

2013-15 Policy Option Package

<u>Agency Name:</u>	Department of Human Services (DHS)/Oregon Health Authority (OHA)
<u>Program Area Name:</u>	Shared Services
<u>Program Name:</u>	Office of Information Services
<u>Policy Option Package Initiative:</u>	N/A
<u>Policy Option Package Title:</u>	Computer and Network Infrastructure Investments
<u>Policy Option Package Number:</u>	401
<u>Related Legislation:</u>	N/A
<u>Program Funding Team:</u>	Improving Government

Summary
Statement:

DHS and OHA will have up to 66% of active computers over five year of age which is beyond industry standard lifecycle and slows down productivity. The State Data Center has also not upgraded DHS/OHA network infrastructure in over nine years in many buildings including the Barbara Roberts and Portland State Office Buildings. Both the Network and outdated computers cause inefficient work processes due to how slow systems operate on these computers and systems. In addition, as modern systems such as HIX and Eligibility Modernization are implemented, a further strain on the performance of DHS and OHA IT systems will occur. The worst case scenario is that some computers will not support these modern applications. Older computers will also not support Windows 7 and Windows XP; support for these systems will be soon phased out by Microsoft. Due to DHS and OHA's reliance on IT systems to provide services and ensure safety of clients, modernizing the IT tools and Infrastructure is critical to the long term success of DHS and OHA in achieving program outcomes and ensuring health and safety of Oregonians.

	General Fund	Other Funds	Federal Funds	Total Funds
<u>Policy Option</u> <u>Package Pricing:</u>	5,213,417	2,373,125	5,213,417	\$ 12,799,959
DHS	\$3,213,417	\$7,068	\$3,213,417	6,433,902
OHA	\$2,000,000	\$2,366,057	\$2,000,000	6,366,057

1. WHAT WOULD THIS POLICY OPTION PACKAGE (POP) DO AND HOW WOULD IT BE IMPLEMENTED?

The focus of activity for FY13-15 is on increasing program performance and delivery, caseworker effectiveness and efficiency; and client support. By addressing existing and growing gaps in three key areas (PC refresh, network performance and mobile computing/communications) OHA and DHS will be able to better meet agency and client needs while delivering increased performance through the support of transformation and modernization efforts.

a) PC Refresh—Meeting Client and Caseworker Needs

Establish a program for the regular replacement of agency information technology assets as required by the Department of Administrative Services. The Information Technology Asset Inventory/Management policy IRM 107-004-010 requires agencies to support standard lifecycles for agency Information Technology (IT) assets. In 2011, DHS began replacing PCs that were incapable of supporting future needs (e.g. Windows 7, Office 2010). The allocation of \$1 million by DHS represents a significant investment, but was slightly more than one third of what is needed to simply upgrade platforms that must be replaced. This Policy Option Package represents a long-term effort to fund for the replacement of systems at their end-of-life in order to meet ongoing technology needs for both DHS and OHA.

b) Network Infrastructure—Supporting Modernization, Improving Efficiency

Ensure the building infrastructure across all OHA and DHS facilities is capable of support the next generation of network-centric solutions. As modernization investments continue to place increasing demands on the OHA and DHS information technology infrastructure, a commitment to establishing and

maintaining a high-performance network environment will be critical to meeting the needs of human services programs, health insurance plans and medical assistance efforts (i.e. Health Insurance Exchange, Health Information Exchange, Coordinated Care Organization web portals, health care analytics, etc.) will. Maintaining a responsive IT network that meets caseworker/client performance/usability demands is essential to the success of virtually all transformation/modernization efforts.

c) Mobile Computing—Increasing Responsiveness and Productivity

The increasing use of mobile devices—particularly smartphones and tablets—represents a significant shift in the way clients and caseworkers interact with technology. Legacy BlackBerry solutions are incapable of supporting the needs of the OHA and DHS community going forward, and this POP proposes replacement of the entire inventory with more modern hardware (Apple IOS, Windows 8 mobile, or Android). Replacement of the legacy BlackBerry phone infrastructure with a device that functions as a combination email agent, voice messaging agent, telephone (cellular/landline), video conferencing client and remote application delivery platform can provide OHA and DHS users with a range of capabilities unavailable in the current platform.

2. WHY DO DHS and OHA PROPOSE THIS POP?

As new software applications supporting Coordinated Care Organizations, Health Systems Transformation and the modernization of human services programs are released, performance problems associated with aging computer hardware and network infrastructure will become increasingly severe. The need for more processing power and higher network performance has already been experienced by users of two systems: MMIS and OR-Kids (memory in older systems was more than adequate at the time of purchase, but aging systems failed to meet agency needs and MMIS/OR-Kids users required memory upgrades).

During the 2011–13 biennium the Windows 7 operating system and Office 2010 will be rolled out to all users. The operating system and software applications are the current generation of products from Microsoft and will ensure OHA and DHS computers and computer generated products remain compatible across the

agencies and with our public and private counterparts as they move in a similar direction. These changes will tax the capabilities of older systems. The resulting poor performance at the desktop PC level will reduce productivity and service delivery.

A 4-year PC lifecycle replacement is the accepted industry best practice for mainstream users to maintain acceptable computer performance for staff productivity. In addition, Microsoft operating system lifecycles typically follow a 4-year cycle from the release to obsolescence. The Windows 7 operating system is the current replacement for the decade old Windows XP platform. As part of the replacement of agency PCs, the technology consulting firm Gartner recommends refreshing the client operating system. This makes the next biennium a critical time for PC upgrades. Failure to replace all systems incapable of running Windows 7 will incur significant support costs to both agencies for the maintenance of the obsolete XP platform.

Maintenance costs on new PCs are covered under warranty, while those associated with an aging, out of warranty inventory are handled as a current expense covered by the business. Current PC vendors provide a 3 to 4-year warranty on systems. Extending the lifecycle beyond the 4-year warranty incurs additional costs (e.g. labor, parts and lost productivity) to maintain increasingly obsolete systems. The lost productivity associated with using and remediating installed systems causes resource issues/impacts, delays client service delivery and shifts technical resources away from operations and toward remediating failing computers and infrastructure.

3. HOW DOES THIS FURTHER THE AGENCY'S MISSION OR GOALS?

Establishing a PC replacement program executed in parallel with efforts to remediate applications to run in the Windows 7 environment is essential. Given the limitations associated with an aging PC inventory and the operational demands of OHA transformation and DHS modernization, outdated legacy systems should be targeted for immediate replacement. Based on industry best practice, software demands, and hardware maintenance needs, DHS and OHA should strive to achieve a 4-year PC lifecycle replacement plan. In practice this would necessitate replacing approximately 2,750 systems per year (5,500 per biennium). Implementing a PC lifecycle refresh program requires significant investment—there are currently over 3,000

PCs that are greater than 5 years old. The replacement of these aging PCs has been deferred several times due to budget cuts.

4. IS THIS POP TIED TO A DHS or OHA PERFORMANCE MEASURE? IF YES, IDENTIFY THE PERFORMANCE MEASURE. IF NO, HOW WILL DHS and OHA MEASURE THE SUCCESS OF THIS POP?

No.

5. DOES THIS POP REQUIRE A CHANGE(S) TO AN EXISTING STATUTE OR REQUIRE A NEW STATUTE? IF YES, IDENTIFY THE STATUTE AND THE LEGISLATIVE CONCEPT.

No statutory changes are required.

6. WHAT ALTERNATIVES WERE CONSIDERED AND WHAT WERE THE REASONS FOR REJECTING THEM?

There are no practical alternatives. Windows XP has reached its end-of-life. The average PC in the inventory is already beyond replacement age. Network hardware in many buildings is nearly a decade old. The wide area network infrastructure is demonstrably incapable of effectively supporting current needs, let alone future demands.

7. WHAT WOULD BE THE ADVERSE EFFECTS OF NOT FUNDING THIS POP?

The risks to OHA and DHS program delivery will be significant if the legacy PC inventory is not replaced, the network infrastructure is not upgraded and a forward-looking mobile communications solution are not implemented. IT functionality for both OHA and DHS will degrade increasingly over time until it is no longer supportable. The results will be severe for caseworkers and clients.

A key part of the caseworker environment is the personal computing platform used by staff. Microsoft's XP operating system has been at the center of OHA and DHS computing for over a decade. The majority of PCs in use are aging and many cannot support migration to Windows 7 or Office 2010. IT industry data indicates

it can take 18 to 32 months to completely transition to a new operating system environment. While both OHA and DHS are a generation behind in operating systems and general office productivity applications, the problem will be further compounded when the next generation of products is released in late 2012.

Network infrastructure across the OHA and DHS agencies (both internal to buildings and Internet/SDC connectivity) is aging and in need of upgrade/replacement. A majority of the networking hardware in OHA and DHS facilities is 5 to 9 years old. The current wide area network transport infrastructure has been in place for over a decade at a majority of OHA and DHS locations and performance is sub-standard at many of these sites. Without a concerted effort to increase performance, the network as a whole will be unable to support currently projected demands.

The mobile communications solution that is currently fielded across OHA and DHS is the BlackBerry phone. These phones represent an aging platform, and the communications network run by Research-In-Motion (RIM) that is required to use the phones with email and instant messaging is both proprietary and outdated. The emergence of Apple's iPhone and Android smartphones (from various vendors) has dramatically shifted the mobile market. In addition to increased usability and functionality, more modern mobile phones can execute applications beyond anything the legacy BlackBerry is capable of supporting.

Transitioning to a more open platform that does not require a proprietary network simplifies the architecture and opens up a range of potential solutions, including "Bring Your Own Device—BYOD." A final and quite serious concern is the viability of the RIM corporation (maker of the BlackBerry) going forward. RIM is facing serious challenges that make newer technologies, open platforms, agency specific application storefronts and the risk associated with the current solution critical considerations for OHA and DHS business operations.

8. WHAT OTHER AGENCIES (STATE, TRIBAL AND/OR LOCAL GOVERNMENT) WOULD BE AFFECTED BY THIS POP? HOW WOULD THEY BE AFFECTED?

N/A

9. WHAT ASSUMPTIONS AFFECT THE PRICING OF THIS POP?

Implementation Date(s): July 1, 2013

End Date (if applicable): _____

a. Will there be new responsibilities for DHS or OHA? Specify which Program Area(s) and describe their new responsibilities.

No new responsibilities.

b. Will there be new administrative impacts sufficient to require additional funding? Specify which office(s) (i.e., facilities, computer services, etc.) and describe how it will be affected. See Addendum A - Administrative Services Division LC/POP Impact Questionnaire (at the end of this document).

No.

c. Will there be changes to client caseloads or services provided to population groups? Specify how many in each relevant program.

No.

- d. Will it take new staff or will existing positions be modified? For each classification, list the number of positions and the number of months the positions will work in each biennium. Specify if the positions are permanent, limited duration or temporary.

PC Refresh	# of months	Type
One (1) ISS5 PC Build Team	21 months	Permanent
Four (4) ISS4 PC Build Team	21 months	Permanent
Network Infrastructure	# of months	Type
Four (4) ISS6 Infrastructure Techs	21 months	Limited Duration
Mobile Computing	# of months	Type
One (1) ISS6 Tech	21 months	Permanent
Two (2) ISS4 Tech	21 months	Permanent

- e. What are the start-up costs, such as new or significant modifications to computer systems, new materials, outreach and training?

Start-up Cost Estimates

PC Refresh	
Replace personal computers in 2013-15 to achieve 4 yr lifecycle	\$3,664,253
Network Infrastructure	
LAN/WAN Infrastructure upgrades	\$3,150,000

Mobile Computing	
Mobile Phone Replacement	\$198,000
Collaborative Infrastructure Servers (14 servers)	\$350,000
Conference Room Equipment (40 rooms)	\$240,000
Desktop Video Cameras (1,000)	\$150,000
Headsets (1,000)	\$50,000

f. What are the ongoing costs?

Ongoing Cost Estimates

PC Refresh	
Replace 260 PCs each month (6,240 per biennium)	\$8,005,920
Mobile Computing	
Mobile Device Management (MDM)	\$48,000
Collaborative Infrastructure Servers	\$336,000

g. What are the potential savings?

N/A

h. Based on these answers, is there a fiscal impact?

<u>PC Refresh</u>	<u>GF</u>	<u>OF</u>	<u>FF</u>	<u>TF</u>	<u>Position</u>	<u>FTE</u>
Personal Services	\$ 0	\$ 631,421	\$ 0	\$ 631,421	5	4.40
Services & Supplies	\$ 1,881,340	\$ 343,827	\$ 1,887,683	\$ 4,112,850		
Special Payments	\$ 488,862	\$ 0	\$ 486,386	\$ 975,248		
Subtotal	\$2,370,202	\$ 975,248	\$2,374,069	\$ 5,719,519	5	4.40

<u>Network Infrastructure</u>	<u>GF</u>	<u>OF</u>	<u>FF</u>	<u>TF</u>	<u>Position</u>	<u>FTE</u>
Personal Services	\$ 0	\$ 611,758	\$ 0	\$ 611,758	4	3.52
Services & Supplies	\$ 1,616,920	\$ 238,300	\$ 1,616,916	\$ 3,472,136		
Special Payments	\$ 426,186	\$ 0	\$ 423,872	\$ 850,058		
Subtotal	\$ 2,043,106	\$ 850,058	\$ 2,040,788	\$ 4,933,952	4	3.52

<u>Mobile Computing</u>	<u>GF</u>	<u>OF</u>	<u>FF</u>	<u>TF</u>	<u>Position</u>	<u>FTE</u>
Personal Services	\$ 0	\$ 419,094	\$ 0	\$ 419,094	3	2.64
Services & Supplies	525,426	\$ 128,725	525,424	1,179,575		
Special Payments	274,683	\$ 0	273,136	\$ 547,819		
Subtotal	\$ 800,109	\$ 547,819	798,560	\$ 2,146,488	3	2.64

TOTAL FOR THIS PACKAGE

<u>Category</u>	<u>GF</u>	<u>OF</u>	<u>FF</u>	<u>TF</u>	<u>Position</u>	<u>FTE</u>
Personal Services	\$0	\$1,662,273	\$0	\$1,662,273	12	10.56
Services & Supplies	\$4,023,686	\$710,852	\$4,030,023	\$8,764,561		
Special Payments	\$1,189,731	\$0	\$1,183,394	\$2,373,125		
Other	\$0	\$0	\$0	\$0		
Total	\$5,213,417	\$ 2,373,125	\$ 5,213,417	\$ 12,799,959	12	10.56

DHS/OHA - Fiscal Impact Summary by Program Area:

	DHS	OHA	Program Area 3	Program Area 4	Total
General Fund	\$3,213,417	\$2,000,000	\$0	\$0	\$ 5,213,417
Other Fund	\$7,068	\$2,366,057	\$0	\$0	\$2,373,125
Federal Funds- Ltd	\$3,213,417	\$2,000,000	\$0	\$0	\$5,213,417
Total Funds	\$6,433,902	\$6,366,057	\$0	\$0	\$12,799,959
Positions	0	12	0	0	12
FTE	0.00	10.56	0.00	0.00	10.56