

Schedule 13
Funding Request for the 2013-14 Budget Cycle

Department: Health Care Policy and Financing

Request Title: Server Upgrade and SharePoint Assessment

Priority Number: S-7

Dept. Approval by: John Bartholomew *JB 12/27/12* Date: 12/27/12

OSPB Approval by: [Signature] *2/21/12* Date: 2/21/12

<input type="checkbox"/>	Decision Item FY 2013-14
<input type="checkbox"/>	Base Reduction Item FY 2013-14
<input checked="" type="checkbox"/>	Supplemental FY 2012-13
<input type="checkbox"/>	Budget Amendment FY 2013-14

Line Item Information		FY 2012-13		FY 2013-14		FY 2014-15
		1	2	3	4	5
Fund		Appropriation FY 2012-13	Supplemental Request FY 2012-13	Base Request FY 2013-14	Funding Change Request FY 2013-14	Continuation Amount FY 2014-15
Total of All Line Items	Total	\$5,940,552	\$85,980	\$5,902,552	\$0	\$0
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$1,312,418	\$42,990	\$1,262,418	\$0	\$0
	GFE	\$0	\$0	\$0	\$0	\$0
	CF	\$437,500	\$0	\$468,500	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$4,190,634	\$42,990	\$4,171,634	\$0	\$0
(1) Executive Director's Office; (A) General Administration, General Professional Services and Special Projects	Total	\$5,940,552	\$85,980	\$5,902,552	\$0	\$0
	FTE	0.0	0.0	0.0	0.0	0.0
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	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$4,190,634	\$42,990	\$4,171,634	\$0	\$0

Letternote Text Revision Required? Yes: No: If yes, describe the Letternote Text Revision:

Cash or Federal Fund Name and COFRS Fund Number: FF: Title XIX

Reappropriated Funds Source, by Department and Line Item Name: None

Approval by OIT? Yes: No: Not Required:

Schedule 13s from Affected Departments: None

Other Information: None



DEPARTMENT OF HEALTH CARE POLICY AND FINANCING

John W. Hickenlooper
Governor

FY 2012-13 Supplemental
January 2, 2013

Susan E. Birch
Executive Director

[Handwritten Signature] for Sue Birch 12/31/12
Signature Date

Department Priority: S-7
Server Upgrade and SharePoint Assessment

Summary of Incremental Funding Change for FY 2012-13	Total Funds	General Fund	FTE
Server Upgrade and SharePoint Assessment	\$85,980	\$42,990	0.0

Request Summary:

In order to upgrade the Department's server infrastructure and develop a High Risk Security Upgrade and Deployment Strategy to comply with an October 2, 2012 Governor's Office of Information Technology (OIT) Security Assessment, the Department requests \$85,980 total funds, comprised of \$42,990 General Fund and \$42,990 federal funds for FY 2012-13.

Problem or Opportunity:

The Department's server infrastructure is aging and reaching storage capacities, putting the Department at significant risks which will increase over the next several years. These risks are preventing the Department from safely implementing Microsoft's SharePoint 2010 software with Electronic Protected Health Information (ePHI), as was found in the October 2012 OIT Security Assessment. To proceed with implementing SharePoint 2010 and use ePHI in SharePoint, the Department is required to mitigate the concerns documented in the OIT Security Assessment.

Brief Background:

Server Infrastructure

The Department's computer network provides the Department with services such as shared file

storage, email, and database facilities that are crucial to the Department's daily operations. These services are made possible by an infrastructure of physical servers that are housed and maintained by OIT. While the Department is responsible for securing additional funding for server upgrades like the one proposed in this request, OIT secures funding for ongoing operations and maintenance of servers through Common Policy.

Many of the Department's servers are aging and reaching their storage capacity, putting the Department at a number of significant risks which will increase over the next several years. These risks include an increasing probability of hardware failure due to age, longer downtimes due to decreasing vendor support for older products, an inability to use increasingly prominent 64-bit software due to the older 32-bit architecture of the servers, and slow speeds or unusual behavior due to full storage drives.

Furthermore, the Department's use of physically distinct servers is an outdated approach to providing network services. Instead, a virtual server environment is a more modern solution which OIT is moving toward with its work on an enterprise computing environment known as the

ECE to support virtual servers; this corresponds with metric number 38, “% of Virtual Machines in Use,” on OIT’s Balanced Scorecard strategy document. A virtual server environment provides many benefits over physical servers including higher speeds, more efficient use of computing resources, faster disaster recovery (it eliminates weeks of waiting for a new physical server in case of failure), high availability system design (essentially allowing the system to work around any failed parts by utilizing still-working parts), and easier expansion as the Department’s needs grow (since it reduces additional hardware purchases when expansion is necessary).

SharePoint

Along with many other state agencies, the Department uses Microsoft’s SharePoint 2007 software to manage intra-department communications and collaboration, and has been able to implement the SharePoint software without the need for additional funding until this point. However, OIT’s October 2012 Security Assessment documented significant risks with the SharePoint solution that must be mitigated before updating to the SharePoint 2010 version and including ePHI in the system. The assessment evaluated the SharePoint solution against the National Institute of Standards and Technology’s security controls and operational standards for managing high risk information technology systems and found that approximately 35% of the applicable compliance standards were not fully in place.

Proposed Solution:

The Department’s proposed solution is to upgrade to a modern virtual server infrastructure that will mitigate the risks of the current, aging server infrastructure. The Department also proposes to develop a High Risk Security Upgrade and Deployment Strategy for implementing the SharePoint 2010 software with ePHI that will, along with the server infrastructure upgrade, address the concerns of OIT’s October 2012 Security Assessment and allow for safe implementation of the software.

Alternatives:

Instead of transitioning to a virtual server environment, the Department also considered maintaining the current physical server environment, but replacing the oldest, highest-risk servers with new ones. This approach would address the risks due to the age and decreasing storage capacity of many of the current servers since the new hardware would be more reliable, have a higher degree of vendor support, use 64-bit architecture, and could address storage issues by adding more servers and storage space. With this approach, the Department would replace the 9 oldest servers, which are between 4 and 9 years old, at a cost of \$5,000 to \$15,000 per server, for a total median cost of \$90,000.

Anticipated Outcomes:

If this request is approved, the Department intends to purchase the hardware required for OIT to transition the Department’s current servers to a virtual server environment. The Department expects this transition will alleviate many risks of the current server infrastructure with greater reliability, increased vendor support, 64-bit software compatibility, increased speed and stability, more efficient use of computing resources, faster and more effective disaster recovery, a high availability system design, and easier network expansion in the future. Also, if this request is approved, the Department expects to contract services to assess SharePoint and develop a High Risk Security Upgrade and Deployment Strategy that, along with the transition to a virtual server environment, will address OIT’s October 2012 Security Assessment and thus allow the Department to proceed with implementing SharePoint 2010 and include ePHI in SharePoint.

Compared to the discussed alternative, the proposed solution offers more benefit for less cost. The proposed solution offers all the benefits of the alternative solution to replace the oldest servers in addition to the benefits that come with a virtual server environment. The proposed solution also more effectively addresses the concerns of OIT’s October 2012 Security

Assessment and better enables the Department to safely implement SharePoint 2010 with ePHI. Moreover, with a median cost of \$90,000, the alternative solution is likely more expensive than the proposed solution, which costs under \$51,000. Note this is a comparison of the server upgrade costs only – the additional cost of developing the High Risk Security Upgrade and Deployment Strategy for SharePoint 2010 would be the same in both cases.

Assumptions for Calculations:

The funding requests for both the hardware for the virtual server upgrade and developing the SharePoint Upgrade and Deployment Strategy are based on estimates received from vendors that have a State Pricing Agreement for these services with OIT. Federal Financial Participation (FFP) is expected to be 50%, with the state’s share coming from the General Fund. See Table 1 below for a complete overview of the funding request.

Table 1: FY 2012-13 Funding Request for Server Upgrade and SharePoint Assessment				
Item	Total Funds	General Fund	Federal Funds	FFP
Server Upgrade	\$50,980	\$25,490	\$25,490	50%
SharePoint Assessment	\$35,000	\$17,500	\$17,500	50%
Total Request	\$85,980	\$42,990	\$42,990	

Consequences if not Funded:

If this request is not funded, then the Department will not be able to upgrade to a virtual server environment and will continue to face the increasing risks of the Department’s current server infrastructure as discussed in the *Brief Background* section. For example, with the Department’s current server infrastructure, the failure of certain servers could result in slower performance or inaccessibility of computing resources critical to the Department’s operations for several weeks while a new server is procured. This risk continues to grow as the servers age and would be greatly alleviated by the proposed server upgrade. Also, if this request is not funded, the Department will not be able to address the concerns in OIT’s October 2012 Security Assessment and thus will not be able to upgrade to SharePoint 2010 or include ePHI on SharePoint, which is central to the Department’s intra-Department communication and collaboration strategy.

Supplemental, 1331 Supplemental, or Budget Amendment Criteria:

The OIT Security Assessment referenced in this request resulted in substantial new data that led to the proposed solution in this request. The assessment is dated October 2, 2012, so the Department did not have this new data in time to meet state budgeting deadlines to make a funding request earlier than this supplemental.