in financing for this capital project and issued a full faith and credit bond. Since the issuance of the bond, the IT has initiated planning for the Data Center and procured the services of an experienced Data Center consulting firm Plan Net.

The business case recommended a two-site Data Center model with capacity and services distributed between two locations: a small (~1,000 sq. ft.) County-owned Data Center, and a leased facility. A dozen existing County-owned facilities were considered for the portion of the Data Center that will be in-house.

In June, 2010, the ECC Project Team, FPM, and IT began discussions on the potential of locating the County-owned Data Center in the new ECC building. Data Center requirements, preliminary design and cost estimates were developed by the ECC Project Team, and compared with the Multnomah County East building as a representative of an existing County-owned facility.

This Charter **pertains only to the County-owned Data Center.** It outlines the plan to locate the County-owned Data Center in the basement of the proposed East County Courts (ECC) facility. This strategy leverages two Board-approved yet previously separate projects. The idea to incorporate the Data Center into the ECC project occurred somewhat late in the overall ECC project design process. In response, additional resources are being used to advance the design so it can be completed on schedule with the ECC project. Critical information for the Data Center will need to be provided in a timely manner to stay on schedule.