

GOVERNMENT EXCELLENCE

Enterprise Information Resources Management Strategy – 2007

V1.0 – JUNE 26, 2007

Lindsay Ball

Director, Department of Administrative Services

Dugan Petty

State Chief Information Officer

Ben Berry

CIO Council Chair 2007

Stan McClain

CIO Council Chair 2006

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Message from DAS Director, Lindsay Ball



Change is never easy, especially for governments and businesses who must deal with rapidly evolving conditions and ever greater demands.

Oregon's state government has entered a period of remarkable change in the way it does business and delivers services, thanks to the vision of the Governor and key policy-makers who understand the importance of looking ahead. Guided by Governor Kulongoski's goals in education, health care, the economy, livability and public safety, an expert team of government leaders have drafted and refined a blueprint for transforming the information systems that enable the state to meet its citizens' expectations and demands effectively, efficiently and economically.

Oregon's state government enterprise needs information-management tools that are up to the complexity of today's challenges. I'm proud to report that this Enterprise Information Resources Management Strategy defines the process we can use to meet those challenges.

It sets actual goals and objectives that are both ambitious and attainable. It strives not only to enable the enterprise to deliver the best possible services to the people who need them, but also to make the best possible use of taxpayers' money. And it enables the citizens of Oregon to use their state government to shape their own future.

The dedicated men and women who worked so hard to draft this critical Strategy have performed a public service that many will appreciate in the near future and the following decades.

Lindsay A. Ball, Director, Oregon Department of Administrative Services

Message from the State CIO, Dugan Petty



An important strategic partnership has developed over the last year. The partnership between agency business and IT leaders is based on a common theme - business needs must drive technology planning and implementation and information technology resources need to enable the business of government. This strategy developed under this emerging partnership describes how the state's information resources will be managed over time to address the state's common business needs.

As the State CIO, it is my duty to lead the collaborative effort to transform this strategic vision into sustained, coordinated action. Three themes will be constant throughout that time:

1. Sound practices must guide all IT investments, projects and initiatives.

It is critical agencies adhere to accepted industry standards for IT controls, management and oversight of enterprise IT projects, programs and initiatives. Demonstrated effectiveness in the planning and delivery of large-scale IT projects is essential to maintaining the trust of citizens and key decision-makers.

2. Cross-agency information sharing is needed to enable quality decision-making.

The issues facing agencies today are far more complex than in the past. Accurate and timely information is required to allow decision-makers to act. Citizens expect the state to share and use information wisely to create innovative solutions and allow quality decision-making based on an accurate facts-base. Citizens also expect the state to be good stewards of their information by implementing prudent privacy and security practices. Together agencies must collaborate to develop better ways to manage, store, retrieve and share information while ensuring the security and privacy that our business partners and Oregon citizens expect.

3. Citizens and businesses must be able to access government services and information via the Internet as they expect.

As more Internet-savvy citizens interact with government, expectations for how state government operates will be fundamentally changed. This will be the greatest challenge in coming years, and provide the greatest opportunity for the future. This strategy gives us a vision. Our collective challenge is execute the strategy in innovative and collaborative ways that facilitate enterprise benefits, provide a value proposition for agency business and create trust and credibility in Oregon state government.

Dugan A. Petty, State CIO

Message from the CIO Council Chair, Ben Berry



In developing this strategy, the business and IT leaders of state government have joined together to chart a unified course of action to address common business needs. While this strategy views state government as an enterprise, it does not call for a single choice between the fulfillment of enterprise vs. agency goals and objectives. Rather, it prompts the question, how do we achieve the best results for both the state as a whole and of its agencies... at the same time?

The benefits of a unified or coordinated approach are abundant. While independent agency action can be justified, collectively, agencies can accomplish what they could not do alone. Where funding, staff, skill sets, infrastructure or knowledge is concerned, we can reach greater heights together than we could ever hope to reach alone.

A major benefit of an enterprise approach is the new understanding each agency has of the business challenges and opportunities of all other agencies. This shared understanding opens the door to a range of innovative solutions not otherwise possible.

Such benefits are not easily realized. Nor is achievement of the strategy assured. This 2007 Enterprise Information Resources Management Strategy assumes we all adopt a new and innovative approach to planning and action across state government. Agencies' business and IT leaders will have to talk the same language, agree on a common set of assumptions, and develop and abide by new "rules of the road" for collaboration across state government. This strategy has to be "our" strategy with joint ownership coming from all state government communities: IT; administrative business services directors; subject matter experts; decision-makers; and agency heads.

Agency business leaders are expected to communicate business needs to IT leaders. IT leaders are expected to routinely communicate to business leaders the opportunities that technology offers business. As ever greater understanding develops, ever greater rewards are possible. Innovative organizational development tools such as the concept of a Community of Practice must be deployed liberally to make artificial agency barriers more transparent and permeable. Together we must all determine how to incorporate enterprise strategy activities into our individual agency efforts. For it is always easier to focus strictly on day-to-day agency responsibilities than to incorporate the added dynamic of enterprise obligations. But that also means agencies miss the opportunity to take advantage of the benefits made possible only through participation in statewide planning and action.

How are we going to do all this? Together we must correctly calculate the right balance between acting on enterprise opportunities and our duty to fulfill agency obligations. If our calculations are wrong, the weight of enterprise activities will cause them to fail and our ultimate constituent customers will have lost the value proposition. Staff resources are limited for enterprise purposes, but the opportunity for great benefit requires that we, together, innovatively tackle the difficult question of resourcing and timing. Lastly, we need to deliver on our promises - deliver what we say we intend to do. That requires a strict regimen of planning that dovetails agency and enterprise efforts together.

I personally believe this unified course of action strategy harnesses the distributive powers of our collective brainpower, parcels the work out to hundreds of us, and uses our piecework to build a better whole by putting informal networks of agencies and individuals in collaborative teams. For success, it works like an ant colony, where the collective intelligence of the network supersedes any single contributor.

Ben Berry, CIO Council Chair and CIO, Oregon Dept. of Transportation

Administrative Business Services Directors (ABSD)

Introduction

The mission of the Administrative Business Services Directors (ABSD), comprised of key agency business leaders, is to: recommend improvements to the business infrastructure of the state government enterprise, and begin making those improvements. Their purpose is to enable state government, as an enterprise, to do its business with maximum efficiency, equipping it to solve problems and make the best possible use of precious tax dollars.

Their key roles are to:

- Provide integrated enterprise leadership.
 - Undertake statewide strategic planning for enterprise administrative functions.
 - Recommend initiatives for statewide administrative functions and priorities for investment in infrastructure.
 - Develop biennial ABSD work plans.
- Provide advice and feedback to the state's most senior executives and decision-makers.
 - Develop and evaluate business cases for new enterprise solutions and statewide administrative policies.
 - Create common performance measures for administrative functions within the enterprise.

The DAS Director and agency directors review and approve the work products of the ABSD as needed.

Chief Information Officer Council (CIO Council)

Introduction

The Chief Information Officer Council (CIO Council) provides leadership and a forum for all agencies to collaborate in the management of information resources across state government. This successful governance group has changed the way state government plans, manages and implements information technology (IT).

When advising the State Chief Information Officer (State CIO) and state business leaders on policy and strategic direction, the CIO Council considers the full spectrum of information technology-related issues facing the state of Oregon.

CIO Council Website: http://www.das.state.or.us/DAS/EISPD/cioc_index.shtml

Contributors

The following people contributed immeasurably to the completion of the 2007 Enterprise Information Resources Strategy:

Agency Directors

- Lindsay Ball, Administrative Services
- Dr. Bruce Goldberg, Human Services
- Cory Streisinger, Consumer and Business Services
- Matt Garrett, Transportation
- Jim Willis, Veterans' Affairs
- Laurie Warner, Employment
- Max Williams, Corrections
- Victor Merced, Housing and Community Services
- Marvin Brown, Forestry
- Elizabeth Harchenko, Revenue

Planning Steering Committee and Key Participants

- Fariborz Pakseresht, Human Services *
- Mike Marsh, Transportation
- Major Peter Spirup, State Police
- Jan Dean, Parks & Recreation *
- Marc Williams, Justice *
- Clark Seely, Forestry *
- Don O'Meara, Revenue
- Scott Harra, Consumer and Business Services
- Bret West, Administrative Services
- Shelli Honeywell, Corrections
- Curt Amo, Employment *
- Doug Kosty, Education
- Sue MacGlashan, Education
- George Naughton, Administrative Services *
- Kris Kautz, Administrative Services *
- Bill Crowell, Human Services
- Ben Berry, Transportation *
- David Yandell, State Police
- Baron Rodriguez, Education
- Bill Carpenter, Housing & Comm. Serv.
- Sandy Jefferson, Forestry
- Stan McClain, Revenue *
- Dan Adelman, Consumer and Business Services
- Mark Reyer, Administrative Services*
- John Koreski, Corrections
- Herb Riley, Veterans' Affairs
- Bob Devyldere, Water Resources
- Rick Crager, Housing & Comm. Services
- Jeff Marecic, Public Employees Retirement System *
- Dugan Petty, Administrative Services*

* Planning Steering Committee Members

Planning Team (Interview process, planning support, research & writing)

- Tim Avilla, Transportation
- Charlene Wood, Administrative Svcs.
- Scott Riordan, Administrative Svcs.
- Dennis Wells, Human Services
- Christine Samples, Administrative Svcs.
- Sean McSpaden, Administrative Svcs.

The current CIO Council Membership Roster can be found at:

http://www.das.state.or.us/DAS/EISPD/cioc_index.shtml

Executive Summary

The state of Oregon adopted its previous Enterprise Information Resources Management Strategy (EIRMS) in July 2005 envisioning a four-year planning horizon. In September 2006, state executive management and information technology (IT) leaders initiated a planning process to refresh that strategy.

This 2007 EIRMS also envisions a four-year action horizon (July 2007-July 2011).

The 2007 EIRMS supports the accomplishment of the Governor's goals, as well as the common, strategic business objectives of state agencies. It represents a common vision for planning, staffing, acquisition, management and shared use of IT resources throughout Oregon government.

2007-09 Biennium

To implement the strategy successfully and to make full use of future opportunities the enterprise must achieve Goal 1 of this strategy and its associated objectives as soon as possible (see next page). Most importantly, Goal 1, Objective 1.2 seeks to, "Implement IT governance required to manage and oversee the portfolio of enterprise IT projects."

The following strategic initiatives are already under way and are expected to be substantially complete within the four-year planning horizon:

- State Data Center
- Information Security
- Business Continuity Planning
- Geospatial Utility Project ("navigatOR")
- E-government
- State public safety wireless network (Oregon Wireless Interoperability Network or "OWIN")

The full electronic version of this 2007 - 2011 Enterprise IRM Strategy is available at: http://www.das.state.or.us/DAS/EISPD/cioc_index.shtml#Enterprise_IRM_Strategy

The following summarizes the Enterprise IRM Strategy, its vision, mission, and objectives across the 2007-2011 action horizon. Details appear in later sections.

Oregon Enterprise IRM Strategy Summary – July 2007-2011

Mission

Maximize the value of government IT investments to best serve Oregonians

Vision

Oregon government services are optimized through the innovative use of information technology

Goal 1

Effectively plan and execute government IT projects

Objective 1.1: Recruit, select, train, and retain IT professionals who possess essential management and technical capabilities.

Objective 1.2: Implement IT governance required to manage and oversee the portfolio of enterprise IT projects.

Objective 1.3: Develop an enterprise business and technical architecture and associated standards.

Objective 1.4: Adopt the policies, procedures, standards and guidelines needed to effectively and predictably initiate, plan for, acquire, implement, manage, and oversee the state's portfolio of information resources.

Objective 1.5: Integrate enterprise IT planning within the biennial budgeting process.

Goal 2

Ensure adequate state government management information and decision support capabilities

Objective 2.1: Develop and improve access to geospatial information across Oregon government.

Objective 2.2: Deploy statewide administrative information systems that meet agency business requirements.

Objective 2.3: Enable system integration and data sharing across agency and jurisdictional boundaries.

Objective 2.4: Prepare state government for the best value evaluation, acquisition, procurement and use of both open and closed source software solutions in compliance with Oregon statutes, rules and policies.

Goal 3

Optimize the efficiency and cost effectiveness of government infrastructure and services

Objective 3.1: Identify, prioritize, and develop detailed plans to act on opportunities for consolidation and shared services in the State Data Center.

Objective 3.2: Provide cost effective and reliable on-line government services.

Objective 3.3: Build a statewide interoperable wireless network to serve public safety.

Objective 3.4: Ensure the continuity of state government operations in the event of a disaster or other business interruption.

Objective 3.5: Secure and protect the confidentiality, integrity, and availability of state information resources.

Objective 3.6: Continuously improve the use of IT in support of state government programs and services.

Specific model deliverables can be found at:

http://www.das.state.or.us/DAS/EISPD/cioc_index.shtml#Enterprise_IRM_Strategy

This list of Model Deliverables includes known milestone dates.

Introduction

Oregon's government enterprise includes state agencies, local and regional governments, public schools, libraries and other information partners. Together, they use a mix of information technologies to manage and share information, and to provide an array of services to citizens and businesses.

An enterprise approach to managing information resources assumes a statewide perspective focused on how to best address citizen, business and agency needs. Coordinated enterprise-level action then depends on sustained strategic relationships, resource sharing and inter-agency and multi-jurisdictional collaboration. These diverse organizations seek to deliver services as effectively and efficiently as possible, and to ensure that those services are readily accessible to the people who need them when they need them. To succeed, the enterprise must view information resources and IT infrastructure as a strategic asset that can be innovatively managed to optimize government efficiency and cost-effectiveness.

Effective management of information resources and technology is based on three primary assumptions about government information technology investment.

1. Agencies must deploy and use IT assets in ways that benefit the business of government. Of primary importance is using IT to better serve citizens through reengineered business processes, streamlined interagency communications and programs, and through creation of new methods of delivering services to the people and businesses we serve.
2. The enterprise must identify, evaluate and select IT investments that meet the standards of: producing feasible solutions that utilize mature, proven and reliable technologies; and ensuring individual investments are considered and planned on an enterprise basis to ensure a maximum return to the total technology asset portfolio.
3. The enterprise must implement and operate IT investments effectively and economically. The investments must comply with the provisions of the state's business and technical architecture as it evolves. Implementation must align with the state's guidelines for project management and quality assurance.

The overall strategy for managing the state's IT resources must give priority to the enterprise as a whole while enabling and supporting agency mission deliverables. The goal is to find and sustain the optimum balance between addressing the business needs of individual agencies and the need to consider and deploy highly efficient and effective enterprise solutions. This holistic approach offers the greatest opportunity for state government, in collaboration with local government and business partners, to leverage taxpayer dollars and maximize the benefits of information technology.

Purpose

The purpose of the Enterprise IRM Strategy is to:

- Communicate a shared vision that guides IT staffing, planning, budgeting, procurement and delivery of government services.
- Guide state government prioritization of planned IT investments.
- Help direct state government toward the use of IT resources, processes, and plans that enable the achievement of the Governor's goals.
- Provide a framework that helps agencies, the Department of Administrative Services, IT governance bodies and the legislature evaluate proposed state investments in IT.

Mission for Enterprise Information Technology

Maximize the value of government's IT investments to best serve Oregonians.

Vision for Enterprise Information Technology

Oregon government services are optimized through the innovative use of information technology.

Key Success Factors

Improve citizens' access to government:

- Improve the accessibility and availability of the government information and services citizens need to make their lives more productive.
- Provide a common online access point citizens can use to access and communicate with their government.
- Enable Oregonians to more easily use the government services their taxes support.
- Protect citizen's trust by ensuring the state safeguards their information.

Enhance access to government for businesses:

- Provide businesses easy and secure access to government information and services.
- Provide online services that let businesses comply with government regulations and conduct other transactions (e. g. licensing, permitting, registration, and revenue collection) in the most efficient and cost-effective way possible.

Key Success Factors (Continued)

Improve government efficiency and effectiveness:

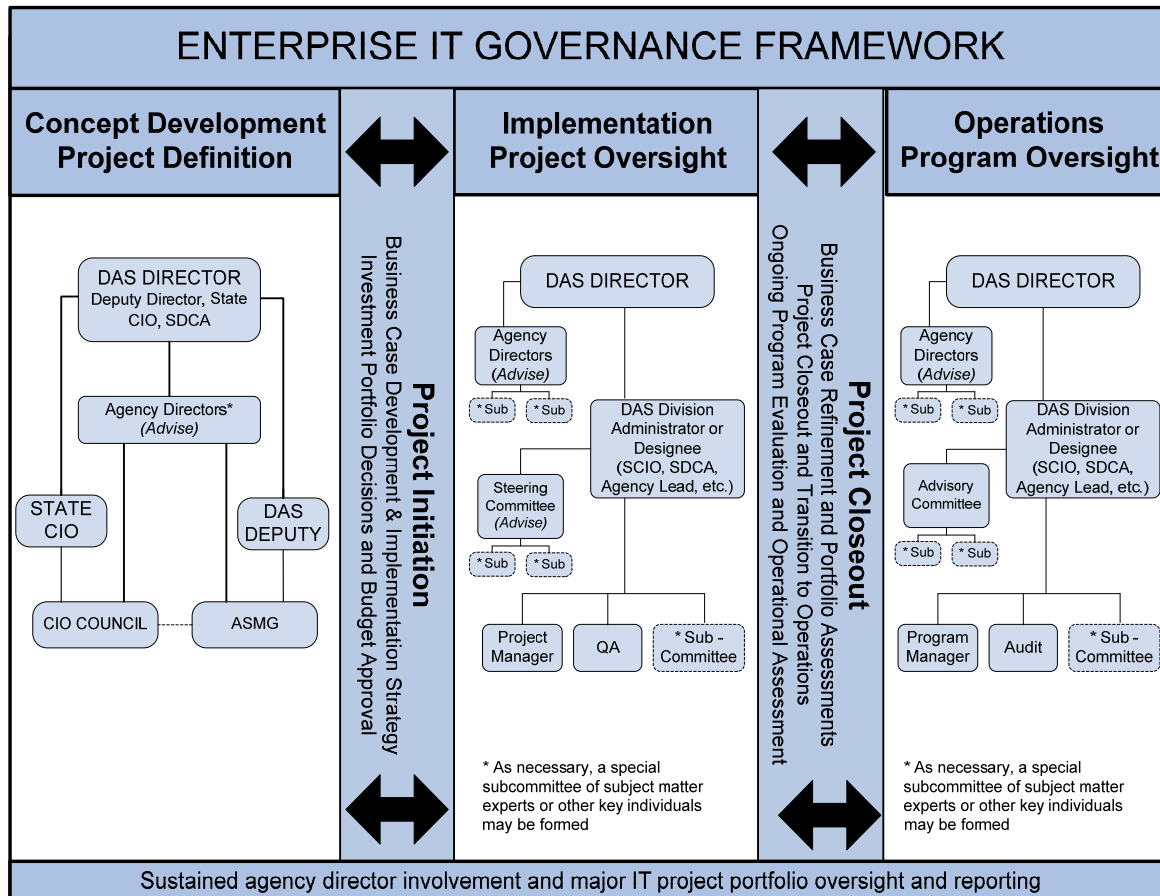
- Reduce the amount of paper to be collected, stored, and processed (e.g., document and records management).
- Develop the controls needed to reliably initiate, manage, oversee and deliver IT projects and programs.
- Develop the security and privacy controls and systems needed for agencies to effectively share information across agencies.
- Encourage collaboration among state agencies and federal, regional, tribal, and local government by using technology and sharing information more efficiently.
- Make transactions among government agencies more efficient and cost-effective.
- Pursue opportunities for collocation, consolidation, and use of shared services whenever a business case to do so exists.

Audience

- Oregonians
- Legislature
- State agencies
- Enterprise IT governance, management & oversight groups
- Federal, regional, tribal, and local governments
- County partners and other stakeholders
- Technical workgroups

Current Environment for Information Resources Management

The graphic below describes the present Enterprise IT Governance Model.



The Administrative Business Services Directors (ABSD) and the CIO Council are fully operational. Other independent IT governance bodies and oversight authorities not depicted on this graphic also exist or are being formed. A more detailed description of these entities appears in Appendix A.

Agency Director Interviews and Findings

Interviews with select agency directors, administrative business services directors and CIOs were an important part of this strategic planning process. The goal of the interviews was to identify and confirm the strategic objectives, strategies, and business needs of agencies across state government, and to bring the agencies' executive management into the planning process at the very beginning. (A description of the planning process appears in Appendix B.)

These interviews and informational reviews occurred during the fall of 2004 and 2006. The interviews led to the identification of common agency business needs in two areas:

1. Enhancing information technology capabilities:

- A. Improved capabilities in management information and decision-support
- B. Improved administrative information systems that meet agencies' business requirements (human resources, finance, budget, procurement, etc.)
- C. Improved information access, sharing, integration, and transformation
- D. Streamlined and automated business (back office) processes
- E. The ability to convert paper records to electronic formats
- F. The capacity to communicate directly with customers and survey their needs

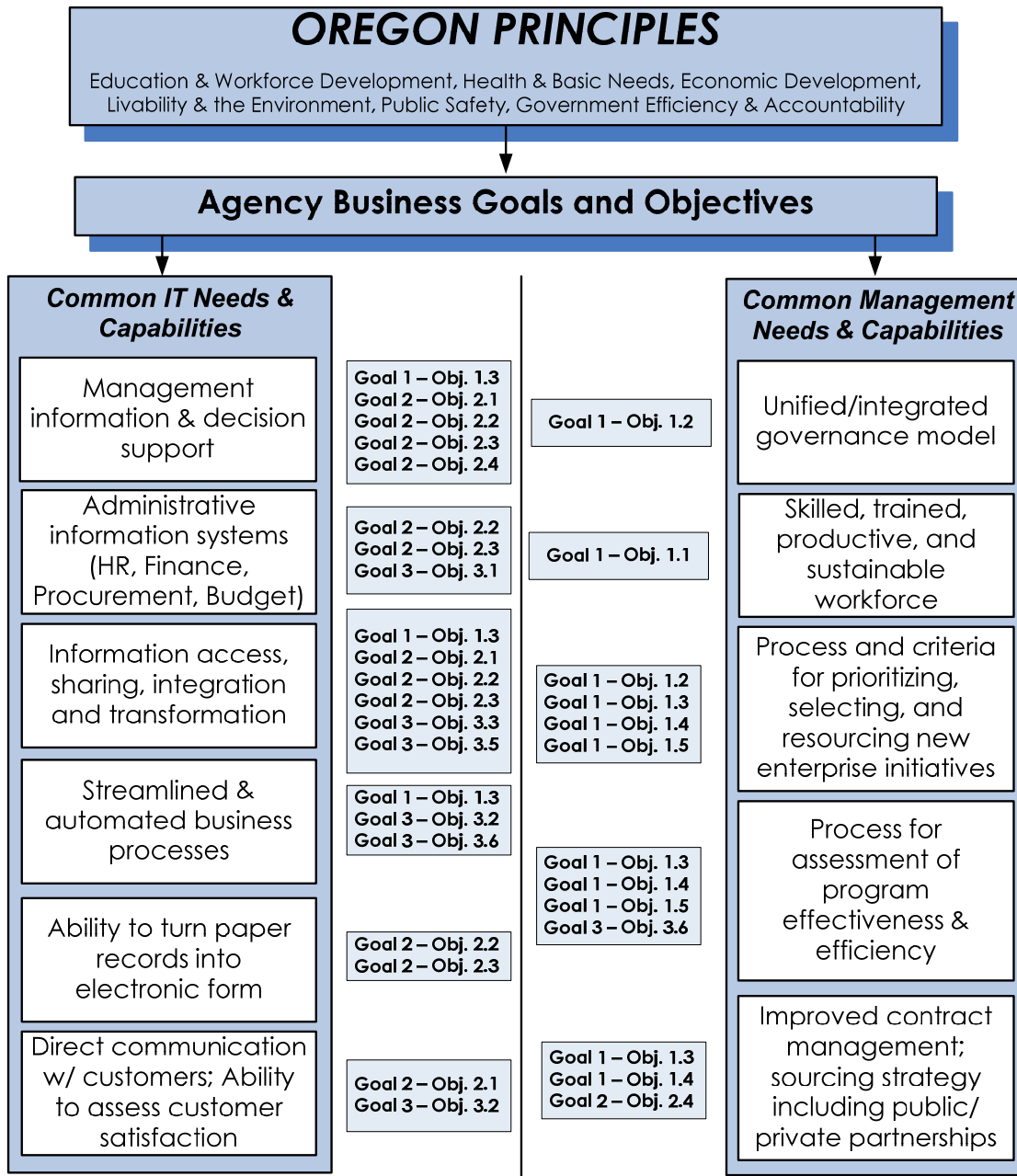
2. Expanding management capacity:

- A. A unified and integrated governance model for all enterprise issues (business & IT)
- B. A skilled, trained, productive, and sustainable workforce
- C. Process and criteria for business case development, prioritization, selection and resourcing of new enterprise initiatives (business and IT)
- D. Processes to evaluate the efficiency and effectiveness of programs and projects, including the ability to gauge customer satisfaction
- E. Improved contract management and sourcing strategies that include public and private partnerships

The interviews with agency directors in 2004 and 2006 proved extremely valuable resulting in this business-driven Enterprise IRM Strategy. The conclusions reached as a result of these interviews and those conducted in the future will continue to underpin any process for updating enterprise IRM strategies from this point forward.

Planning Team Response to Agencies' Common Business Needs

Strategic goals and objectives were established to address the common needs voiced during the 2004 and 2006 interviews with the agency directors. The following graphic illustrates how the goals and objectives align with those needs.



Note: Common IT and management needs and capabilities were identified subsequent to series of agency director interviews.

Enterprise IRM Goals and Objectives

The following goals and objectives provide direction for the 2007-11 action horizon.

GOAL 1: Effectively plan and execute government IT projects.

- Objective 1.1: Recruit, select, train, and retain IT professionals who possess essential management and technical capabilities.
- Objective 1.2: Implement IT governance required to manage and oversee the portfolio of enterprise IT projects.
- Objective 1.3: Develop an enterprise business and technical architecture and associated standards.
- Objective 1.4: Adopt the policies, procedures, standards and guidelines needed to effectively and predictably initiate, plan for, acquire, implement, manage, and oversee the state's portfolio of information resources.
- Objective 1.5: Integrate enterprise IT planning within the biennial budgeting process.

GOAL 2: Ensure adequate state government management information and decision-support capabilities.

- Objective 2.1: Develop and improve access to geospatial information across Oregon government.
- Objective 2.2: Deploy statewide administrative information systems that meet agency business requirements.
- Objective 2.3: Enable system integration and data-sharing across agency and jurisdictional boundaries.
- Objective 2.4: Prepare state government for the best value evaluation, acquisition, procurement and use of both open and closed source software solutions in compliance with Oregon statutes, rules and policies.

GOAL 3: Optimize the efficiency and cost-effectiveness of government infrastructure and services.

- Objective 3.1: Identify, prioritize, and develop detailed plans to act on opportunities for consolidation and shared services in the State Data Center.
- Objective 3.2: Provide cost-effective and reliable online government services.
- Objective 3.3: Build a statewide interoperable wireless network to serve public safety.
- Objective 3.4: Ensure the continuity of state government operations in the event of a disaster or other business interruption.
- Objective 3.5: Secure and protect the confidentiality, integrity, and availability of state information resources.
- Objective 3.6: Continuously improve the use of IT in support of state government's programs and services.

Enterprise IRM Work Plan

The 2007 - 2011 Enterprise IRM Strategy (EIRMS) is a “living document” that requires periodic refreshment well in advance of the state's biennial planning and budgeting process. This EIRMS refreshment will allow decision-makers to set an enterprise-level action path that guides agency planning and budgeting efforts.

Throughout the four-year planning horizon, the State Chief Information Officer (CIO) will ensure that EIRMS deliverables are defined and that milestone dates for completion of those deliverables are set. Semi-annually, the State CIO will ensure that goals and objectives are reviewed and revised as appropriate.

A formal approval process will govern commitments for deliverables and milestones, as well as the allocation of people and financial resources to complete the required work.

By December 1 of each year, the State CIO will, on behalf of the agencies of state government, issue a comprehensive report on the achievements in information resource management and implementation of the EIRMS goals and objectives.

Goal 1 – Effectively plan and execute government IT projects

Objective 1.1: Recruit, select, train, and retain IT professionals who possess essential management and technical capabilities.

Description: A sustained pool of talented professionals is essential to planning, implementing, and operating statewide, large-scale IT projects, enterprise-level initiatives, and programs. Attracting, retaining and acquiring a serviceable pool of knowledge workers present an ongoing challenge for industry and government. The imminent retirement of the Baby Boom generation adds urgency to the challenge.

The state of Oregon will take steps to ensure that it has sufficient numbers of managers and IT professionals with the expertise needed to design, plan, implement and sustain statewide, large-scale IT projects. The state will find ways to share IT expertise across agency boundaries as a way to optimize the value of those limited resources.

Objective 1.2: Implement IT governance required to manage and oversee the portfolio of enterprise IT projects.

Description: Effective planning and successful execution of statewide, large-scale IT projects requires sustained leadership, direction and oversight. Because their costs and impacts are substantial, these projects require management and oversight as a portfolio of investments. State executives will require information in a portfolio that is both current and reliable to ensure that the IT projects meet the state's goals and objectives.

Informed decisions on statewide projects depend on sound business cases and a thorough understanding of roles and responsibilities, which is the essence of effective IT governance. This means that statewide projects benefit from leadership that focuses on the established timeline and objectives, with enough budget and staff to complete the projects and ensure successful transition to operations.

The state of Oregon will implement an IT governance model that: acknowledges the DAS Director's role as the point of accountability for leading and implementing government-wide efforts; provides the forum for agencies to collaboratively plan and implement the range of strategic initiatives; provides a single coordination and oversight point for strategic initiatives; and enables authoritative decision-making that allows sustained, unified and iterative action over time.

Oregon's Enterprise IT governance will occur in three stages: 1) developing concepts and defining the project; 2) implementing and overseeing the project; and 3) overseeing program operations. Roles and responsibilities of agency leaders, experts and stakeholders vary at each stage. Sustained involvement by agency directors, as well as oversight of the major IT project portfolio and reporting, provides the framework necessary to ensure achievement of overarching objectives.

Objective 1.3: Develop an enterprise business and technical architecture and associated standards.

Description: The expanding importance of information resources requires strong and effective management by agencies and by state government as a whole. Managers and policy makers need a method that expresses the critical interrelationships among business strategies, information, technology and solutions within state government. That method is typically called "Enterprise Architecture."

Enterprise Architecture (EA) results in a logical and consistent set of principles - a "blueprint" for optimizing information systems and technology infrastructure in support of the state's business goals, objectives, and strategies. EA provides the predictable framework that converts vision to action, while aligning business processes, technology, and information to deliver effective solutions.

Development of an Enterprise Architecture that can effectively guide future action on a state government-wide basis is a sizable undertaking. This effort must be undertaken gradually. In early stages, EA development will focus on providing value to individual projects by helping to demonstrate direct connection to the state's overarching strategies, principles, and business requirements. As the EA effort matures, it can be used to guide project planning across an entire range of subject areas. At this point, EA can provide planners with a replicable methodology to: define the "as is" and future states; perform the gap analysis needed to establish a roadmap to achieve the future state; and enable the coordination of information resource activities across enterprise.

Objective 1.4: Adopt the policies, procedures, standards and guidelines needed to effectively and predictably initiate, plan for, acquire, implement, manage, and oversee the state's portfolio of information resources.

Description: To ensure that the state's portfolio of information resources are effectively managed, DAS will collaborate with state agencies to create an enabling policy framework comprised of administrative rules, policies, procedures, standards and guidelines. That policy framework will provide the appropriate level of guidance and direction required to initiate, plan for, acquire, implement, manage, and oversee the state's portfolio of information resources in the most integrated, economic and efficient manner possible. Within the policy framework, DAS will establish control standards that effectively guide management of IT projects and operations, and ensure that any subsequent audit of those practices is based on known evaluation criteria. This guidance will also define a consistent, repeatable, and measurable approach to planning and implementation of statewide, large-scale IT projects and other enterprise-level initiatives.

Objective 1.5: Integrate enterprise IT planning into the biennial budgeting process.

Description: Within agencies, as well as at the statewide level, planning for IT, business and strategy often occurs in isolated settings with little or no consideration of efforts under way in other organizations. Such planning frequently occurs outside the state's biennial budgeting process.

DAS, in collaboration with state agencies, will develop a formal, integrated process for business planning, IT planning, and budgeting. DAS will incorporate the requirements of that process into the biennial budget instructions to all agencies.

Integrating planning and the budget process will link efforts in IT project development with the state's biennial planning and budgeting cycle. DAS will optimize and streamline the integrated planning process by developing and deploying standardized templates, guidelines, tools, techniques, and training for planning, budgeting, business case development and project planning. The Department will also provide access to a "best practices" library of that material.

This integrated planning and budgeting process is expected to produce well planned and successfully implemented large-scale IT projects and enterprise-level initiatives that will optimize state government services and infrastructure.

Goal 2 - Ensure adequate capabilities in state government for management information and decision-support.

Objective 2.1: Develop and improve access to geospatial information across Oregon government.

Description: It has been estimated that at least 85 percent of all information used by government to manage programs and make decisions is geographic information that relates to a specific location on the face of the earth.

Geospatial Information Systems (GIS) technology allows the collection of such information from a wide variety of sources. The technology also enables agencies to use the information to identify relationships and trends. Assuming that agencies can overcome the barriers that inhibit information-sharing and collaboration, geospatial information can enable government to make better decisions and use its resources more efficiently and effectively.

As a fundamental building block to optimize the performance of government, the state will create a statewide GIS utility, "navigatOR," which will accelerate efforts to develop statewide geospatial data, while extending and enhancing access to geospatial information and analysis throughout government across Oregon.

Oregon's approach to geospatial data development, sharing, and stewardship will establish a new model for cross-jurisdictional collaboration, resulting in higher efficiency and greater effectiveness in delivering public services.

Objective 2.2: Deploy statewide administrative information systems that meet the business requirements of agencies.

Description: The Statewide Financial Management Systems Plan received its latest update in 1991, more than 16 years ago. By 2009, the core information systems that DAS oversees - human resources, benefit management, finance, budget, and procurement - will range in age from four to over 30 years.

In addition to these core administrative information systems, most state agencies have created their own systems to better manage their budgets, personnel, purchasing, records and documents, and other common administrative processes. Few of these agency-specific systems interface with other agencies' systems, and in many cases do not interface with central systems.

Agencies need robust and integrated administrative systems that meet their day-to-day business requirements more closely. They need real-time access to the spectrum of information contained within these systems to optimize performance and make timely, high-quality decisions.

The state of Oregon has begun a multi-year effort to identify state and agency business requirements for common administrative information systems. Though various agencies will prototype separate components of these systems, the state will undertake planning and implementation through a collaborative enterprise approach.

An enterprise approach makes possible solutions that serve multiple agencies eliminating expensive redundancy, while also taking advantage of powerful processes that individual agencies probably could not afford on their own. Over time, the state of Oregon will create a common administrative infrastructure that will support high-quality management, decision-making and offer new strategic capabilities through which to optimize government performance.

Objective 2.3: Enable system integration and data-sharing across agency and jurisdictional boundaries.

Description: An inextricable link exists between human, environmental and economic issues in every aspect of government. However, links between the information systems that support programs are limited or do not exist at all.

The information that resides within government computer systems is a precious asset. Because state and local governments serve the same citizens and business customers, they collect and keep much of the same basic information. If for no other reason than privacy and confidentiality, integration and sharing of such information is difficult if not impossible, even when the rationale to do so is strong and persuasive.

Ensuring that government agencies have the information they need to be effective, both individually and collectively, is not a technical issue. Rather, it is a cultural issue. Agencies must begin to see themselves as a part of a broader, statewide organization.

The state of Oregon will embark on a multi-year effort to: identify barriers to system integration and data sharing; identify areas where system integration and data-sharing can improve service to citizens, management practices and decision-making; establish the standards and processes that make system integration and data sharing possible; and eliminate duplication of effort at all levels of government to the greatest possible extent through the use of systems integration and data sharing.

Objective 2.4: Prepare state government for the best value evaluation, acquisition, procurement and use of both open and closed source software solutions in compliance with Oregon statutes, rules and policies.

Description: The State of Oregon is a globally recognized leader in open source innovation. Oregon is home to the Open Technology Business Center and the Oregon State University Open Source Lab (OSU OSL). Oregon hosts the Government Open Source Conference (GOSCON) annually attended by representatives of federal, state, local, and municipal governments, as well as industry representatives and academia.

Where the opportunity exists, Governor Kulongoski has encouraged state government to continue to build bridges to those in industry and academia who are involved in open technology and to find ways to increase government efficiency through the effective and innovative use of technology in the future.

Open source represents a new business model for community based development, maintenance and technology refreshment. Open source software is built upon the principle that end users should be provided the source code of information systems programs and should be free to use, share, modify and enhance software products. The goal is widespread interoperability, permissive incorporation into new technologies and new systems, and control over the destiny of the systems employed by users and organizations.

Some open source products are available royalty-free, although the precise rights and restrictions imposed on open source software depend upon the specific terms of the open source license under which it is distributed. Like closed source software licenses, open source licenses pose their own set of legal, business and technical issues for the users and the organizations employing these products.

The state's CIO Council has chartered an Open Source Community of Practice to prepare state government for the best value evaluation, acquisition, procurement and use of both open and closed source software solutions in compliance with Oregon statutes, rules and policies.

Goal 3 - Optimize the efficiency and cost-effectiveness of government infrastructure and services.

Objective 3.1: Identify, prioritize, and develop detailed plans to act on opportunities for consolidation and shared services in the State Data Center.

Description: Shared services are those infrastructure or back-office functions that agencies perform in basically the same way. DAS provides many such services to eliminate wasteful reinvention and duplication of systems and processes by individual agencies.

In 2005, the state of Oregon built a modern State Data Center (SDC) to house most of the state's computing and networking infrastructure. Migration of the infrastructure to the SDC is a significant first step in streamlining and modernizing the state's technical capabilities.

The state of Oregon will now embark on a multi-year effort to optimize the strategic value of the State Data Center by identifying and pursuing opportunities to consolidate and develop shared services. The state will develop a comprehensive plan and business case that addresses the portfolio of potential consolidation and shared service initiatives. The state will then apply enterprise architecture to enable the SDC and agencies it serves to collaboratively design a roadmap to the future. Business process inventory, analysis and reengineering prior to application consolidation will be essential.

Objective 3.2: Provide cost-effective and reliable online government services.

Description: Oregonians expect interactions with government to be efficient and convenient. Citizens and business customers expect easy, integrated, reliable and secure access to government information and services online at any time. They also want the ability to make payments online, using a variety of methods that include credit cards, debit cards, and e-checks.

The state has implemented an award-winning state portal (Oregon.gov), a content-management system creating a common look and feel for Web content across all agencies, and an e-commerce function that allows agency customers to pay for licenses, registrations, and products through the Internet. State agencies provide online services today, and have positioned themselves to make substantial gains in delivering online information and services to Oregon's citizens and businesses.

The state of Oregon will promote and accelerate online information and service delivery as a means to improve government efficiency and service quality, and enhance citizen and business access to government.

Objective 3.3: Build a statewide interoperable wireless network to serve public safety.

Description: As public safety agencies' communication systems age, the risk of failure increases. Aging systems threaten to compromise the safety and wellbeing of the public who depend on these lifesaving communications systems, as well as the safety of the first responders and law enforcement officers who rely on the systems to do their jobs. Public safety professionals need reliable communications systems to respond to routine daily events and extraordinary emergencies. They must be able to exchange voice and data communications (i.e., "interoperability") with their partners in other levels of government, if an emergency occurs that involves more than one jurisdiction.

In 2005, the legislature and Governor Kulongoski enacted HB2101 directing the state of Oregon to develop, finance, maintain and operate a single emergency response wireless communications infrastructure. That infrastructure must meet Federal Communications Commission mandates for conversion of public safety communications frequencies and spectrum allocation by 2013. Further, that infrastructure must support both the communications needs of all state public safety agencies and ensure interoperability among all state, local, tribal and federal public safety agencies, thereby maximizing shared use of this invaluable public asset. The Oregon Wireless Interoperability Network (OWIN) effort is now under way.

Objective 3.4: Ensure the continuity of state government operations in the event of a disaster or other business interruption.

Description: Services to state agency customers and the public would effectively cease if the state's IT infrastructure and key information systems became inaccessible for an extended period of time. In some cases, failure or inaccessibility of a critical core business process may immediately jeopardize public health and safety. If confronted with such an event, the state must ensure restoration of mission-critical business functions, computer resources, and data. The state will create the policies, plans, procedures and tools needed to ensure the state can ensure continuity of operations.

Objective 3.5: Protect the confidentiality, integrity and availability of state information resources.

Description: All agency operations have become increasingly dependent on information and technology. Information has become a strategic asset and protecting it has become one of the state's highest priorities. At stake are the state's physical and financial resources, reputation, legal position, employees, partners, and the trust and confidence of Oregonians.

House Bill 3145 (2005 Legislative Session) established a central point of accountability and coordination for enterprise information security within the Oregon Department of Administrative Services (DAS). The DAS Enterprise Security Office (ESO) is responsible for providing statewide vision, leadership and oversight; and, for ensuring the state's information security risks are assessed and that appropriate safeguards are applied. To do so, ESO is developing an information security risk management program that: identifies and achieves an acceptable level of risk across the agencies of state government; standardizes and institutionalizes security processes and systems; and establishes a security culture characterized by agency accountability and security awareness.

Through these and other efforts at the agency level, the state will strengthen the security of its information resources and ensure the sustained confidentiality, integrity and availability of its information assets.

Objective 3.6: Continuously improve the use of IT in support of state government programs and services.

Description: IT underpins virtually all government business processes and is an enabler of business process automation. Without hard facts about the use of IT and its value to government and citizens, policymakers cannot be certain that prudent management of IT investments is occurring at either the agency or the enterprise levels. Continuous improvement is both a business and IT endeavor, with IT supporting the business processes of state government programs.

The state's Administrative Business Services Directors (ABSD) and Chief Information Officers Council (CIOC) will initiate a range of "Communities of Practice" workgroups to ensure continuous improvement on an enterprise basis. This approach joins business and IT experts to collaborate in continuous, enterprise-level improvement. The state will also develop and deploy the objective means to define current information resource performance and track improvement over time. This work will necessarily involve the development of metrics, external benchmarks, and performance targets.

Appendix A: Independent Governance Bodies

Other independent IT governance bodies and oversight authorities also exist or are in the process of being formed. They include:

1. Information Resources Management Council (IRMC)

Among other things, ORS 291.038 states that the planning, acquisition, installation and use of all information and telecommunications technology by state government and its agencies shall be coordinated so that statewide plans and activities, as well as those of individual agencies, are addressed in the most integrated, economic and efficient manner.

To provide policy direction for and coordination of information technology for state government, ORS 291.038 directs the Director of the Oregon Department of Administrative Services to chair and appoint not fewer than five agency executives to an Information Resources Management Council. ORS 291.038 prescribes that the council membership shall include at least two members representing the private sector and political subdivisions of the state.

Enabling ORS 291.038 can be found at:

<http://www.leg.state.or.us/ors/291.html>

2. Oregon Geographic Information Council (OGIC)

The Oregon Geographic Information Council (OGIC) is the governing body for GIS activities across the enterprise of Oregon state government. OGIC develops policy guidelines and provides coordination and leadership for the management and use of geographic information and Geographic Information Systems (GIS) technology. The OGIC also endorses and coordinates the development of data standards for geographic information.

The enabling Executive Order, EO-00-02, establishes a relationship between the policies and guidelines of OGIC and the Enterprise IRM Strategy.

Executive Order 00-02 can be found at:

http://arcweb.sos.state.or.us/governors/Kitzhaber/web_pages/governor/legal/execords/eo00-02.pdf

3. State Interoperability Executive Council (SIEC)

Originally chartered under Executive Order 02-17, the Oregon State Interoperability Executive Council (SIEC) was established as a statutory council as part of HB2101 - passed in the 2005 Legislative Session. HB2101 created the SIEC within the Office of Emergency Management. Among other things, HB2101 directs the SIEC to:

- Work with public safety agencies in the state to develop the Infrastructure Replacement Plan
- Develop the Oregon Interoperable Communications Plan, the goal of which is to achieve statewide interoperability within six years

The SIEC members appointed by the Governor represent a unique partnership of state and local public safety organizations that have a strong interest in the creation and operation of public safety communication systems.

Enabling HB2101 can be found at:

<http://www.leg.state.or.us/05reg/measpdf/hb2100.dir/hb2101.en.pdf>

4. Criminal Justice Information Standards (CJIS) Advisory Board

The Department of State Police, or the criminal justice agency designated by the DAS Director, is responsible for operating a CJIS program that coordinates information among state criminal justice agencies. The program is charged with ensuring that data can be retrieved to support evaluation of criminal justice programs; establishing methods and standards for data interchange and information access between criminal justice information systems; designing and implementing improved applications for exchange of agency information; and implementing the capability to exchange images between criminal justice agencies.

The program is also tasked with developing a plan to accelerate data sharing and information integration among criminal justice agencies. The Chief Information Officer for the Oregon State Police chairs the CJIS Advisory Board. The 21-member CJIS Advisory Board includes the State CIO and four local government representatives.

Enabling ORS 181.715 - 181.725 can be found at:

<http://www.leg.state.or.us/ors/181.html>

5. Oregon Telecommunications Coordinating Council (ORTCC)

The ORTCC is responsible for enhancing the coordination of local, regional, and state telecommunication plans to accelerate the development of advanced telecommunication services to the entire state of Oregon. The ORTCC will provide recommendations that will be used by the Governor, the legislature, state agencies, local and regional governments, and the private sector to allocate limited telecommunication resources in the most strategic and cost-effective manner to serve all Oregonians.

Enabling Oregon Laws 2001 Chapter 699 can be found at:

[http://www.ortcc.org/PDF/orlaws0699\[1\].pdf](http://www.ortcc.org/PDF/orlaws0699[1].pdf)

6. DAS Enterprise Information Strategy and Policy Division (EISPD)

The Enterprise Information Strategy and Policy Division is a state government-wide information technology (IT) and information resources management (IRM) planning, policy, standards setting, program development and oversight division within the Department of Administrative Services (DAS). The division is led by an administrator who also serves as the state of Oregon's Chief Information Officer (CIO). The division is comprised of the

following sections: the E-government Program; the Geospatial Enterprise Office; the Enterprise Security Office; the Enterprise Business Continuity Planning Program; and the IT Investment and Planning section. It is funded by assessment and rates charged for the services provided.

The DAS EISPD Web site can be found at:

<http://www.das.state.or.us/DAS/EISPD/index.shtml>

7. Joint Legislative Committee on Information Management and Technology

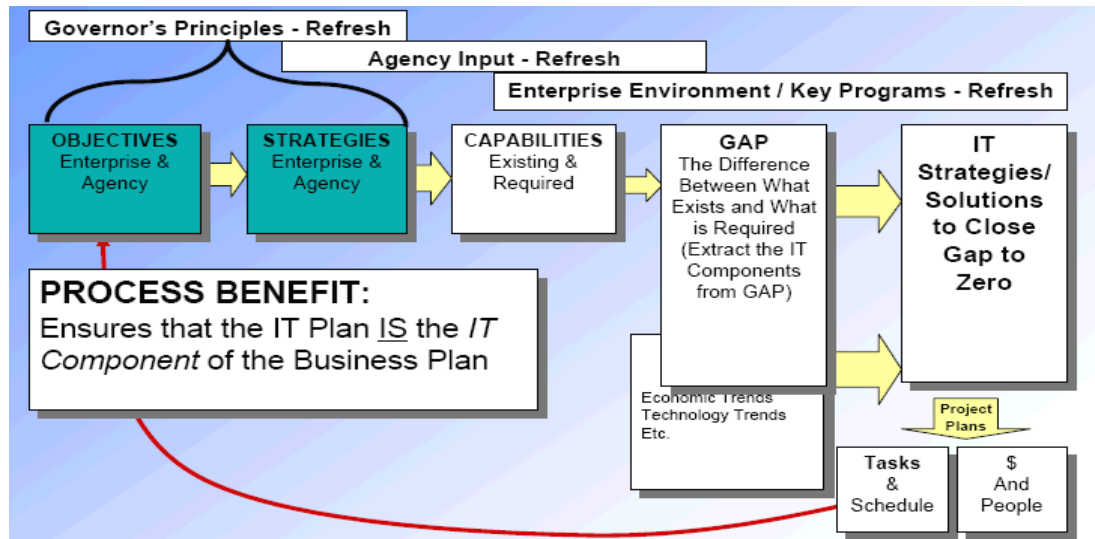
The Joint Legislative Committee on Information Management and Technology (JCLIMT) provides legislative direction and project oversight. The JLCIMT was created to review statewide data processing goals and policies, to make recommendations to the Legislative Emergency Board or Ways and Means Committee regarding established and proposed data processing programs and data processing equipment acquisitions, and to conduct studies of data processing efficiency and security.

The enabling Oregon Revised Statutes (ORS 171.852 - 171.855) can be found at: <http://www.leg.state.or.us/ors/171.html>

Appendix B: Strategic IT Planning Process

The state of Oregon's current Enterprise IRM Strategy was adopted in July 2005. That strategy was developed based on a four-year planning horizon.

In support of the Governor's goals, state executive, management and information technology leaders initiated a planning process designed to refresh that strategy. The 2007 Enterprise IRM Strategy development process was conducted from September 2006 to June 2007. The process as originally envisioned is illustrated in the following diagram.



At the highest level, the process involved:

- Agency director interviews to identify primary business objectives and strategies;
- Review and analysis of interview notes, Agency Budget Request documents, Governor's goals, legislative direction, Oregon Benchmarks and measures, existing enterprise and agency plans and initiatives, etc. ;
- A feasibility assessment and a gap analysis between existing capabilities and those capabilities needed to successfully achieve agency/enterprise objectives;
- IT strategy formulation, review and prioritization; and
- Enterprise IRM Strategy finalization.

The planning process is expected to produce: an updated enterprise IT strategy; and a roadmap for the enduring processes required to permanently integrate enterprise planning, budgeting, funding into the agency biennial budgeting process.

The strategy will be developed on a four year action horizon and updated on at least a biennial cycle.

Appendix C - Glossary of Terms and Acronyms

Terms

Benchmark – a point of reference from which measurements may be made. A benchmark is something that serves as a standard by which other products, services, technologies or performance may be measured or judged.

Benchmarking – a systematic process of continuously measuring an organization's critical business processes and operational performance against that of similar organizations or to one's own business processes and operational performance over a defined period of time. Benchmarking is performed to gain information which will help the organization take action to improve its performance.

Capability Assessment – an inventory and evaluation of the capabilities and resources required to achieve specific objectives and strategies (i.e. money, expertise, support, infrastructure... etc). A capability assessment demonstrates that the resources available within the organization are sufficient to achieve specific objectives and strategies...or not.

GAP Analysis – a process designed to identify and evaluate the difference (the gap) between an organization's current capabilities and those required to successfully implement strategies.

Goal – the end toward which the organization's efforts are directed - high level outcomes the organization aspires to achieve. Goals provide a clear and understandable direction for action and reflect the organization's priorities. Goals are beacons for the "ship" and the "fleet."

Mission – a clear and concise expression of the organization's purpose and function - identifying what the organization does, why, and for whom. The mission represents the unique purposes promoted and served by the organization. The mission serves to focus attention and energies on the organization's major purpose - acknowledging reality but also aspiring to the ideal.

Objective – a commitment of the organization to achieve specific, measurable end results that lead to the accomplishment of a goal. Objectives are measurable, demonstrable, or observable in, at least, two of the following terms: (1) time, (2) money, (3) quality, and (4) quantity.

Principle – a fundamental truth or proposition serving as the foundation for belief or action. A principle is an underlying, comprehensive and fundamental assumption required in a system of action or thought.

Priority – a goal, objective, strategy or issue that, given current conditions, represents high importance in carrying out the agency's goals and mission. Priorities are what make strategic planning "strategic" in that they guide the use of an organization's resources for the greatest possible good. "If everything is a priority, nothing is."

Strategic Planning – an iterative process by which an organization commits to a future destination and the means to get there. Strategic planning is a series of decision points supported by the best analysis and information possible. The decision points can be articulated as four simple questions. 1) Where are we? 2) Where do we want to go? 3) How do we get there? 4) How did we do?

Strategy – a preplanned commitment to deploy the organization's resources toward achieving stated objectives. Strategies tell how the organization will accomplish its objectives. Strategies are designed to close the gap between the organization's desired future and its current situation -- the means to the end.

Vision – a compelling, inspiring, values-based description of the organization's desired future - a consciously created image of what the organization is striving to become. It clarifies what the organization should look like and how it should conduct itself as it fulfills its mission.

Acronyms

ABSD – Administrative Business Services Directors

BCP – Business Continuity Planning

CIO – Chief Information Officer

CISO – Chief Information Security Officer

CJIS – Criminal Justice Information Standards

DAS – Department of Administrative Services

E-Gov – Electronic Government

EISPD - DAS Enterprise Information Strategy and Policy Division

FCC – Federal Communications Commission

GIS – Geospatial Information Systems

IRMC – Information Resources Management Council

IRM – Information Resources Management

IT – Information Technology

OGIC – Oregon Geographic Information Council

ORTCC - Oregon Telecommunications Coordinating Council (ORTCC)

SDC – State Data Center

SIEC – State Interoperability Executive Council