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DEPARTMENT OF  
ADMINISTRATIVE  
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## **OREGON STATE CIO COUNCIL'S**

# **Progress Report to the 75<sup>th</sup> Legislative Assembly's Legislative Fiscal Office**

**Actions and Opportunities to Optimize  
Information Technology Cost and Efficiency**

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## **Progress Report - Summary**

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## Executive Summary

### Background

Oregon state government has experienced an unprecedented reduction in funding. Yet, that situation is just a reflection of the economic conditions Oregonians currently experience. Because of these unprecedented challenges, on February 12, 2009 the Legislative Fiscal Office (LFO) asked the State Chief Information Officer (CIO) to convene the state CIO Council to describe to the legislature: what state government's information technology (IT) community is already doing to help deal with the current fiscal crisis; and to explore other ways information technology could be leveraged in these tough times. On February 17, 2009, a joint message was sent by State CIO Dugan Petty and CIO Council Chairperson Bob DeVyldere to the CIO Council members inviting them to participate in a series of "Fast Track" brainstorming sessions beginning February 25, 2009.

### Initial "Brainstorming" Phase

The first 1 ½-hour brainstorming session produced: 41 ideas for IT cost optimization; and the beginning of a list of actions already underway to optimize IT costs and efficiency. Over the next several days CIO Council members evaluated that list of opportunities (i.e. financial benefit, business impact, timing, organizational and technical risk, and cost).

### Program Area Breakout Brainstorming Sessions

With the concepts from the Feb. 25 brainstorming session ranked, the full CIO Council then met on March 3, 2009 to conduct four additional brainstorming sessions, each comprised of CIOs from similar program areas (Natural Resources, Public Safety, Education, and General Government). The State Data Center also held an independent "Fast Track" brainstorming session. A broad range of ideas, large and small, were proposed over a total of 4 ½ hours of brainstorming. Using IT cost optimization categories defined by Gartner, Inc., a renowned IT research authority, staff sorted, analyzed and aggregated the suggestions into meaningful categories of action. Staff found that candidate concepts had been identified by CIOs in all of the Gartner categories.

### Prioritization of Near-term Opportunities

The CIO Council then met on several occasions to identify and prioritize possible IT cost optimization actions, especially those that could be undertaken in the near-term. CIOs identified and then ranked 11 near-term candidates. The state's Administrative Business Services Directors group was then asked to independently rank the CIO Council's list of 11 candidate actions. Both groups ranked the potential actions much the same. The first six concepts were ranked identically by both groups.

### Acting on Near-Term Opportunities

In one last session, CIOs met to select concepts that should and could be acted on now. Three concepts were identified for immediate exploration and possible action including: 1) re-negotiating existing contracts, licenses and agreements to lower costs; 2) expanding the use of cost efficient web-enabled tools; and 3) creating a new paradigm in contracting and web-enabled "Software as a Service" procurement that would have one agency representing all others thus optimizing the cost and efficiency of the procurement.

### Agencies' Efforts Already Underway

Agencies cited a variety of practices already underway to optimize cost and efficiency. Examples included: streamlining management practices; consolidating IT asset utilization to eliminate duplication and optimize energy use; deployment of a variety of web-enabled tools to streamline business processes; and a variety of deferred or cancelled near-term expenditures.

### Next Steps in IT Cost Optimization and Efficiency

The CIO Council will continue to act on the three near-term (Wave 1) IT cost optimization actions. Multi-agency teams will evaluate each concept to determine the potential impact and benefit. If cost optimization and benefit potentials warrant, these multi-agency teams will progress to action. CIO Council members anticipate providing LFO periodic progress reports on IT cost optimization with the next update predicted to be delivered by December 31, 2009.

## What Agencies Are Already Doing To Optimize IT Cost and Efficiency

### Examples of agencies' cost savings using IT procurement practices

- Statewide Price Agreements (through DAS EISPD / State Procurement Office) leverage buying power and reduce duplication of effort.
- Desktop and laptop computer configuration standards make volume buying possible optimizing cost.
- IT Managed Service Provider (MSP) (CIO Workgroup) - Reduced time to contract – 7 months to 17 days.
- IT Quality Assurance Services (CIO Workgroup)
- Using more Shrink-wrapped Commercial-Off-the-Shelf Software (COTS)
- Electronic Records Management Systems Software and Services
- Video & Web-enabled Conferencing
- IT Research and Advisory Services
- GIS Software Enterprise License Agreement - Enterprise License Agreement (ELA) established for GIS Software. Lowers the time and money required to administer and maintain GIS software.

### Examples of IT cost savings at the State Data Center

- Telecommunications - SDC is currently moving from frame relay to digital lines saving an estimated \$50,000 per month.
- Network Consolidation - Network management consolidation / network security upgrades completed.
- Voice Upgrade and Consolidation - Switch upgrades / consolidation completed.
- Server Consolidation - Shared infrastructure / virtualization / standardized server management underway. Powered down 76 of 128 enterprise servers (60% reduction). Powered down 608 of 1749 windows based servers (35% reduction).
- Mainframe Consolidation - 3 into 1 mainframe consolidation completed. A 36-month mainframe lease provides increased capacity on-demand.
- Storage Consolidation - 435 Terabytes of tiered storage / virtual tape system / automated tape library completed.

### Examples of operational IT cost savings undertaken by agencies

- Stretching IT asset lifecycles (PC replacement time frame) reduces cost.
- Server consolidation / virtualization in the agencies - Cost savings in power, cooling, space, maintenance, monitoring, administration. Virtualization means multiple physical data storage devices are viewed as a single logical unit.
- Open source software and code - common code library (Dept. of Transportation)
- Web-enabled tools - Enterprise Learning Management System (iLearnOregon - DAS HRSD). Collaboration software enables 24/7 concept development and planning.
- Telework (Telecommuting) - Agencies expanding telework via enabling tools (Citrix).

### Examples of business and IT cost savings undertaken by agencies

- Web-enabled Citizen Services - 83 agencies, boards and commissions using portal. Content increasing 40 percent annually. Agencies using web-enabled applications to serve citizens and business.
- Agency and Enterprise Web 2.0 - Web-enabled Collaboration Tools - Web-enabled collaboration tools replaces the need for travel to face-to-face meetings (trainings, communications, etc.) resulting in lower fuel, maintenance and travel costs.
- E-Commerce Stores - 32 active e-commerce stores. 16 new stores were added in 2008-09 with 4 more in progress. 405,476 transactions for \$49 million (2008). 5 e-commerce stores connect directly to the state's accounting system.
- Auto Notification - Oregon GovDelivery used to automatically notify interested parties of information updates and to receive needed notifications (Dept. of Consumer and Business Services).
- Green IT - Desktop Power Management practices reduce energy consumption, greenhouse gas emissions and cost. Forums held to gain knowledge of opportunities to better manage power consumption and reduce greenhouse gas emissions. A DAS Internal PC Power Management Assessment is in progress. PC Power Management Software Statewide Price Agreement (in process / DAS EISPD).

## Emerging Ideas for IT Cost Optimization and Efficiency

### General Observations

State of Oregon agencies have already undertaken many cost optimization steps recommended by Gartner research experts. CIOs provided a full range of additional ideas for cost optimization covering nearly all of the categories cited by Gartner. CIOs also provided suggestions for a path to gain enterprise-scale efficiencies. Several of the proposed concepts are likely to result in immediate and significant cost optimization. Other recommendations will require varying degrees of planning and timing with the potential of increasingly greater efficiencies near, mid and long term. When viewed in composite, CIOs recommendations fell into several stages of progressive action:

- 1. Act on opportunities presented by the State Data Center** - Now that the SDC exists, it also represents a clear path to additional and significant cost optimization. Recent reductions in budget effecting new SDC business, consolidation, and disaster recovery are projected to significantly slow the state's ability to achieve Fast Track Planning participant's recommendations that include the following: continue SDC consolidation and de-duplication; a variety of software consolidation efforts; and, expand the SDC customer base to lower costs.
- 2. Re-negotiate existing contracts, licenses and agreements** - The fastest path to cost optimization is by re-evaluating and potentially re-negotiating a full range of existing contracts, licenses and agreements to: quickly re-negotiate lower costs; apply the concept of Strategic Sourcing to IT; and, develop and deploy a multi-agency contracting model.
- 3. Reassess asset utilization and reduce inefficiency** - Immediately review and reassess the full range of ongoing expenditures such as utilities, network infrastructure, telecommunications, and PC costs including: quickly reassess spending patterns; move to less expensive infrastructure solutions; wholesale conversion to Voice over Internet Protocol (VoIP); wholesale adoption of Web-enabled alternatives; and, evaluate wholesale adoption of open source alternatives.
- 4. Authorize and enable a multi-agency planning model** - The greatest opportunity for cost optimization is enabled by a multi-agency approach to common business processes. Participants suggested that establishing a multi-agency planning forum is the first step needed to establish the organizational capacity required to act on the larger opportunities identified in the Fast Track Planning sessions. Follow-on activities required to increase organizational capacity include: Creating a Web 2.0 multi-agency planning forum; map common lines of business; develop business process streamlining expertise; use a one-government approach; formally recognize a multi-agency portfolio of initiatives; use strategic communications practices; seek multi-agency funding; create an inclusive governance model; and apply strong decision support.
- 5. Consolidate agencies' common business processes** - Once agencies have the capacity to collaboratively plan and act to optimize state government services and infrastructure, CIOs have highlighted a range of candidate actions including: combine common, redundant services; increase E-Government services; make data sharing the norm; and, create a geospatial data utility and service cooperative.
- 6. Set business expectations for collaborative, multi-agency planning and action** - Fast Track Planning is a first step. Clearly voiced expectations for the IT community will accelerate IT cost optimization efforts including: creating clearly defined target outcomes; creating a predictable, standardized multi-agency budgeting / funding model.

### "Short List" of proposed near-term actions to optimize IT cost / efficiency

The CIO Council, in several rounds of prioritization, arrived at the following list of actions they felt could be successfully initiated and conducted near-term: 1) Renegotiate Contracts, Licenses and Agreements; 2) Utilize more Web-based Tools; 3) Contract Brokering through Cross-agency Collaboration; 4) Electronic Payroll Statements (Pay Stubs); 5) Improve Citizen Access to State Government Services; 6) Streamline "Software as a Service" Acquisition; 7) Online Timekeeping; 8) Enterprise Anti-Spam; 9) IT Better Enables Telecommuting; 10) Expedite Shared Development and Use of Code; and 11) GIS Data Consolidation.

## Ranking Potential Near-term IT Cost Optimization Efforts

### Ranking Overview

A majority of the members of the CIO Council (CIOC) and Administrative Business Services Directors (ABSD) group took the time to independently prioritize the list of 11 potential near-term cost optimization concepts originally identified by CIO Council members. More than half of the concepts received the same relative priority from both groups. With that alignment, the short list of actionable, near-term opportunities was clear.

### Conclusions on Near-Term Actions

With the prioritized list of near-term IT cost opportunities in-hand, CIO Council members then sought to determine the few actions to take first. The list was pared down to three actions that would be sponsored and undertaken near-term under the auspices of the CIO Council including:

1. Renegotiate Contracts, Licenses and Agreements
2. Utilize more Web-based Tools
3. Contract Brokering - Blend two concepts into one (“Contract Brokering through Cross-agency Collaboration” and “Streamline Software as a Service Acquisition”)

Further, the CIO Council determined that several of the prioritized concepts could be proposed to other subject-specific governance bodies for evaluation and potential action including:

1. Electronic Payroll Statements - The concept will be proposed to the Administrative Business Services group for evaluation and possible action.
2. Improve Citizen Access to State Government Services - The concept is already being addressed via substantial changes to the EISPD E-Government Program business model.
3. Online Timekeeping - The concept will be proposed to the Administrative Business Services group for evaluation and possible action.
4. Enterprise Anti-Spam - The concept will be proposed to the State Data Center’s CIO Advisory Board for evaluation and possible action.
5. GIS Data Consolidation - The concept will be proposed to the Oregon Geographic Information Council and State Data Center Advisory Board for evaluation and possible action.

## Next Steps

Since there is alignment between the CIOC and ABSD on the first six priorities, the recommended next steps should be:

- Coordinate actions with enterprise policy owners, in particular coordinating action with contracting and accounting, to resolve policy issues
- Move longer-term strategic ideas to Enterprise Information Resource Management Strategy (EIRMS) update process
- Solicit interest from agencies to work on refining and conducting opportunity assessments on the top concepts based on available resources
- Complete an opportunity assessment for the concepts to be pursued
- Based on the results of the opportunity assessments, form teams to further assess opportunity related to resources, benefits and schedule for a first-wave approach (Wave 1)
- Define potential project charters and targets for multi-agency teams
- If resources are available, develop cross-agency action teams with defined project charters and targets
- Pursue projects based on available resources
- Obtain agency progress and team progress in pursuing accomplishments by concepts and categories of concepts
- Provide a progress report to the Legislative Fiscal Office
- Track and monitor progress against charter and targets
- Review and conduct opportunity assessment for the remaining concepts to be pursued in Wave 2