



OREGON INFORMATION RESOURCES

STRENGTHEN. OPTIMIZE. INNOVATE.

**Enterprise Information Resource
Management Strategy
2010-2015**

V1.5 – January 29, 2010

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EXECUTIVE SUMMARY

Background

The 2010-2015 EIRMS development effort was led by the Department of Administrative Services (DAS) on behalf of the agencies of state government. The conclusions, goals and strategies in this document have been collaboratively developed. This update occurs at a time of unprecedented challenges to citizens and the state government services upon which they rely. It provides a multi-agency framework to address the full range of challenges while also producing the added value of predictably optimizing overall cost, effectiveness and efficiency of information resources.

Vision

The EIRMS describes a vision for the strategic management of information resources over a six-year planning horizon. It anticipates a combination of actions to allow agencies to work together to identify and act to optimize:

- Agencies' business processes and support systems;
- Better target agencies' resources on achieving missions and business objectives; and
- The cost, efficiency and effectiveness of information resources overall.

This strategy provides a road map for change in the management of Oregon's information resources ([Appendix B](#)).

Challenges and Change Drivers

The nation's economic downturn has had profound effects on Oregon's citizens. Many have an increased need for government services and information. Citizen expectations for online government services, information and data and information are increasing because of their experience with the Internet. The population of the State of Oregon continues to expand. State government needs to respond to this changing economy and population-driven increase in demand for government services and information.

Many agency and multi-agency initiatives related to information resource management are underway. Each of these initiatives requires different types of agency involvement (i.e., agency directors, administrative leaders, technology leaders, subject matter experts, etc.). Since these multi-agency initiatives are not bundled as coordinated activities, participant's time is not used efficiently. There is no single, unifying forum for agencies to come together to jointly consider and agree on overarching, multi-agency direction. Information resource-related projects that are repeated in every agency unnecessarily or overlap drive up complexity and cost.

All agencies have electronically enabled business processes. Agencies have a wide spectrum of business systems to support operations. Diversity of agencies' business systems and supporting technical infrastructure has led to an explosion of technological complexity. This complexity makes information resource management even more difficult. Redundancy in business support processes common to all agencies has led to unnecessary cost. Progress has been made by consolidating multiple agency computing centers and networks into one State Data Center. More needs to be done. IT projects take too long to complete. In a risk averse environment there is little appetite for innovation or change. New methods are needed to innovate and effectively deliver IT projects and services.

Key trends and drivers include:

- Information technology infrastructure required for citizens to interact well with their government;
- Information availability to citizens;
- Stewardship of public assets through prudent management of investments, projects and expenditures;
- Value added information and data for informed decision-making by citizens and agencies;
- Geolocation of data creating added value and relevance;
- Data and records management challenges; and
- Information security, privacy and confidentiality.

Members of the Oregon Legislature raised concerns about state government-wide information resource management during the 2009 session. A Budget Note issued by the Joint Ways and Means Committee ([see Appendix L](#)) itemized those concerns at a high level. This document provides a solution.

A new multi-agency approach that promotes innovation through collaboration in governance, planning, and management is needed to overcome common challenges and meet the demand of known trends.

Strategy Highlights

Goal 1 – Strengthen Strategic Governance

The current siloed approach to information resource governance demands an excessive resource commitment. It also fails to produce a “for the good of all” view of information assets and opportunities. A new, united governance model will engage top agency executives to establish and support business priorities at the strategic multi-agency or enterprise level. The united model will make guiding the planning and deployment of information resources across state government more effective. Governance will be provided by an executive group supported by DAS and agency professionals. The governance mission is to propose collaborative investments in innovative business solutions to improve value, cost efficiency and effectiveness. This governance model will provide strategic capability not possible by individual agencies. Executive-level, multi-agency guidance and accountability will result in more robust project controls, budget development and oversight.

Goal 2 – Optimize Information Resource Investments

A comprehensive portfolio management system will provide an enterprise view of information assets, needs and investments. Oregon’s investment in information resource is large and complex. Over 1,400 agency employees provide the information technology infrastructure to support state operations. Management of these assets must be coordinated and targeted to strategic purpose. Assets like the State Data Center investment must progress rapidly to maturity to fully realize the benefits of the investment. Information resource functions within DAS must be reviewed and reorganized to provide critical functions within available funding. Strategies to consolidate systems (such as separate state e-mail systems) into a shared resource will prevent duplication and reduce ongoing costs.

Goal 3 – Innovate Service Delivery

New and innovative use of proven technologies positions state agencies to meet their business objectives and to interact with citizens. Innovative technology solutions are assessed and piloted by a multi-agency team on behalf of all agencies. This reduces the need for individual agency research and will result in better choices for agencies. An effective e-government portal with applications to enable agencies to meet citizen expectations and improve the citizen experience creates government credibility. Improved data sharing between state agencies not only reduces costs, but results in smart and more effective solutions. Focused and prioritized development of shared administrative systems reduces costs and provides more effective government services. Agencies with recognized competency and leadership in certain information resource-related solutions provide effective shared services for other agencies.

Conclusions

In the execution of mandates, goals and objectives, Oregon’s state agencies can no longer afford to operate separately when it comes to developing and supporting the core business activities of government. The strategy proposes new ways for agencies, individually and collectively, to achieve success.

This strategy has at its core a new approach in information resource management. With change comes added risk. New solutions also come with risk. It is not prudent or cost effective to manage to a risk-free environment. State government must be prepared to accept the potential of risk to achieve cost reductions or improved outcomes. State agencies can no longer afford to operate separate islands of business solutions that are core to all agencies. State business managers must work together to help design and deploy common, cost effective solutions that achieve agencies mutual business needs. Information systems must be the prime channel for providing government information transparently, and to drive costs down. By creating agency-led centers-of-excellence providing business solutions for all other agencies, other agencies can quickly benefit from these shared services.

The 2010-2015 EIRMS describes actions needed to:

- Help agencies’ achieve missions and business objectives through the innovative information resources management;
- Improve the overall cost, efficiency, effectiveness, value and strategic capability of information resources; and
- Provide decision-makers and stakeholders a meaningful way to understand the pace, quality and return-on-investment of forward progress.

NOTE: More detail on the guiding principle, strategic change drivers, agencies' common needs and the vision statement can be found in the appendices.

PURPOSE

The purpose of the 2010-2015 EIRMS is to:

- Establish a **shared** vision to guide the use of information resources across state government;
- Provide a **roadmap** for a productive, multi-agency approach to information resource management; and
- Ensure stakeholders have a continuous understanding of the **shared value** that is derived from state government's use of information resources.

GUIDING PRINCIPLES

Several principles have been developed to guide the EIRMS implementation over time.

- **Interoperable Enterprise** – The agencies of the State of Oregon should function as an interoperable enterprise.
- **Timely Results** – Agencies derive value from effective and efficient use of affinity groups, enterprise collaboration, and multi-agency sharing to deliver timely results transparently.
- **Stakeholder Value** – Enterprise efforts are driven from the perspective of stakeholder value.
- **Build On Success** – Successful approaches are replicated or built on to improve results.
- **Value of Standardization** – Agencies recognize the value of standardization to reduce risk, increase value, provide consistency, improve efficiency and reduce or avoid cost.
- **Security** – Agencies respect the public trust by protecting the security and integrity of the public's information.
- **Innovation and Risk** – Strategically balance efforts to manage risk and the innovative use of information resources to produce greater value, efficiency, and effectiveness.

[Appendix C](#) provides more detail about each of the guiding principles.

STRATEGIC CHANGE DRIVERS

Expectations for government have changed, and the rate of change is increasing. Several change drivers ([see Appendix D](#)) must be factored into strategic planning including:

- Increasing Demand for Service
- Changing Citizen Expectations
- Reduced Revenue
- Redundant, Non-standard Information Resources
- Agencies' Variable Approaches to Forward Progress
- Increasing Administrative Systems Challenges (i.e., imaging, data, records management, etc)

There are several trends occurring in information resource management that rise to the level of "Mega Trend" ([see Appendix E](#)). These trends require a coordinated approach to avoid added cost and unsatisfactory results. Mega trends include:

- Government Interaction with Citizens
- Transparency of Information
- Information Needed for Informed Decision-making
- Geolocation of Data
- Information Security

AGENCIES' COMMON NEEDS

In the planning process, agencies defined common needs for information resource management ([see Appendix A](#)). Seven areas were identified as priority common needs.

Enterprise Information Resource Management Strategy (EIRMS) – v1.5

- **Reduce Complexity** – Diminish complexity through standardization and consolidation in whenever possible to lower cost and free valuable resources to focus on agencies' mission and business objectives.
- **Integrated Governance** – Create an enterprise approach that directly involves key stakeholders and decision-makers on a sustained basis leading to a deeper and more comprehensive understanding of the purpose and value of the portfolio of enterprise target outcomes and activities.
- **Enterprise Portfolio** – Create and continuously report a single, unified view of enterprise activities – a high-level inventory, roadmap and status – to provide stakeholders and decision-makers a shared understanding of enterprise activities.
- **Increase the Pace of Progress** – Devise standardized enterprise processes that result in quicker action while balancing risk and appropriate due diligence. Act on the range of enterprise opportunities to better meet the needs of agencies.
- **Enterprise / Agency Fit and Integration** – Create enterprise planning, budgeting, and funding models that:
 - o Precedes agency budget cycles;
 - o Shortens lead-time requirements to better address agencies' business requirements;
 - o Dynamically responds to ever-changing conditions; and
 - o Integrates enterprise activities into agencies' operational resource allocations.
- **Appropriate Resourcing** – Devise a way to resource enterprise activities independently from agencies ongoing operations when necessary to avoid placing a resource demand on agencies that cannot be absorbed naturally.
- **Extend Service Delivery and Improve Citizen Experience** – As an example, take advantage of Web-enabled technology to provide services that meet the expectations of citizens while also reducing cost and improving efficiency for agencies.

To better understand how each goal and strategy addresses agencies' common needs, please [see Appendix K](#).

VISION STATEMENT

The changes driving government demand new solutions. The response to those changes must be well-considered and offer rapid, suitable solutions. Multi-agency innovation, planning and action will get the most out of existing investments. Existing investments and centers-of-excellence are leveraged to provide greater value. New solutions facilitate citizen interaction with government. Processes are open and transparent. Partnerships cross agency and jurisdictional boundaries. Cross-agency teamwork is the unifying theme of the EIRMS. Working together to the benefit of the whole is the best strategy for the future.

For more information about the vision behind the EIRMS, please [see Appendix B](#).

OVERVIEW OF MISSION, VISION, GOALS, STRATEGIES

MISSION

Maximize the value of government information resource investments to best serve Oregonians

VISION

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

GOAL 1

STRENGTHEN strategic governance.

- [Strategy 1.1:](#) Establish an IT governance model that advances consolidation efforts where feasible and champions agency-centric solutions where required
- [Strategy 1.2:](#) Establish an effective enterprise planning, funding, and resource allocation model to successfully implement enterprise and multi-agency initiatives
- [Strategy 1.3:](#) Strategically manage the IT workforce to meet current and future needs
- [Strategy 1.4:](#) Develop a multi-agency framework that allows agencies to interoperate effectively to optimize common business processes and information resource support

GOAL 2

OPTIMIZE information investments.

- [Strategy 2.1:](#) Identify and act on opportunities for consolidation and shared services
- [Strategy 2.2:](#) Reduce the complexity of the existing IT infrastructure and processes
- [Strategy 2.3:](#) Optimize DAS and agency information resource delivery

GOAL 3

INNOVATE service delivery and improve access to government services and information.

- [Strategy 3.1:](#) Improve citizen interaction with government services and information
- [Strategy 3.2:](#) Establish capabilities to evaluate, prototype, and pilot potential innovative solutions and risk strategies
- [Strategy 3.3:](#) Enable agency-led Centers of Excellence to enhance data and service sharing across agency and jurisdictional boundaries
- [Strategy 3.4:](#) Deploy effective statewide administrative information systems

GOAL 1 – STRENGTHEN STRATEGIC GOVERNANCE

Effective Governance Framework

Strategy 1.1: Establish an IT governance model that advances consolidation efforts where feasible and champions agency-centric solutions where required

Discussion – A critical missing piece in the effective state government-wide management of information resources is a multi-agency governance framework. During the EIRMS planning process, agency participants said governance must provide the:

- Highest direct value to agencies;
- Means to optimize business solutions, especially those common to agencies;
- Most efficient use of agency stakeholder time by consolidating and coordinating governance obligations; and
- Ability to optimize agencies' common business processes while progressively reducing redundancy through consolidation and standardization over time.

Key Elements:

- **Sustained Executive Agency Involvement** – State information resource governance is led by agency executive decision-makers. Agency executives are appointed to a governance body, chaired by the DAS Director, to serve as the multi-agency forum with the overview to guide all multi-agency information resource-related activities as a managed portfolio of investments and activities. They act as a community of agencies to optimize the use, value and cost of those resources while targeting investments that best achieve agencies' missions and business objectives.
- **Accountability and Coordination** – The State Chief Information Officer (CIO) coordinates and facilitates the multi-agency governance approach. The State CIO working with a multi-agency team provides staff work, recommendations and reports on progress to executive decision-makers. This multi-agency coordination and support team routinely formulates and proposes a range of collaborative investments. Together they create innovative business solutions that provide value, cost efficiencies, effectiveness and strategic capability not otherwise possible. This group creates the portfolio of ongoing, planned and potential information activities, investments and opportunities.
- **Sustained, Joint Business and Technology Leadership Involvement** – A multi-agency group of administrative business services and technology leaders ensures that agencies' prioritized business needs drive investments in information resources. The portfolio is thoroughly explored with these leaders. They recommend a business-driven, information resource investment roadmap to executives.
- **Multi-agency Approach** – The multi-agency approach allows agencies to collaboratively plan and deploy joint, standardized solutions to common business challenges. This approach will optimize the value, cost, effectiveness and efficiency of both agencies' business processes and the supporting information resource enabled solutions. This multi-agency approach offers strategic capabilities not possible by individual agencies.

For more information on this governance approach see [Appendix F](#), [Appendix G](#), [Appendix H](#) and [Appendix I](#).

Successful Multi-agency Initiatives

Strategy 1.2: Establish an effective enterprise planning, funding, and resource allocation model to successfully implement enterprise and multi-agency initiatives

Discussion – A weakness in the effective state government-wide management of information resources is routine multi-agency planning, budgeting, and funding framework for potential information resource investments. The current planning, budgeting, funding framework is agency-specific. It does not provide for multi-agency information resource efforts. The unpredictable rates for services paid by agencies pose financial challenges. The two-year budget cycle is also challenging for technology investments. By the time budgeting processes, budget approval processes and funding allocations are complete up to 48 months may have passed. That is too long to address the business requirements of multiple agencies. Current funding mechanisms do not facilitate effective multi-agency and statewide enterprise investments.

Key Elements:

- **Enterprise Investment Portfolio** – Under the guidance of the multi-agency executive-level governance body and the authority of the DAS Director, the recommended portfolio of multi-agency information resource investments then flows into an established enterprise planning, budgeting, and funding process.
- **Enterprise Planning and Budgeting** – The enterprise, budgeting, funding process precedes the current agency-specific process. This allows prioritized enterprise direction, efficiencies and innovation to be factored into agency-specific planning, budgeting, resource allocations and operations. Multi-agency initiatives that cannot be undertaken within available agency funding and resource constraint are offered to the legislature as multi-agency proposals.
- **Enterprise Project Funding** – Request establishment of enterprise project funds through savings and assessment to enable the Executive Governance Committee. This will serve as seed money to invest in enterprise and multi-agency initiatives.
- **Alternative Funding Models** – New funding models are needed to support the development and sustain operation of multi-agency and enterprise systems that provide services to agencies and citizens.
- **Controls and Industry Practices** – Apply standardized practices for business case and justification, design, project management, project controls, decision gates and oversight to assure quality of multi-agency initiatives. Consistently apply performance measurement and management monitor achievement of key target outcomes. The objective of innovation and optimization is balanced by standardized risk monitoring and mitigation processes.

Strategic Workforce Management

Strategy 1.3: Strategically manage the information technology (IT) workforce to meet current and future needs

Discussion – The state's information and technology-related (IT) workforce is a highly valued asset. This workforce must be strategically managed to optimize the value, efficiency and effectiveness of government business processes. Strategic management of the IT workforce requires:

- A composite view of the resource base;
- Trends that must be considered;
- Known requirements and standards, especially when needed to achieve defined target outcomes; and
- Maturity in other strategic areas precedes effective IT workforce management (i.e., governance, direction setting, prioritization, etc.).

Key Elements:

- **Foundation Blocks** – Prepare a system to inventory, analyze and report IT professionals' skills, training, and career path information. Inventory existing IT skill areas. Inventory all IT professionals' skills producing an enterprise-wide asset inventory that can be strategically evaluated.
- **Skill and Workforce Clearinghouse** – Refine and promote the skill clearinghouse using "Oregon GovSpace," (a suite of Web-enabled collaboration tools generally available to state government) and Job Rotation agreements to match IT resources to agency needs. This allows a high level of skill utilization of IT staff.
- **Workforce for the Future** – As skill requirements for the future are identified and used to progressively build an IT workforce strategic management plan to guide the training, development and evolution of the IT workforce.
- **Succession Planning** – Develop succession plans for critical skills and key positions nearing retirement.

Successful Multi-agency Planning and Action

Strategy 1.4: Develop a multi-agency framework that allows agencies to interoperate effectively to optimize common business processes and information resource support

Discussion – The Chief Information Officers (CIO) Council and Administrative Business Services Directors jointly sponsor and endorse the biennial update of the EIRMS. Together these groups have sponsored many multi-agency workgroups and initiatives with positive results. Participation in these groups is limited to discretionary resources on the part of agencies. There is a need for multi-agency planning forums to expand opportunities for progress.

Key Elements:

- **Multi-agency Optimization Forums** – A variety of innovative forums are started to facilitate sustainable agency participation to identify common business needs and new opportunities for business solutions. Together participants seek to optimize value, cost, efficiency, effectiveness and strategic capability using innovative approaches to information resource investment. Examples include:
 - **Agency Affinity Groups** – Agencies with similar or related business interests (i.e., traditional budget or program areas) routinely come together to find ways to optimize common or complimentary business processes and supporting information resources.
 - **Communities of Practice** – Subject matter experts come together in cross-agency forums. Participants collaboratively seek to optimize cost, value, efficiency, effectiveness or strategic capability.
 - **Multi-jurisdictional Planning** – Multiple government jurisdictions share business requirements in a one-government effort to eliminate redundancy and explore other innovative solutions using a cross-jurisdictional approach.
 - **Legacy System Planning** – Multi-agency participation in planning replacement of legacy systems can be approached strategically. This forum can explore how emerging technologies may extend the life and value of these systems. With up to 80% of information resource funds being spent on maintaining legacy systems this is a significant opportunity area.
- **Jointly Develop Good Ideas** – A multi-agency group chartered to work with the State CIO to provide an active coordination point for a portfolio of ongoing, planned and future investments and activities recommended to the Executive Management Council. Small, multi-agency workgroups are formed to develop road maps and take streamlined steps to quickly convert ideas into investment-ready initiatives. Together these become a portfolio of potential investments – the enterprise blueprint.
- **Web-enabled Collaboration** – Collaboration and cross-agency sharing of information can self-form using the collaboration tool made available by DAS called Oregon GovSpace.com.

GOAL 2 – OPTIMIZE INFORMATION INVESTMENTS

Mobilize to Act on Opportunities

Strategy 2.1: Identify and act on opportunities for consolidation and shared services

Discussion – Agencies have independently deployed all of the business processes and support systems needed to enable operations and achieve mission and business objectives. This has led to redundancy. A principle focus of multi-agency activities is optimizing information resource investments through consolidation or by establishing shared services to benefit all agencies.

Key Elements:

- **Explore Opportunities** – Identify common business processes, systems or supporting infrastructure that provides an opportunity for consolidation or as a multi-agency shared service. Consolidated services may be provided through DAS or through willing agencies.
- **Evaluation** – Opportunities are tracked and a progressive evaluation undertaken. This step-by-step review quickly surfaces opportunities that offer the highest positive impact and value. Opportunities are mapped to note connections to other concepts or dependencies that must be considered.
- **Facts Base** – If concepts are perceived as effective opportunities for optimization, a more rigorous development begins. Facts are gathered and analyzed in a feasibility study to provide the foundation for informed decision-making at an enterprise level or between participating agencies.
- **Roadmap** – Once an opportunity is considered a candidate for multi-agency or enterprise action, a path is prepared to build alignment and transparency for consolidation.

Reduce Complexity

Strategy 2.2: Reduce the complexity of the existing IT infrastructure and processes

Discussion – Agencies' independent development of business processes and supporting systems and infrastructure has led to a variety of approaches and platforms. That level of complexity makes the path to optimize cost, value, efficiency, effectiveness and strategic capability far more difficult. Actions that create further complexity must stop. Movement toward standardization of these diverse processes and support systems must occur on a sustained basis.

Key Elements:

- **Inventory and Evaluate** – Determine each area where commonality or difference exist in approaches to common business processes and underlying business process support systems, technical infrastructure and data. Where there is consensus move to declare a standard.
- **Facts-based Evaluation** – Quantify differences to allow facts-based evaluation. When differences between agencies are not driven by clear business decisions seek agreement from agencies on a standardized approach. When agreement is reached declare a standard.
- **Data Governance** – Create data governance teams to define shared data interoperability standards. Create teams that are appropriate for the discussion.
- **Architecture and Standards** – Where standards are established, they guide all further development and investments. Standards will be set for all common business processes and underlying business process support systems, data and technical infrastructure and made widely available. Standard setting follows a predictable, collaborative process.

Optimized Information Resource Delivery

Strategy 2.3: Optimize DAS and agency information resource delivery

Discussion – DAS services in information resource management are provided primarily by two divisions: EISPD and the State Data Center. Some services formerly offered to agencies by DAS are no longer available including:

- Enterprise application development, hosting and support; and
- Project management.

DAS's services and organization need to be reviewed and reorganized to meet funding constraints as well as implications of this strategy.

Key Elements:

- **DAS Roles Assessment** – Conduct a comprehensive review of DAS roles, responsibilities, authorities, accountabilities and service offerings in the context of funding and the 2010-2015 EIRMS. Identify elements needed to provide the complete framework needed to successfully implement the EIRMS goals and strategies as well as available funding.
- **DAS IRM Organization** – Based on the DAS roles assessment organize DAS information resource-related functions in the most efficient and effective way possible given available funding.
- **Optimize State Data Center Investment** – Continue the progress to bring the State Data Center to full maturity and optimum service capability as a secure cost contained network and data hosting utility with more predictability and consistency in rates.
- **Establish Enterprise Application Solution** – Assess the need for and benefits of an enterprise-level application development, hosting and support function to accommodate core enterprise applications.
- **Portfolio Management System** – Provide the portfolio management systems and protocols needed to offer the capability needed to track and manage the range of agency and multi-agency initiatives anticipated in this strategy.
- **Effective Multi-agency Action** – Agencies have the means to share information, then identify and agree on mutual opportunities for progress information resource management. A streamlined initiative development and implementation process results in multi-agency activities that meet the business requirements of agencies and informs enterprise efforts.
- **Procurement** – Create a streamlined procurement pathway to ensure successful pilot actions can be quickly converted to enterprise-scale business solutions.

GOAL 3 – INNOVATE SERVICE DELIVERY AND ACCESS TO GOVT. SERVICES AND INFO.

Improve Citizen Interaction

Strategy 3.1: Improve citizen interaction with government services and information

Discussion – Citizen's expectations for Internet-enabled government services and information outpace current capabilities. Based on an explosion of innovative private industry web sites, citizens now expect similar 7X24 user experiences from government. As younger generations interact with government they want additional experiences such as social networking on more mobile platforms. Citizens not only want readily accessible information, but expect to conduct secure transactions on line and to obtain data that can be used for their own purposes. Improved citizen interaction through internet channels and innovative agency service delivery will increase trust and credibility.

Key Elements:

- **Citizen Value and Usability** – Deploy highly usable Web-enabled government services, information, and data feeds to provide clear value to citizens. Highly usable, secure on-line services provided through a single portal will improve the citizen experience with government while reducing the cost of agency service delivery.
- **Increase Applications** – Develop an e-government delivery system that provides an option for agencies to more quickly deploy on-line applications. Measure and increase the number of online service applications for citizens.
- **Citizen Interaction** – Create a variety of routinely available, Web-enabled methods for citizens to interact with government including: location-based assistance and directions to services; ability to make suggestions and register complaints; self-registration to receive electronically generated notices and alerts; online participation in public virtual meetings, online Citizen to Government and Citizen to Citizen interaction on use of government services. Increase the number of citizen feedback loops and act on feedback to improve the user experience.
- **Transparency** – It is a national trend and legislative priority to make government information readily available to citizens. While initial work has been done a better user experience must be designed to make data and information available in ways that citizens want to see the information and access the data. Make public data easily available online so that it can be used as data feeds into citizen developed websites.
- **Benchmark** – Conduct baseline and bi-annual surveys of citizens to adapt this strategy over time.

Clear Path to Innovate

Strategy 3.2: Establish capabilities to evaluate, prototype, and pilot potential innovative solutions and risk strategies

Discussion – Agencies independently evaluate, plan and deploy solutions to business processes and the necessary underlying support systems and infrastructure. This results in redundant expenditures conducting the same lifecycle process in each agency. The results are not standardized nor jointly undertaken causing additional expense and complexity.

Key Elements:

- **Assessment Capability** – Evaluate innovative approaches for the future technology applications. Assessment scope could include: technical assessments; feasibility; cost/benefit; interoperability; return-on-investment: demonstration or educational projects; and prototypical or seed development using multiagency and subject matter experts.
- **Innovate and Pilot** – Pilot expensive initiatives before full deployment to develop a full awareness of risks and advantages. It is strategically important to risk failure in a pilot effort in order to avoid finding risks at a much later and expensive stage.
- **Prioritization** – Prioritize candidates for study based on the purposes and considerations described in strategy and the potential of any particular study to provide uniquely valuable or necessary information for future decision-making.

Efficient Service Delivery

Strategy 3.3: Enable agency-led Centers of Excellence to enhance data and service sharing across agency and jurisdictional boundaries

Discussion – Currently agencies have their own internal information services, acquire certain services from DAS, or in some cases procure services outside of state government. There is no widely available enterprise application development and hosting capability for agencies in state government. That capability was discontinued some years ago. Now there is a tangible need for alternatives to the current menu of service offerings. In particular, in response to the trend toward consolidation and shared services for agencies to solve common business challenges, alternative approaches are needed now.

Key Elements:

- **Build on Successes** – When an agency has an established capability to address a business requirement common to multiple agencies that meets standards, help the agency provide services as a Center of Excellence if it will reduce cost and improve efficiency and effectiveness for all other agencies.
- **Alternative Business Model** – To support the practice of consolidating business services or support infrastructure common to agencies establish a shared service business models with associated service level agreements and funding models.

Informed Decision-making

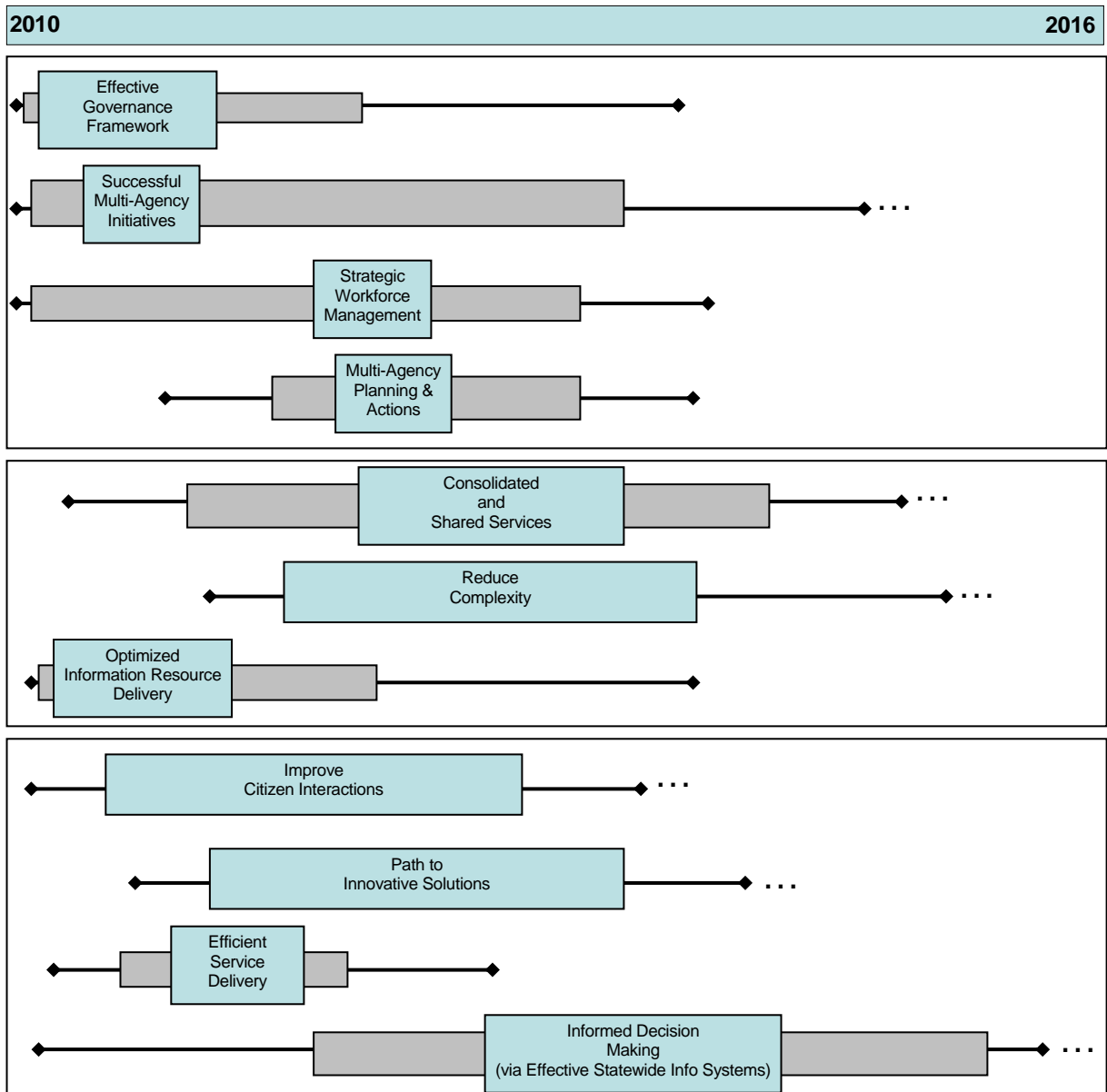
Strategy 3.4: Deploy effective statewide administrative information systems

Discussion – Administrative systems are deployed by agencies to facilitate operations, inform management and support executive decision-making. Current administrative systems have been designed to fulfill some agency and enterprise business requirements but do not address composite business needs. These systems have had to be modified with expensive and non-standardized work-a-rounds to address specific agency requirements. In particular, they do not provide the real-time information needed to ensure facts-base management and decision-making.

Key Elements:

- **Inventory Agencies' Business Requirements and Legacy Systems** – Identify and comprehensively inventory agency business requirements for common administrative information systems. Identify legacy system lifecycles and evaluate alternatives to prolong operation or replace.
- **Prepare a Roadmap** – Undertake planning and formulate an implementation roadmap for administrative systems using a collaborative enterprise approach. Ensure business process flows are streamlined and optimized before automating. Provide agencies with real-time access to the spectrum of information contained within administrative systems to optimize performance and make timely, high- quality decisions.
- **Common Administrative Infrastructure** – Provide quicker implementation of common administrative infrastructure elements that support agency business needs. Evaluate and utilize software as a service application where feasible to reduce costs, risk and speed implementation.

ROADMAP TO PROGRESS



Final Comment

In the execution of their mandates, goals and objectives, Oregon’s state agencies can no longer afford to operate independently when it comes to developing and supporting the core business activities of government. This strategy gives us a new way to decide together where our shared interest are and how to more effectively act on those shared interests for mutual benefit. It suggests that there are opportunities to achieve cost efficiencies and better outcomes when it makes sense to act together. It also recognizes that there are times when actions between a few agencies or simply by individual agencies are best. The strategy gives agencies individually and collectively better ways to achieve success.

This strategy has at its core the conviction that new approaches in information resource management are needed. With change comes added risk. New solutions come with risk. It is not prudent or cost effective to manage to a risk-free environment. State government must be prepared to accept the potential of greater risk to achieve cost reductions or improved outcomes. State agencies can no longer afford to operate as separate islands of business solutions that are core to all agencies. State business managers must work together to help design and deploy common, cost effective solutions that achieve agencies mutual business needs. Information systems must be the prime channel for providing government information transparently, and to drive costs down. By mobilizing and facilitating agency-led centers-of-excellence providing a business solution for all other agencies, other agencies can quickly benefit from these shared solutions.

APPENDICES

Appendix A – More About Agencies' Common Needs

In the 2010-2015 EIRMS planning process, agencies defined their common needs with regard to information resource management. Seven areas were identified as priority common needs.

Reduce Complexity – Diminish complexity through standardization and consolidation in every area possible to lower cost and free valuable resources to focus on agencies' mission and business objectives.

- Agencies are better able to focus limited resources on primary, mission-critical business objectives.
- Composite costs associated with development and maintenance of systems common to agencies are reduced.
- Robust systems that meet the business needs of larger agencies then provided smaller agencies strategic capabilities not otherwise possible.

Integrated Governance – Create an enterprise approach that directly involves key stakeholders and decision-makers on a sustained basis leading to a deeper and more comprehensive understanding of the purpose and value of the portfolio of enterprise target outcomes and activities.

- Enterprise target outcomes and activities that explicitly address the business needs of stakeholders and decision-makers will result in the highest positive impact and benefit for citizens and agencies.
- Involved stakeholders and decision-makers reduce the strategic risks to forward progress caused by misunderstanding and mistrust.

Enterprise Portfolio – Create and continuously report a single, unified view of enterprise activities – a high-level roadmap and trip status – to provide stakeholders and decision-makers a shared understanding.

- Stakeholders and decision-makers are fully aware of enterprise activities resulting in a fundamental shift to a facts-based dialog.
- Enterprise activities are continually tracked and the status and value is strategically communicated.
- Incremental progress can be planned taking into account the full range of priorities, dependencies and interrelationships of enterprise activities.
- Enterprise activities can be strategically managed as a dynamic whole.

Increase the Pace of Progress – Devise standardized enterprise processes that result in quicker talk-to-action while maintaining appropriate due diligence on the range of enterprise opportunities to better meet the needs of agencies.

- Small workgroups comprised of select subject matter experts evaluate and recommend a genesis roadmap of actions leading to forward progress on all priority IRM subject areas.
- Enterprise processes, once defined, can then be continuously improved creating additional efficiencies.
- Quality enterprise planning and implementation avoids costly and resource intensive fixes later.
- Agencies trust the enterprise approach thus increasing the pace of innovation and optimization.

Enterprise / Agency Fit and Integration – Create an enterprise planning, budgeting, funding model that: precedes agency budget cycles; shortens lead-time requirements to better address agencies' business requirements; dynamically responds to ever changing conditions; and allows agencies to integrate enterprise activities into agencies' operational resource allocations.

- Agencies' sharing information about business needs and approaches to address those needs creates unanticipated opportunities and value.
- Over time, a range of enterprise initiatives creates substantial cost savings and efficiencies for agencies.
- Enterprise opportunities for cost savings, improved efficiency, more effective resource utilization, and needed strategic capabilities are factored into agencies' planning, budgeting, funding.
- The objective of enterprise collaboration is to: pick up the pace of planning; get opportunities funded when agencies cannot support actions on their own; quickly move to deployment; get things done to create tangible optimization.

Appropriate Resourcing – Devise a way to resource enterprise activities independently from agencies ongoing operations when necessary to avoid placing a resource demand on agencies that cannot be absorbed naturally.

- With appropriate consideration and planning, enterprise activities will not surprise or disrupt agencies ongoing operational plans.
- Over time load balancing will become a routine feature of enterprise activities, even as enterprise activities result in agencies' being able to focus more explicitly on mission-specific activities.

Extend Service Delivery and Improve Citizen Experience – As an example, take advantage of Web-enabled technology to provide services that meet the expectations of citizens while also reducing cost and improving efficiency for agencies.

- Take advantage of Web-enabled services known to reduce the cost of transactions and providing information. They also reduce the process encumbrance by making a variety of streamlining opportunities possible.
- A wholesale adoption of Web-enabled services holds the potential to transform how government operates, and how citizens perceive their government.

Appendix B – More About Future Vision

As the 2010-2015 EIRMS is deployed, many features and benefits will surface.

Business Needs Drive Planning – A clear and demonstrable linkage exists between business requirements and electronically-enabled business solutions established to meet those requirements. A clear focus on innovation accelerates the effort to optimize cost and efficiency.

Predictable Governance – A predictable governance path puts substantial forward progress within reach. The role of DAS is valued as it uses its authority on behalf of agencies to fulfill a unique and high-value role in state government.

Functional Model – In composite transformational changes create a functional model. That model provides direct, immediate and progressive value to agencies in that their business priorities drive information resource management. Information technology does not drive. Every process associated with information resource management has been streamlined in its design creating a dynamic, living-system that is able to adapt in real-time to external pressures and emerging opportunities. “Just Enough” process, and short “bite-sized” work increments, allows concepts to move to action much more quickly. In pilot efforts designed to test the viability of the emerging model, efforts that took up to five months were shortened to several weeks. The pace of progress is expected to increase substantially because waste and redundancy is eliminated from the information resource management processes. An agile, high-functioning enterprise means that more gets done with fewer resources, while still providing necessary due diligence. Alternately, it can also mean that more high priority, mission critical tasks can be taken on because of these efficiencies.

Enterprise Design – Over time the management of information resources moves from an ad hoc, “Custom Built Home,” model to a “Planned Community” design approach, and in some cases a multi-family tenancy approach, when needs and investments are best served. This applies all of the same efficiencies to information resource management that accrue in home building; lower cost and consistency. Reduced complexity produces efficiency and optimizes cost. When we see and share a common view the way forward becomes clearer. An explicit understanding of common requirements and opportunities is invaluable because it adds clarity and simplifies complexity. This will lead to better outcomes and more effective information sharing between agencies and across jurisdictions.

Portfolio Management – Information resources are viewed as a portfolio of investments, activities and resource allocations targeted to achieve priority strategic purposes. The portfolio of activities and potential investments is prioritized based on business requirements. A comprehensive picture of the range and scope of all information resource-related initiatives is known and communicated routinely. That changes the nature of oversight and decision-making. The portfolio management approach promotes achievement of measureable, achievable outcomes. Continuous use of portfolio management practices means that information resource management is transparent to all. Each level of information resource governance uses the portfolio as their common point of connection.

Agencies’ Participation – Using collaboration and social networking techniques, networks of highly skilled agency employees collaborate across traditional organizational boundaries. Agencies see value in and contribute to multi-agency efforts since they can be directly connected to satisfying agencies’ business needs. Multi-agency teams are organized and chartered with concise goals and compressed timelines making more efficient use of agencies’ resources.

Enterprise Alignment – An effective decision-making environment is essential. Controls are used to create the alignment needed enable consistent, effective, productive multi-agency action.

Execution and Delivery – Agencies are able to move a concept from idea to implementation in the time needed to address business requirements.

Strong Stewardship – Public funds are well managed and protected through streamlined processes, effective and accountable project delivery, and cost effective agency outcomes and more Web-enabled citizen services.

Appendix C – More About Guiding Principles

Several principles have been developed to guide strategy implementation over time; answering questions that have not yet been asked.

Interoperable Enterprise – The agencies of the State of Oregon should function as an interoperable enterprise.

- The enterprise acts as a thoughtful, well-intentioned whole to optimize cost, resources and efficiency.
- Agencies strive to understand and optimize what is common with other agencies and with other jurisdictions.
- Planning, budgeting, funding processes are conducive to solving enterprise problems.

Timely Results – Agencies derive value from effective and efficient enterprise collaboration that delivers timely results.

- Lead on behalf of the enterprise or affinity group.
- Collaboration, sharing, transparency and trust are paramount.
- The value of enterprise activities increases the earlier they are deployed in the planning process. Optimum value is derived by inventorying agencies' business needs, then deploying enterprise solutions based on those common business needs.
- Repetitive development effort is neither productive nor cost-effective.
- Use appropriate technology to extend service delivery.

Stakeholder Value – Enterprise efforts are driven from the perspective of stakeholder value.

- Business models and funding models are aligned around citizen and agency value.
- Enterprise efforts are outcome based. Target outcomes are established early. Progress toward outcomes is measured and tracked.
- The governance of enterprise information resource management involves key stakeholders on an ongoing basis. Governance should focus on supporting those who guide and authorize state government operations. Governance should engage the right people at the right time for appropriate reasons including: state executive and legislative decision-makers; agency heads; administrative leaders; technology leaders; subject matter experts; and stakeholders. Stakeholders' business requirements drive enterprise action

Build On Success

- Successful agency project managers lead enterprise efforts.
- Successful funding models are replicated.
- Successful collaboration models are expanded.
- Successful individuals act as mentors for others.
- Successful strategies and solutions are repeated wherever it makes sense.
- Successful platforms are leveraged and expanded.

Value of Standardization – Agencies recognize the value of standardization of back office functions.

- To reduce risk, increase value, provide consistency, improve efficiency and reduce or avoid cost.

Appendix D – More About Change Drivers

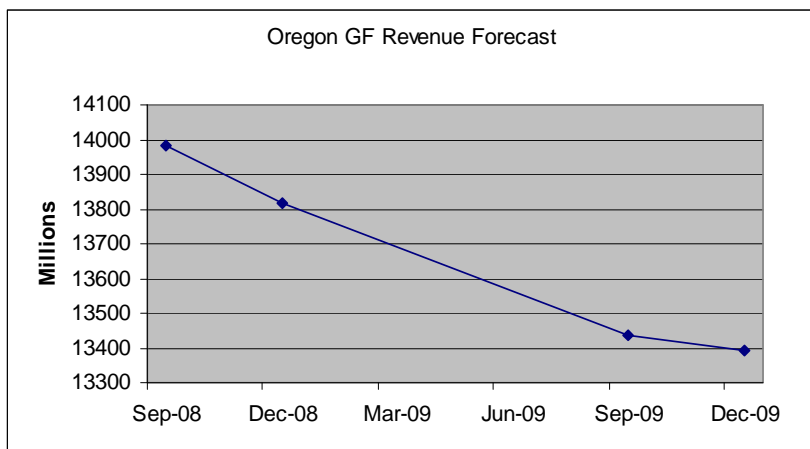
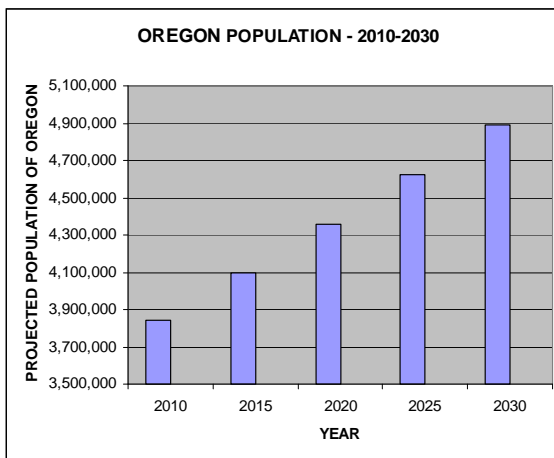
The "Perfect Storm" of Environmental Challenges – Expectations for government are changing, and the rate of change is increasing. The national trend toward transparency of government requires the quick deployment of new approaches in technology, business systems, and data management. Greater focus on information security means that the trend toward transparency must be counter balanced by ever more rigorous practices to protect those resources. The economic crisis of the last two years has had the impact of requiring increased efficiency at reduced costs while meeting greater demand for government services and information. So critical pressures have been placed on government funding sources at all levels while demand for more services and technology support for agency business needs increases.

Increasing Demand For Service – The population of the State of Oregon continues to expand, though at a somewhat slower rate. Even so, one million more citizens are expected to live within Oregon's borders by 2030¹. This will increase demand for government services and information.

Along with an increase in population comes a demographic shift. An earlier study projected the proportion of Oregon's population classified as elderly was expected to increase from 13.6 percent in 1995 to 24.2 percent in 2025; a shift from the 17th highest proportion of elderly in 1995 to the 4th highest proportion of elderly in the nation in 2025². One example of increased demand for government services is caseload projections for the Department of Human Services.

Changing Citizen Expectations – Citizens' expectations for government services and information has changed because of their growing experience with the Internet and web-based applications. Citizens expect government services should be available 24 hours-per- day / 7 days-per-week using web-enabled services; just like they receive from many private sector entities.

Economic impacts & Reduced Revenue – Based on the national and local economy revenues available to support agencies business processes are in decline and are likely to continue through the period of this strategy. The pressure of additional demand for state government services, coupled with lower revenue, creates a situation where new and innovative service delivery mechanisms are needed now. An agile process is needed to enable agencies to find ways to work together and to optimize systems and improve service delivery.



Sub-optimized Information Resources -

All agencies have electronically enabled their business processes and have a range of business systems needed to support agency operations. Agencies have planned and deployed these information resources individually over time to achieve their individual missions and business objectives. In the last several years, the state's largest agencies have come together to consolidate key components of their technology infrastructure into the State Data Center. While many of the state's information resources are now collocated, this represents just the first step toward optimizing state information resources..

Because agencies' business processes and support systems were built independently, they are very different. Based on the experience of the SDC to consolidate and research on the state's 53 e-mail systems, there are three primary consequences: 1) excessive system diversity; 2) unnecessary redundancy; and 3) difficulty in interoperating among agencies. Together these result in a sub-optimal technical infrastructure.

Non Standard Forward Progress – At the service delivery level, agencies are making forward progress on an individual, "siloed" basis. A number of agencies are examining and redesigning their internal processes to gain improvements in services delivery. Most agencies are making great strides in moving services and access to information to the Web, and modernizing business processes through various approaches.

¹ Office of Economic Analysis report available at: http://www.oregon.gov/DAS/OEA/docs/demographic/pop_components.xls

² Source: State Population Rankings Summary / Source of Data: U.S. Bureau of the Census, Population Division, Population Paper Listing #47, Population Electronic Product #45 - <http://www.census.gov/population/projections/state/9525rank/orprsrrel.txt>

However, there is currently no effective means to allow agencies to consistently share information that would highlight overlaps, gaps or similarities in information resource deployment, infrastructure and basic services. This results in repetitive projects duplicated across the agencies as they strive to solve similar business problems independently. At the same time, some agencies have expressed a willingness to divest some non-core business functions to other providers to better focus on mission critical business challenges.

Increasing Data and Records Management Challenges – Data and records management challenges are substantial and increasing. Data storage, the requirement for ready access to that data, and the integration of data as a routine component of work flow combine to pose a strategic challenge. Facets of data and records management include, but are not limited to: data management; document management; records management; records archiving; records retention; electronic discovery; imaging; standardization; and data transmission and storage.

Appendix E – More About Mega Trends

There are several trends occurring in information resource management that rise to the level of “Mega Trend.” These trends must be considered and a iron clad response developed by agencies. If agencies are required to address these business requirements individually the results are likely to be more expensive and less likely to be satisfactory. These trends include:

- **Government Interaction with Citizens** – A robust capability needs to be in place to allow two-way communications between government and the citizens it serves. If produced individually by agencies, this capability will not become the strategic tool required to improve government communications with citizens.
- **Transparency of Information** – House Bill 2500 (2009) requires that a spectrum of information be made publicly and readily available to citizens. Work has been done to deliver an initial capability to fulfill the requirements of the legislation. However, a unified solution that displays information and provides data in ways the citizen wants is needed to make the progress expected by citizens and decision-makers.
- **Information Needed for Informed Decision-making** – There is a general trend of compiling and making data available as useful information to enable quality decision-making. Business analytics, as this trend is called, is one that will require a progression of improvements ranging from data management, analysis, information delivery and infrastructure upgrades needed to support those processes. This effort is one that should be undertaken using a unified approach as opposed to an agency-by-agency basis.
- **Geolocation of Data** – In the coming years, most information will be geolocated creating essential added value for decision-making and management. While many agencies have varying degrees of capability in geospatial information, none have the ability to create the foundation needed to meet strategic needs for the future. A coordinated approach is needed to ensure that all areas of information that would benefit from geolocation can be adequately served.
- **Information Security** – All business processes, and the mega trends described above, are dependent upon ensuring that information is secure. Agencies must interoperate within the context of a secure environment. All of the practices and strategic capabilities must be in place across the full fabric of state government.

Appendix F – More About Enterprise Information Resource Management Governance

Enterprise information resource governance provides the means to establish and sustain an ongoing, systematic approach to improving results in information resource management using a multi-agency approach.

Governance Purpose – The purpose of enterprise information governance is to: enable authoritative and strategic decision-making that allows sustained action to optimize the value of information resources; establish target outcomes all agencies can work toward; provide agencies a unified governance model for all enterprise issues (business & IT); and enable multiagency, and eventually multi-jurisdictional, collaboration.

Features of Governance – The features of enterprise information resource management governance are: a results focus; activities that are relevant and valuable to agencies and stakeholders; transparency to agencies and stakeholders; alignment with agencies' missions, priorities, and desired outcomes; decisions and processes driven by data; continuous organizational learning; a focus on strategic outcomes; and processes and decisions are sustainable over time and across transitions in leadership.

Anticipated Outcomes – Enterprise information resource management governance is anticipated to: achieve better results through the use of collaborative planning and execution; produce organizational alignment; ensure

organizational continuity; enable more flexible resource management; and change state government's underlying culture to one that values evidence, learning, and accountability for results.³

Appendix G – More About Governance Roles, Responsibilities and Accountabilities

DAS Director – Serves as the point of accountability and authority for undertaking state government-wide or multi-agency efforts. The DAS Director provides the leadership, sponsorship, coordination and oversight needed to successfully undertake strategic initiatives at an enterprise level.

State CIO – Serves as the point of accountability for: promoting and implementing innovation in information resource management; and enabling an effective state government-wide, business-driven information resource management planning, budgeting, funding and coordination framework.

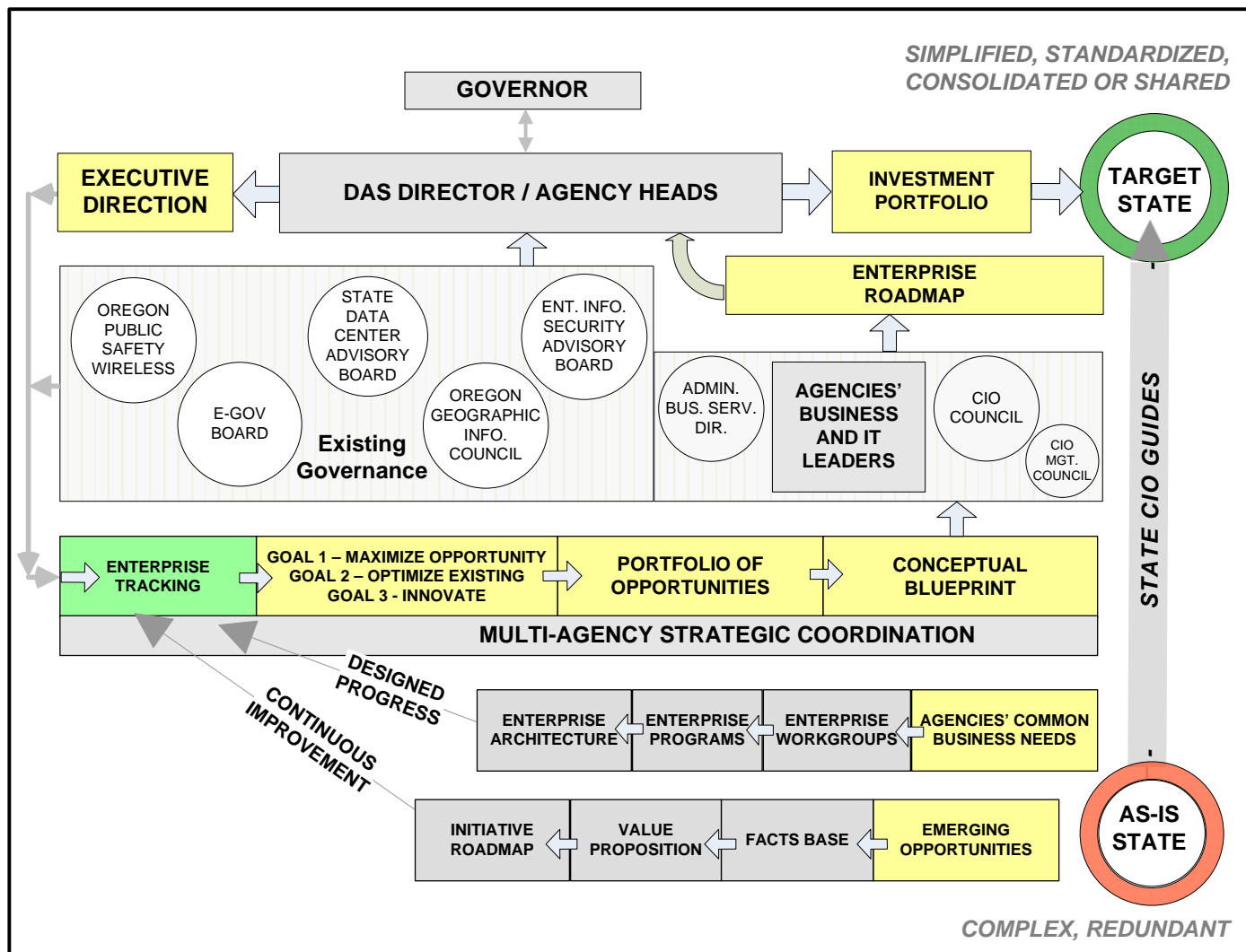
Executive Management Council – Agency executives comprise a governance body with sustained accountability for: defining agencies' core, common and strategic business needs then fulfilled through innovative information resources management; overseeing the development and execution of the enterprise information resource management strategy to fulfill those business needs; and enabling the investment management processes needed to deploy a prioritized portfolio of strategic information resource initiatives.

Business and IT Management Council – The current Steering Committee that developed the 2010-2015 EIRMS becomes the prototype of a planning team in support of the executive council. This group is envisioned to: sponsor agencies' collaborative planning based on their core and common business needs and requirements; develop an enduring design for optimized state government services and infrastructure; and recommending business-driven direction for information resource management.

Multi-agency, Strategic Coordination – Supervised by the State CIO, a DAS-sponsored multi-agency Strategic Coordination Team serves as the active, multi-agency coordination point for information resource management across Oregon state government. This team: provides a coordination point to track, evaluate and conceptually develop the full range of information resource-related opportunities and activities needed to achieve target outcomes; and, builds and consistently reports a comprehensive view of all information resource opportunities and activities. Team tasks include concept: inventory; tracking, mapping conceptual relationships and dependencies between information resource areas; prioritizing; and creation of a conceptual blueprint for action going forward. This group also serves provides the communications linkages needed to establish and sustain a common understanding of the status and vision for information resource management across the range of related governance bodies and stakeholders.

³ Adapted from “A Performance Management Framework for State and Local Government: From Measurement and Reporting to Management and Improving” (Public Review Draft, July 2009) by the National Performance Management Advisory Commission

Appendix H – Governance Model Diagram



Appendix I – More About Strategic Coordination

DAS-sponsored, Multi-agency Strategic Coordination Team – Supervised by the State CIO and reporting simultaneously to the State CIO and the State Management Council, a DAS-sponsored multi-agency Strategic Coordination Team serves as the active, multi-agency coordination point for information resource management across Oregon state government. The Strategic Coordination Team:

- **Coordination Point** – Provides a coordination point to track, evaluate and conceptually develop the full range of information resource-related opportunities and activities needed to achieve target outcomes.
- **Progressive Conceptual Build-out** – Builds and consistently reports a comprehensive view of all information resource opportunities and activities. Team tasks include concept: inventory; tracking, mapping conceptual relationships and dependencies between information resource areas; prioritizing; and creation of a conceptual blueprint for action going forward.
- **Business Needs Drive** – Defines the full range of agencies' common business needs and actively seeks to address those needs using a multi-agency approach.
- **Environmental Forces** – Constantly seeks to sustain forward progress while also incorporating environmental influences such as new political and external mandates, emerging technology trends, and other external forces that require action.
- **Informed Decision-making** – Conducts sustained tracking and reporting of baseline information needed to guide enterprise-level information resource management such as: spend; value; risk; net cost savings; improvement in

Enterprise Information Resource Management Strategy (EIRMS) – v1.5

efficiency and effectiveness. This provides the framework to enable consistently applied performance management and to measure progress.

- **Continuous Improvement** – Views all aspects of information resources and seeks to identify and act to continuously improve their planning and deployment with the dual objectives of: 1) enabling agencies to better focus on achieving their missions and business objectives; and 2) optimizing the cost, value, efficiency and effectiveness of information resources when viewed as a state government-wide portfolio of investments.
- **Enterprise Roadmap** – Creates work products that graphically demonstrate an overarching roadmap or blueprint for coordinated action over time that will result in optimizing the use, effectiveness, efficiency and cost of information resources.
- **Communications Hub** – Establishes the communications needed to establish and sustain a common understanding of the status and vision for information resource management across the range of related governance bodies and stakeholders.
- **Enterprise Repository** – Develop and maintain an easily accessible repository for all enterprise information artifacts and resources.

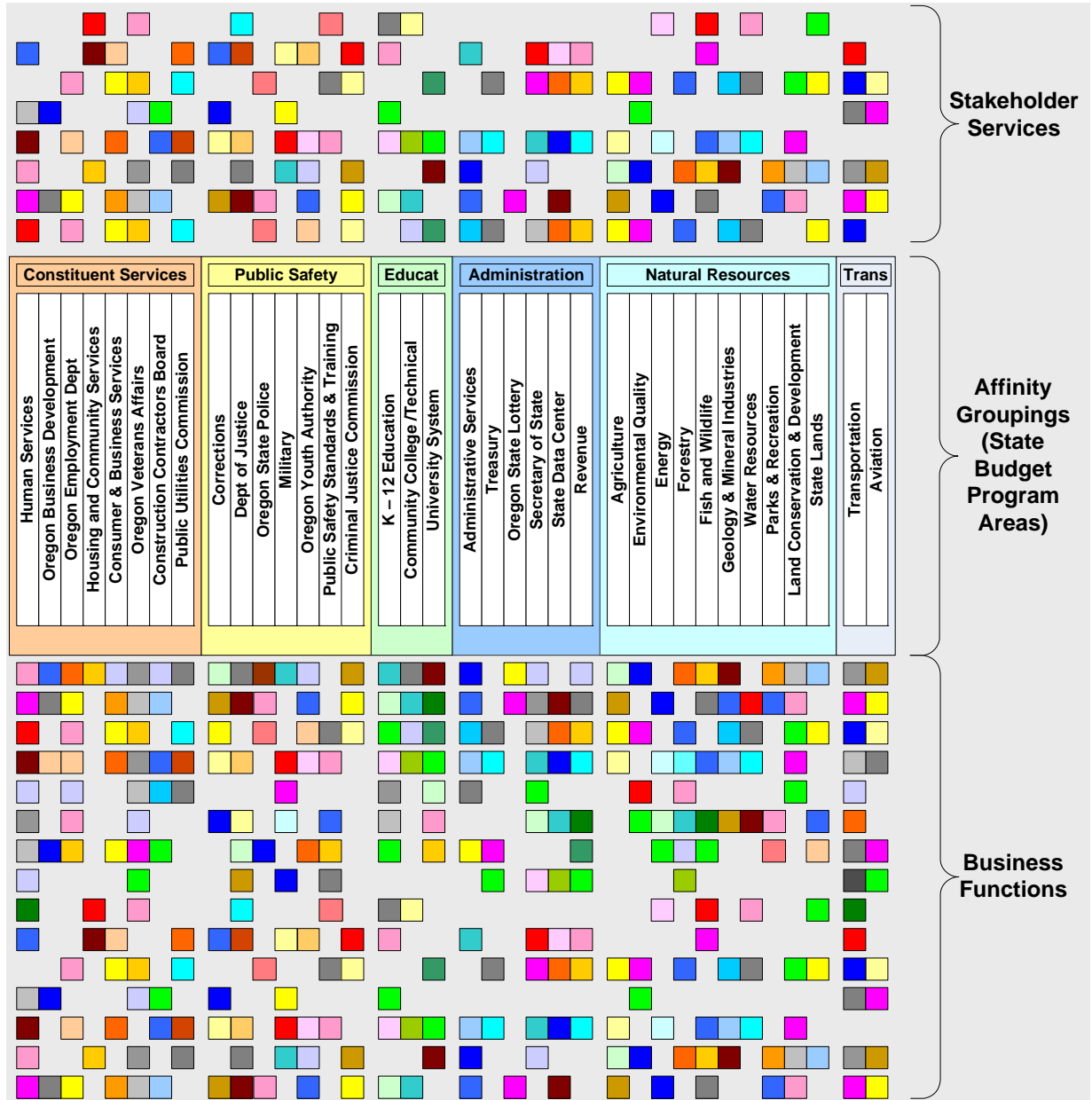
The Strategic Coordination Team activities include:

- **Track and Report** – Comprehensively track and report all information resource management concepts.
- **Standardized Opportunity Evaluation** – Conduct a standardized opportunity evaluation of each information resource-related concept. Determine those concepts that are worthy of further development. Assess and report the potential value and impact of each concept.
- **Initial Enterprise Assessment** – Conduct an organizational assessment in the following areas: readiness; maturity; stakeholder requirements; fit into the state's overall design or blueprint; resource requirements; finance. Determine the nature of the opportunity: core (all agencies); common (several agencies or affinity groups); potential shared service; strategic opportunity (optimization or address projected demand).
- **Portfolio Assessment** – Determine fit into existing enterprise domains and connection to other domains (data management, technical infrastructure; business process, etc.). Determine connections to sub-portfolios (policy, standards, legislative concept, etc.)
- **Tactical Coordination of Enterprise Activities** – On a routine basis coordinate and directly work on a multi-agency basis to promote enterprise opportunities as quickly and efficiently as possible. This includes direct negotiation, sequencing and staging of enterprise activities.
- **Recommend Further Concept Development Stages** – When appropriate, recommend further concept development to the appropriate state leaders.
- **Status Reporting** – Maintain and report the status of all enterprise activities as a single portfolio (new, opportunity, active, underway, staged, on hold, etc.). Briefly document and be able to report concepts that were stopped or rejected as an ongoing reference.
- **Cumulative Tracking / Reporting** – Track and report data that is valuable over time including: spending; value; achievements; benefits; risk and risk mitigation strategies.
- **Strategic Communication** – Consistently communicate and market the status, vision and value of multi-agency information resource management sustaining forward progress.

Impact – Strategic Coordination is, over time, expected to produce the predictable and progressive steps toward refinement and optimization of information resources across the agencies (see graphics on the following pages).

Enterprise Information Resource Management Strategy (EIRMS) – v1.5

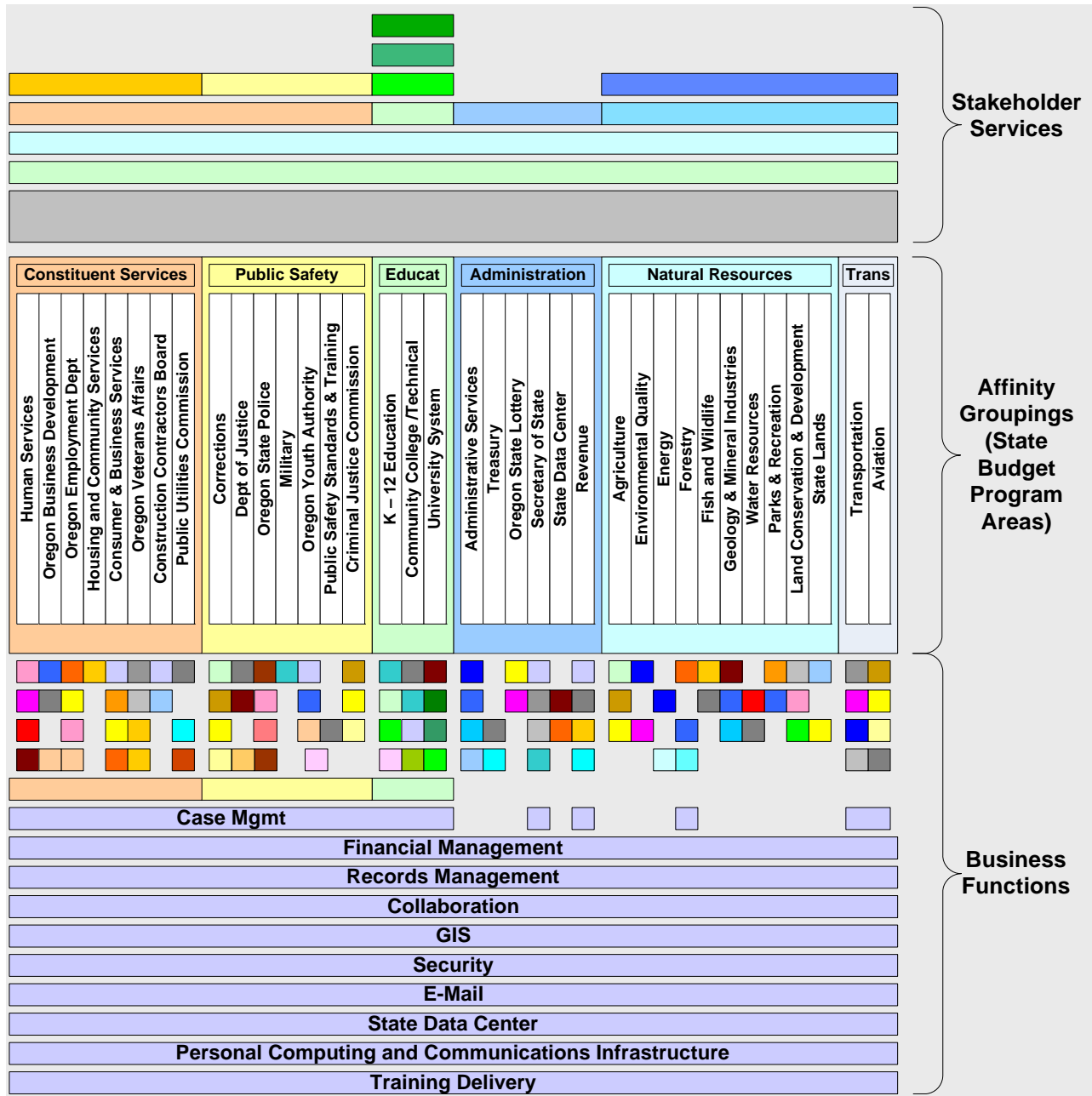
Now – The first graphic illustrates how agencies' current deployment of the full compliment of business processes and support systems has resulted in: wide diversity in systems; complexity; and redundancy. This strategy provides a reliable path for agencies to optimize their information resources a range of collaborative approaches including: consolidation; establishing shared services; reducing complexity; and deploying more effective administrative systems solutions.



Current State

Enterprise Information Resource Management Strategy (EIRMS) – v1.5

Future – The second graphic illustrates how agencies' business processes and support systems will be optimized over time resulting in: standardization of systems; alignment across natural affinity groups of agencies; a more manageable information resource asset base; and elimination of redundancy.



Future State

Appendix J – More About Challenges and Barriers

Resource to Purpose – The transformational change proposed in this strategy is based on the value agencies will derive from multi-agency efforts. Anticipated benefits and value warrant dedicating limited but crucial staff resources to these efforts. Using this “volunteer” resource approach, substantial improvement is expected over current practices. Experience indicates that agencies’ operations can interfere with multi-agency efforts, especially when external forces place extra demand on agencies. So using the volunteer resource approach cannot ensure optimum performance of the new multi-agency approach. A predictable, dedicated resource base would provide the basis for predictable improvements. For example, several pilot efforts have taken place over the course of the EIRMS Update to stress test emerging practices. One of the findings was that collaborative planning can serve to shorten the time from idea to “shovel ready” concept. Another finding was that sessions require pre-work to create that time advantage. The better the pre-work the more time it saves for multiple agencies. In one case valuable work product was created by a multi-agency team in one morning session. But two months of periodic staff work was required to make that session as productive as it was.

Funding – The most frequently discussed subject throughout the EIRMS Update planning effort was the need for a predictable multi-agency planning, budgeting and funding model. A variety of alternatives were proposed. Almost all dealt with the fact that multi-agency planning, budgeting, funding processes should precede agency-specific processes. Almost all cited the need for some kind of fund that can be used to pursue a portfolio of enterprise or multi-agency target outcomes, with at least some portion of subsequent funding coming from accrued savings. Importantly, almost all cited the fact that the current process of the Department of Administrative Services putting forth rate-based Policy Option Packages on behalf of multi-agency efforts does not work.

Risk / Innovation – Risk is often associated with innovation. It is important that Oregon state government is ready to assume some balanced measure of risk to adopt practices that result in innovation and an increased pace of progress. There is also risk associated with continuing the "As-Is" approach. Failing to deploy the practices needed to ensure transformational progress creates risk. That risk is now known. This strategy is its mitigation. Lastly, oversight controls are placed on information resource-related projects, but are not effective until very late in the project lifecycle. That lateness in the lifecycle introduces risk. That risk could be reduced by applying controls, and controls of a different nature, much earlier in the project lifecycle. Routine use of pilot efforts to validate expensive projects before full funding and implementation occurs also reduces risk.

Risk / Budget Cycle – Another risk is the fact that the current two-year budget cycle, with time horizons of up to 48 months, is not compatible with multi-agency information resource initiatives. Planning assumptions and technologies go out-of-date in far less time. Some hybrid planning, budgeting, funding method should be considered that allows information resources to be used innovatively and in a more timely way to address agencies’ business needs. The fact that the current budget process considers agencies’ budget individually is also a risk when contemplating multi-agency opportunities for progress.

Organizational Challenge – The 2010-2015 EIRMS will pose an organizational challenge for agencies. Every practice now in place requires agencies to compete. Multi-agency planning, budgeting, funding proposals will also compete with agency-specific proposals.

Other State Priorities Underway – A variety of legislatively chartered or executive policy-driven initiatives also compete for agency resources. Examples include: reporting required of the American Recovery and Reinvestment Act 2009; Go Oregon funds tracking and reporting; statewide broadband; sustainability initiatives; etc.

Trained Staff – New approaches in technology deployment and management will be more effective when staff is trained in the underlying practices. This can lay the groundwork for common shared practices. Examples could include: enterprise portfolio management, investment management, performance management, enterprise architecture, etc.).

Appendix K - Success Factor Cross-Walk

The table below demonstrates how the various strategies combine to support key success factors.

SUCCESS FACTORS	GOAL #1	GOAL #2	GOAL #3
AGENCIES' COMMON NEEDS			
Reduce Complexity	Strategy 1.1	Strategy 2.1 Strategy 2.2	
Integrated Governance	Strategy 1.1		Strategy 3.2
Enterprise Portfolio	Strategy 1.2	Strategy 2.1 Strategy 2.2 Strategy 2.3	Strategy 3.4
Increased Pace of Progress	Strategy 1.1	Strategy 2.1 Strategy 2.2 Strategy 2.3	Strategy 3.2 Strategy 3.4
Enterprise / Agency Fit and Integration	Strategy 1.1 Strategy 1.2 Strategy 1.4	Strategy 2.1 Strategy 2.3	
Appropriate Resourcing	Strategy 1.2 Strategy 1.3 Strategy 1.4		
Extend Service Delivery		Strategy 2.1 Strategy 2.2	Strategy 3.3
Improve Citizen Experience			Strategy 3.1
LEADERSHIP			
Lead Planning	Strategy 1.1 Strategy 1.4		Strategy 3.4
Lead Management	Strategy 1.1 Strategy 1.4	Strategy 2.2	
Lead Policy Development	Strategy 1.1	Strategy 2.1 Strategy 2.2	
FOCUS			
Statewide IT budget controls	Strategy 1.2		Strategy 3.2
Statewide IT project controls	Strategy 1.2		Strategy 3.2
Oversight	Strategy 1.2	Strategy 2.1 Strategy 2.2	Strategy 3.2
Optimize existing IT infrastructure investments	Strategy 1.4	Strategy 2.1 Strategy 2.2 Strategy 2.3	Strategy 3.3 Strategy 3.4
Manage state IT operations more cost effectively and efficiently	Strategy 1.2	Strategy 2.3	Strategy 3.3

Appendix L – More About HB 5002 (2009) Budget Note

At the conclusion of the 2009 Legislative Session, the Joint Ways and Means Committee added a Budget Note to the DAS budget bill, House Bill 5002, providing the following instructions:

“The Legislature is concerned about how effectively the Department of Administrative Services (DAS) is performing as the state's leader in information technology (IT) planning, management and policy development. To address these concerns, the Department is directed to take the following actions during the 2009-11 biennium:

1. Update Oregon's Enterprise Information Resource Management Strategy with a focus on improving statewide IT budget and project controls and oversight, identifying strategies to optimize existing IT infrastructure investments, and managing state IT operations in a more cost effective and efficient manner. The updated strategy should include benchmarks, deliverables, and data that will be used to inform the 76th Legislative Assembly on progress being made toward achieving cost savings and efficiencies.
2. Develop and implement an Enterprise IT Security Plan and a report on the department's progress toward addressing the Secretary of State audit findings related to the DAS Enterprise Information Strategy and Policy Division (EISPD) Enterprise Security Office and the DAS State Data Center.
3. Develop a DAS EISPD E-Government program transition plan that describes the planned future operating model, and the steps, measures of success and timeframe required to complete the program's transition.

The Department shall report on its progress toward completion of these actions to the Joint Legislative Committee on Information Management and Technology or an appropriate interim/session legislative committee by February 1, 2010.”

This 2010-2015 EIRMS addresses topic areas highlighted by Ways and Means. Links make it easier for decision-makers to refer to the appropriate location in the document to understand each strategic elements contribution to addressing concerns.

Below is a more detailed explanation of some actions to be taken to satisfy concerns raised in HB 5002 Budget Note.

BUDGET

- [Strategy 1.1](#) – Creates an integrated governance body comprised of top agency management to set priorities for enterprise systems and applications. This improves project initiation and aligns project need, support, funding and review. This body makes investment gate recommendations for major IT projects.
- [Strategy 1.2](#) – Staff work and recommendations needed for an integrated governance body is achieved through EISPD and an intermediate multi-agency body working to assess technologies, architectures, business needs and make recommendations to the new governance body. Enterprise level IT projects are initiated, approved, and tracked through the Integrated Governance Body.
- [Strategy 1.2](#) – Continued maturity of IT business case development will integrate into the planning and budget cycle and results in more effective project initiation and project outcomes
- [Strategy 1.2](#) – An enterprise portfolio management system becomes the backbone of project budgeting, investment management, tracking and oversight. It not only optimizes core IT process related to project budgeting and controls, but it is also the base reporting system to keep all stakeholders advised.
- [Strategy 2.3](#) – DAS statewide information resource management functions are reviewed and reorganized to provide the most effective outcomes achievable within available resources.

PROJECT CONTROLS

- [Strategy 1.2](#) – A unified and integrated governance structure using investment gate reviews drives improvements in major IT project controls and project initiation.

Enterprise Information Resource Management Strategy (EIRMS) – v1.5

- [Strategy 1.2](#) – A portfolio management system coupled with the current independent quality assurance requirements and major IT reports are the main tools for project oversight.
- [Strategy 2.3](#) – Continue progress towards Information Technology Infrastructure Library (ITIL) process improvements within the State Data Center (SDC) as set out in the SDC strategic plan.
- [Strategy 2.3](#) – Continue progress towards knowledge acquisition of Control Objectives for Information and related Technology (COBIT) and ITIL procedures throughout state government agencies.

OVERSIGHT

- [Strategy 1.1](#) – A unified and integrated, multi-agency top management IT governance body will receive reports on major IT projects and make investment gate recommendations. Project exit gates may be excised through their recommendations.
- [Strategy 1.2](#) – Portfolio management system becomes the backbone of the oversight process and enables reporting, tracking and monitoring.

OPTIMIZE IT INFRASTRUCTURE

- [Strategy 1.2](#) – Portfolio management system allows better visibility into application and systems across the enterprise. This leads to de-duplication of unnecessary processes and infrastructure. Successful approaches can be replicated in a standardized approach leading to more cost effective and efficient operations.
- [Strategy 1.4](#) – Facilitate data governance structures to develop and agree to both common and core data exchange elements.
- [Strategy 2.1](#) and [2.2](#) – Reduce from 55 to fewer e-mail systems based on a common standard using cost benchmarking, SaaS and Center of Excellence strategies. Added functionality includes: archiving, encryption, e-discovery and improved licensing pricing. Develop e-mail system and administration standards. Downstream accomplish directory rationalization.
- [Strategy 2.3](#) – Continue consolidation of applications and software in the SDC moving SDC to a mature utility model. Tiered data storage management tied to a rate structure that reflects storage costs better optimizes data storage.
- [Strategy 2.3](#) – Document and refine enterprise architecture through the linkage of existing and additional segment architectures. Key reference architectures include: SDC technical; information security; e-government; and Geospatial information. De-clutter and simplify application environment and system environment at a core and common level.

MORE COST EFFECTIVE AND EFFICIENT OPERATION

- [Strategy 1.1](#) – Creates an integrated multi-agency governance body from top agency management to set priorities for enterprise systems and applications. This improves project initiation and aligns project need, support, funding and review. This body makes investment gate recommendations for major IT projects.
- [Strategy 2.1](#) and [2.2](#) – Reduce from 55 to fewer e-mail systems based on a common standard using cost benchmarking, SaaS and Center of Excellence strategies. Added functionality includes: archiving, encryption, e-discovery, and improved licensing pricing. Develop e-mail system and administration standards.
- [Strategy 3.1](#) – Deploy more citizen self service applications.
- [Strategy 3.2](#) – Cooperative evaluation and piloting of new technologies and applications for potential common and core applications builds stronger multi agency project initiation, reduces redundancy between agencies and reducing long term application development, acquisition, training and operating costs.
- [Strategy 3.2](#) – Utilizing software as service applications can be cost effective for some applications. It can have a lower overall total cost of operation, while providing a quick-to-implement solution.