Enterprise Technology, Office of

Projects Summary

($ in Thousands)

Project Title	2010 Agency Priority Ranking	Agency Project Request for State Funds ($ by Session)				Governor's Recommendations	Governor's Planning Estimate	
		2010	2012	2014	Total	2010	2012	2014
Data Center	1	$131,006	$0	$0	$131,006	$0	$0	$0
Total Project Requests		$131,006	$0	$0	$131,006	$0	$0	$0

At A Glance

To carry out its mission, OET:

- Provides technology and telecommunications services to state agencies and political subdivisions
- Provides statewide enterprise governance, planning, sourcing and service development for new consolidated, shared, and utility services, including shared data centers
- Provides oversight of agency IT planning and investment
- Sets state standards for purchasing of IT hardware, software, and professional/technical service contracts
- Manages enterprise security policy and governance, and manages shared security prevention and intervention tools.

Agency Purpose

The mission of the Office of Enterprise Technology (OET) is to provide leadership and services to improve government through the effective use of information technology (IT). This mission is carried out by developing statewide enterprise IT strategies and standards, overseeing state technology investments, and creating a secure and efficient information management environment that includes the central provision of core IT services (network, mainframe computing, etc.) to the executive branch and other government entities. OET has broad statutory authority to set state information technology (IT) direction and policy, to provide services, and to manage and direct state IT resources. This mission is further reinforced by M.S. 16E that directs the development of:

- an information technology governance structure at a statewide enterprise level;
- an enterprise information technology management organization (OET) capable of leading a statewide transformation to increased shared services; and
- IT resource allocation processes and standards.

Core Functions

OET's 2009 Strategic Plan outlines several strategies to further the mission of the organization:

- transform OET to be a provider of choice
- rebuild OET's customer-facing processes
- improve OET's financial systems
- advance a limited number of new high-priority services
- manage effective internal and external IT governance

These strategies are pursued through several core functions within the following five program areas:

1. Technology Management – delivering utility and shared information and telecommunications technology systems and services through OET's internal service fund to enable faster, better, more efficient services to Minnesota's public sector. This program area focuses on aggregation of demand, integration of multi-platform systems to minimize redundancy of procurement and staffing requirements for economies of scale, and scalability of shared and utility resources (storage, processing, and network capacity) to meet the varying peak demands for resources.

2. Customer Service Management – delivering value add services by aligning business needs with appropriate information technology solutions. By conducting comprehensive market research both for feature/functionalities as well as price, services are provided and sourced in the most competitive and efficient manner. This program area includes the business relationship management function, service portfolio management, and single-point-of-contact service desk. It is responsible for managing OET's IT services via a well developed services design lifecycle and for the overall customer relationship.

3. Financial Management – managing OET's funds and financial processes and collaboratively working with agency partners to find funding models and mechanisms for enterprise-wide investments and system modernizations, utility services, OET and agency-centered shared services, and emerging services. The program also provides an array of administrative functions for OET internal operational needs.

4. Security Management – developing a more robust, comprehensive, and consistent enterprise-wide security environment and structure through the setting of enterprise policy and the development of security prevention and intervention tools. The program area includes security architecture, enterprise security planning, vulnerability assessment, administration, security monitoring, interception, incident response, remediation, compliance, and business continuation of the state's critical, time-sensitive IT infrastructure, systems, and services aimed at having minimal interruption or essential change in the event of a disaster. The high-priority need by OET and agencies for these heightened security services has been buttressed by the recent risk assessment done by the Office of the Legislative Auditor.

5. Technology Development – setting enterprise commodity and architecture standards, managing enterprise project and investment oversight, and developing and managing key shared applications. This program area manages the state IT acquisition process for hardware, software, and professional/technical services that builds on the architecture and state standard and leverages the buying power that goes with aggregation and focused procurement. The program area provides project management services and IT architecture standards, and is working to phase out the current North Star web portal and engaging agency partners in seeking a cost-effective, standard enterprise infrastructure and Minnesota.gov web portal interface.

Operations

Current OET technical services customers include citizens of Minnesota, state agencies and constitutional offices, courts, public school systems and higher education institutions, and local political subdivisions of the state. OET works with customers by charging internal service rates, developing interagency agreements for collaborative partnerships or shared utility / common functions, sharing loaned agency staff, and leveraging resources for enterprise IT savings.

In the transformation of the OET organization, the department has refocused to place a stronger emphasis on cost, accountability and value-adding services to better meet ongoing customer needs and to become more citizen-centric. OET is also in the process of developing service metrics and service level agreements. OET has redefined or resized processes and organizations and has retired services that are not competitive or for which no real market has emerged. A number of factors were considered in the retirement process including customer impact, availability of alternative solutions, and the historical financial performance of the services.

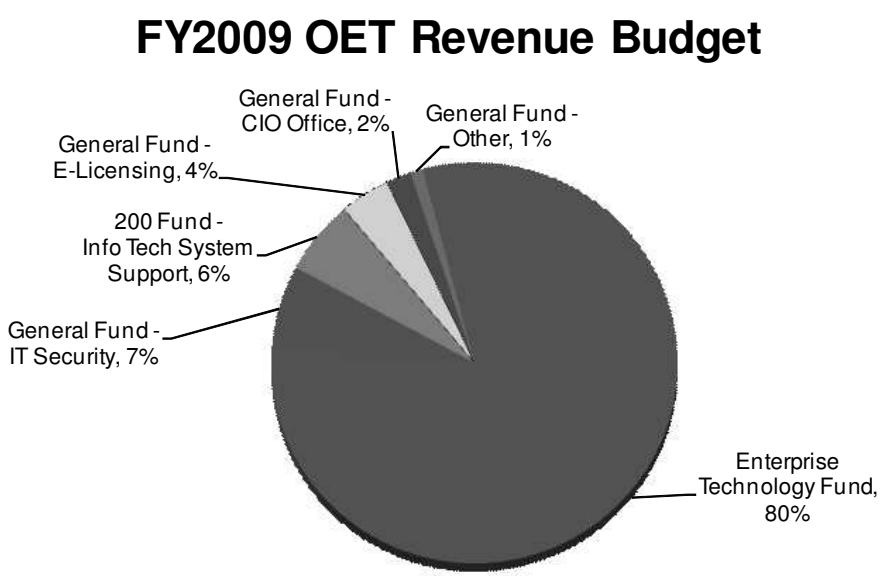
Budget

OET's services are funded primarily by the enterprise technology fund through cost-recovery/charge back rates. OET also receives a general fund appropriation for agency and enterprise IT management and oversight, and for management of a comprehensive and consistent statewide security structure. The information/telecommunication technology systems and services account captures savings for reinvestment on behalf of the enterprise. Through an interagency agreement, OET receives a portion of vendor administrative fees charged by the Department of Administration for IT purchases. Additionally, federal funds have been received during the past several years through interagency agreements with the Department of Public Safety (DPS), Emergency Management and Preparedness Division, for homeland security leasehold improvements and IT cyber-security assessments and initiatives.

The cost recovery rate structure for the enterprise technology fund has been realigned to be more transparent and equitable to agencies, reflecting actual costs of services provided. Agencies are impacted differently based on their needs and usage.

OET continues to explore additional funding mechanisms for the programs and functions identified above that are legislatively mandated or critical to fully realizing the transformation of OET. This includes long-term savings that are realized through aggregation and consolidation of services and economies of scale.

The following pie chart represents the FY 2009 revenue budget:



OET's employs 386.3 FTE. Of this total, 88% is funded by the enterprise technology fund and 22% is funded by the general fund. As a result of data center and other IT service consolidations, FTE count and funding for OET may increase, typically with a corresponding decrease in the other agencies.

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At A Glance: Agency Long-Range Strategic Goals

The Office of Enterprise Technology (OET) has just completed a two-year plan that outlines the goals and strategies for the executive branch relating to information technology. **Minnesota iGov** is designed to meet the following objectives for the enterprise:

- **Stronger infrastructure.** Provide a more stable, secure and function-rich IT infrastructure for the state.
- **Partnerships for better business results.** Align technologies with agency business needs to achieve better results.
- **Integrated technologies and services at best cost and value.** Plan and prioritize IT investments for maximum leveraged impact and highest collective value; determine the most cost-effective means of providing the state with high quality, responsive and reliable IT services on a service-by-service basis.
- **Accountability.** Provide better accountability for IT management through improved project and portfolio management practices.

Minnesota iGov outlines seven priority initiatives that will be managed by OET under the leadership of its cross-agency governance process and the direction of the State Chief Information Officer. The initiatives include the following:

I. Foundational Building Blocks: These initiatives address the systematic development of standards and policies for designing, procuring and managing IT, and address the risks to the state's information assets.

1. Standards and Enterprise Asset Procurement
2. Architecture
3. Project and Portfolio Management
4. Information Security Tools and Services

II. Efficient IT Service Delivery: These initiatives focus on IT services and tools.

5. Unified Communication and Collaboration
6. Enterprise Electronic Licensing ("e-Licensing")
7. Data Center Facilities and Operations

Trends, Policies and Other Issues Affecting the Demand for Services, Facilities, or Capital Programs

The Minnesota iGov plan attempts to lay the groundwork for a more stable, secure and function-rich IT infrastructure for the state; to better align technologies with agency business needs; and to integrate technologies and services at best cost and value for the state. The goals of the plan are not new. They have been well articulated in the State of Minnesota's ten-year Enterprise IT Master Plan, and reinforce many efforts already underway. However, current fiscal challenges and their implications for the future make a clearly defined, aggressive program of improvements to the state's IT infrastructure more imperative than ever.

When fully implemented, the Minnesota iGov plan will result in a variety of benefits to the state:

1. State agencies can focus on their core business objectives.
2. State IT capabilities will be faster and better able to support the services citizens need.
3. The state will avoid costs, improve government operations, and ultimately provide citizens with better services.
4. Some citizen services will be directly enhanced, while many others will see "back office" benefits.
5. The state will improve its ability to develop long-term strategies and prioritize investments that best serve the enterprise as a whole.

In particular, one of the Minnesota iGov priority initiatives is the development of a data center strategy that will meet the state's need to store and protect vital citizen and government data.

Provide a Self-Assessment of the Condition, Suitability, and Functionality of Present Facilities, Capital Projects, or Assets

The primary facilities, capital projects, and assets that relate to OET are data centers. Data center facilities house equipment for data processing, communication, and storage. They are essential for government operations

and citizen services such as 911 emergency response, tax collections, and criminal records.

As explained in the project narrative, the condition of the state's data centers is on the verge of compromise and poses a serious and growing risk to government and citizen data, services, and programs. The state's data centers are at Tier I – the lowest ranking possible on the well-regarded scale from the Uptime Institute. The state's data center facilities need to be rated at least at the industry's Tier III level to adequately protect itself and serve the public.

Multiple problems contribute to the vulnerabilities of the state's data centers. They are built to 40 year-old guidelines and most facilities are retrofitted office space lacking key mechanical and electrical capabilities. Some critical agency infrastructure is essentially run out of "home and garage" type power and cooling. In one case at the time of the assessment, there were 64 servers plugged into a single wall outlet without a backup power supply. Lastly, about 80% of the locations have no or inadequate disaster recovery capability.

Under current conditions, it is estimated that within the next three years the state will experience three to five data center failures, impacting major state programs that will lose or interrupt access to vital stored data. There were multiple nearly complete failures in the last year, impacting tens of thousands of Minnesotans and costing the state hundreds of thousands of dollars.

For more information, please see the Project Narrative.

Agency Process Used to Arrive at These Capital Requests

Four important processes helped give rise to this request. First, data center consolidation was recommended in 2007 by a number of state agencies via their chief information officers (CIOs) as an enterprise consolidation opportunity. A steering team comprised of agency CIOs and OET management guided the creation of a business case and subsequent planning.

Second, in 2008 an independent third-party prepared a detailed assessment of state executive branch data centers and facilities. The assessment defines the security and business risks of the existing data center environment and provides recommendations for new data center space.

Third, during the 2009 legislative session the Governor recommended a proposal for leasing new data center space. The legislature demonstrated its support with an appropriation of $250,000 to continue planning for data center consolidation, including a predesign study for a new facility the state would build and own. The Governor signed the appropriation into law. OET has been working with the Department of Administration to implement the planning activities.

Finally, during the spring and summer of 2009, OET began discussions with local government partners in an effort to explore opportunities for collaboration. An independent third-party helped in gathering and analyzing the technical needs and data from all parties involved to form an appropriate partnership opportunity.

Major Capital Projects Authorized in 2008 and 2009

None.

2010 STATE APPROPRIATION REQUEST: $131,006,000

AGENCY PROJECT PRIORITY: 1 of 1

PROJECT LOCATION: Primary site outside downtown Mpls. and St. Paul

Project At A Glance

- Provides a cost effective, highly secure, green data center for the state executive branch and other potential government partners in order to increase service performance
- Unifies and standardizes most of the 36+ state executive branch agency data centers into an enterprise operation for greater efficiency, reduced risk of failure, and improved redundancy during an emergency
- Allows for additional future partnerships with higher education, state, county and city governments to reduce costs

Project Description

This request for $131,006,000 in state funds is to acquire land, design, construct, and equip a new data center building for use by state executive branch agencies, with additional capacity for other government and higher education partners like the Minnesota State Colleges and Universities System (MNSCU) and county and city governments. Specifically, discussions are ongoing with several higher education institutions, a county government, and the State of Wisconsin.

The state – through the Office of Enterprise Technology (OET) and Department of Administration (Admin) – will develop a new state-owned Tier III data center facility with 32,500 square feet on six acres of land. The new facility will allow for the consolidation of most state executive branch agency data centers into an enterprise, state of the art secure cloud computing operation for delivery of Minnesota government services. It will consist of a single primary facility with two or more separate disaster recovery sites. Two or more current agency data centers will be renovated and upgraded for the purpose of serving as disaster recovery sites; the funding to cover these costs is included in this request. The new facility will be scaleable so it can accommodate additional government partners across jurisdictions, establishing a regional computing platform.

Total Project Cost: The total cost of this project is $131,006,000. The funding includes $127,203,000 in state-issued general obligation bonds, as well as a general fund request of $3,803,000 for agency moving costs and IT hardware relocation to the new facility. By partnering with others, costs for construction and ongoing operations could potentially be reduced.

Current State: Data center facilities house equipment for communication, data processing, and storage. They are essential for government operations and citizen services such as 911 emergency response, tax collections, and criminal records. Minnesota's state executive branch agencies currently maintain 36+ data center facilities, using 69,251 square feet of space and 3,275 servers.

As more state agencies move their essential services online, there is a critical need for secure, reliable 24x7x365 computing operations to maintain and protect the information and services citizens receive. By standardizing data centers, the state would better manage investments, service quality, security, and energy consumption (green IT). This is an imperative to ensure the secure running of government operations in today's world.

A recent independent third-party assessment of state executive branch data centers determined that their current state poses a serious and growing risk to government and citizen data, services, and programs, and is highly inefficient and wasteful. The assessment found that limited financial resources over the years, coupled with decentralized management of the data centers, has resulted in facilities and locations that are makeshift, antiquated, and deteriorating. The state's data centers are at Tier I – the lowest ranking possible on the well-regarded scale from the Uptime Institute. The state's data center facilities need to be at least at the industry's Tier III level to adequately protect the state and serve the public.

The state's current decentralized environment uses an excessive number of locations based upon the number of servers, applications, and requirements. It is extremely complex and difficult to maintain, creating large-scale inefficiencies and risks of failure:

- The current square footage used for data centers is three times larger than necessary.
- There are 85 different operating system versions in use and there should be significantly fewer. Many of these operating systems are no longer supported by the vendor, which means they cannot be fixed if they break down and cannot integrate with new software.
- There are 267 different server models and there should only be 30-50 main types. A server inventory this diverse increases costs.

Under current conditions, it is estimated that within the next three years the state will experience three to five data center failures, impacting major state programs that will lose or interrupt access to vital stored data. There were multiple nearly complete failures in the last year, impacting tens of thousands of Minnesotans and costing the state hundreds of thousands of dollars.

Multiple problems contribute to the vulnerabilities of the state's data centers. They are built to 40 year-old guidelines and most facilities are retrofitted office space lacking key mechanical and electrical capabilities. For example, the data centers lack cameras and video recording. Some critical agency infrastructure is essentially run out of "home and garage" type power and cooling. In one case at the time of the assessment, there were 64 servers plugged into a single wall outlet without a backup power supply. Lastly, about 80% of the locations have no or inadequate disaster recovery capability.

Impact on Agency Operating Budgets (Facilities Notes)

The new data center will be a state-owned facility. Details related to the governance of the partnership, lease payments and/or charge-back rate fees are in development and will be refined in the predesign/design process. OET is in the process of determining the impact of the project on the square-foot lease rate.

OET currently pays lease costs on its data center space and OET will continue to do so at the new data center. These lease costs will likely be higher at the new center, impacting OET's operating budget. Note that the higher lease costs are due to the increased citizen demands and improved security, redundancy, and cooling and electrical capacity of the new data center space; the increased costs could potentially be offset by the virtualization of servers, which will result in space savings. Any remaining or other increases in operating costs will be offset by additional standardization efficiencies or will be covered through charge-back rate fees.

Previous Appropriations for this Project

The 2009 legislature appropriated $250,000 to the Department of Administration to continue planning for data center consolidation, including beginning a predesign study and lifecycle cost analysis, and exploring technologies to reduce energy consumption and operating costs. This amount is expected to cover all the predesign costs since OET and Admin are pursuing a combined predesign-design strategy using a single contractor for the work.

Other Considerations

In addition to the security and efficiency benefits, this initiative will allow for conversion of a significant amount of agencies' building space into more appropriate office uses for which it was designed.

Also, given the large size of this project, it will provide a number of construction and technical jobs.

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Governor's Recommendations

The Governor does not recommend capital funds for this request.

TOTAL PROJECT COSTS All Years and Funding Sources	Prior Years	FY 2010-11	FY 2012-13	FY 2014-15	TOTAL
1. Property Acquisition	0	1,500	0	0	1,500
2. Predesign Fees	250	0	0	0	250
3. Design Fees	0	7,426	0	0	7,426
4. Project Management	0	7,076	0	0	7,076
5. Construction Costs	0	92,978	0	0	92,978
6. One Percent for Art	0	0	0	0	0
7. Relocation Expenses	0	3,803	0	0	3,803
8. Occupancy	0	6,073	0	0	6,073
9. Inflation	0	12,150	0	0	12,150
TOTAL	**250**	**131,006**	**0**	**0**	**131,256**

CAPITAL FUNDING SOURCES	Prior Years	FY 2010-11	FY 2012-13	FY 2014-15	TOTAL
State Funds :					
G.O Bonds/State Bldgs	0	127,203	0	0	127,203
General	0	3,803	0	0	3,803
Misc Special Revenue	250	0	0	0	250
State Funds Subtotal	250	131,006	0	0	131,256
Agency Operating Budget Funds	0	0	0	0	0
Federal Funds	0	0	0	0	0
Local Government Funds	0	0	0	0	0
Private Funds	0	0	0	0	0
Other	0	0	0	0	0
TOTAL	**250**	**131,006**	**0**	**0**	**131,256**

CHANGES IN STATE OPERATING COSTS	Changes in State Operating Costs (Without Inflation)			
	FY 2010-11	FY 2012-13	FY 2014-15	TOTAL
Compensation -- Program and Building Operation	0	0	0	0
Other Program Related Expenses	0	0	0	0
Building Operating Expenses	0	0	0	0
Building Repair and Replacement Expenses	0	0	0	0
State-Owned Lease Expenses	0	0	0	0
Nonstate-Owned Lease Expenses	0	0	0	0
Expenditure Subtotal	0	0	0	0
Revenue Offsets	0	0	0	0
TOTAL	0	0	0	0
Change in F.T.E. Personnel	0.0	0.0	0.0	0.0

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS (for bond-financed projects)	Amount	Percent of Total
General Fund	127,203	100.0%
User Financing	0	0.0%

STATUTORY AND OTHER REQUIREMENTS Project applicants should be aware that the following requirements will apply to their projects after adoption of the bonding bill.	
Yes	MS 16B.335 (1a): Construction/Major Remodeling Review (by Legislature)
Yes	MS 16B.335 (3): Predesign Review Required (by Administration Dept)
Yes	MS 16B.335 and MS 16B.325 (4): Energy Conservation Requirements
Yes	MS 16B.335 (5): Information Technology Review (by Office of Technology)
No	MS 16A.695: Public Ownership Required
No	MS 16A.695 (2): Use Agreement Required
No	MS 16A.695 (4): Program Funding Review Required (by granting agency)
No	Matching Funds Required (as per agency request)
No	MS 16A.642: Project Cancellation in 2015