



DEPARTMENT OF TECHNOLOGY SERVICES

2009-2012 Strategic Plan



**UTAH DEPARTMENT OF TECHNOLOGY SERVICES
AND OFFICE OF THE CHIEF INFORMATION OFFICER**

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Salt Lake City, Utah 84114

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STATE OF UTAH
Department of
Technology Services

**J. STEPHEN
FLETCHER**

CIO
Executive Director

**JON M.
HUNTSMAN, JR.**
Governor

**GARY R.
HERBERT**
Lieutenant Governor

Dear Associates,

The Strategic Plan for The Department of Technology Services (DTS) outlines our approach to achieving the goals and objectives we have set to optimize IT services for the State of Utah. The primary objective of the Strategic Plan is to establish and maintain a clear alignment of the State's IT resources to its business needs while ensuring an optimal return on investment.

The Plan outlines the need for a systemic approach to assess continuing IT developments and lists major IT initiatives throughout the enterprise. Furthermore, we are partnering with agencies to assist in achieving business objectives as outlined in the State of Utah Emerging Issues and Strategies document, as well as the IT Plans.

Since the passage of the Information Technology Governance Act (HB109) in 2005, the Department of Technology Services has merged over 900 State IT workers into a single department and worked to develop a culture that promotes service excellence and innovation. The organization has developed rates for IT services based on cost that continually improve business efficiencies. The department has implemented service level agreements with each department in the State that are customized to the individual service needs of each customer agency.

The department will continue optimization through the alignment of IT resources and business objectives to be more efficient and effective. DTS is working to optimize the service levels through an enterprise approach to customer service. The organization will create a portfolio of enterprise projects, ensuring greater coordination of Agency IT Plans.

Our future success as a State depends in many ways on our ability to achieve these objectives. The DTS Strategic Plan provides a roadmap for the planning of IT activities for 2009-2012. With this plan, DTS is poised to move forward to more efficiently deliver IT services best-enabling the State to do its business.

Thank you for your continued support in this process, I look forward to our continued work together.

J. Stephen Fletcher
CIO and Executive Director
Department of Technology Services

The *Utah Code 63F-1-203* explicitly requires the Chief Information Officer (CIO) to prepare an executive branch strategic plan that addresses:

- Interchange of information between executive branch agencies;
- Coordination between agencies in the development and maintenance of information technology and systems;
- Protection of the privacy of individuals who use State systems;
- Priorities for the development and implementation of information technology and systems; and,
- Maximizing the use of existing State information technology resources.

Accordingly this document aligns the following Core Strategic Objectives for 2009-2012 with the requirements of the *Utah Code*. These goals are meant to support State agency business objectives and help define metrics by which the Department of Technology Services (DTS) can measure progress.

Continuous Improvement and Optimization

There is no shortage of demand from State agencies to offer more IT solutions which help government operate more efficiently. DTS will continue to establish a close working relationship with its stakeholders to ensure that the state's IT organization is responsive, accountable, and well-aligned to the business needs of the State of Utah. DTS will continually seek improvements throughout all activities in order to provide optimal IT solutions, including the improvement of current services. The Department will continue optimization through the alignment of IT resources and agency business objectives to be more efficient and effective.

Green IT

Utah Governor Jon Huntsman, Jr. has declared clean energy a top priority in Utah, as a means to improve efficiency, reduce energy demand and enhance the environment while saving money and creating jobs. The Department of Technology Services has identified Green IT as a way to reduce internal costs and save energy while providing equivalent or better service to customers. The Department will incorporate the Green IT initiative into every area of strategic focus and will work with customers to implement strategies that support this perspective.

Privacy and Security

The State of Utah's information technology infrastructure is tightly woven into all State business functions and is an integral part of daily tasks. The privacy and security of the technology infrastructure will not be separated from the Department's overall mission, as the State's information resources are among the most valuable State assets.

As the number of State services available via the web expands, security of the State's information must remain a priority. The safety and security of information resources cannot be an afterthought but must be considered and built into every service and product from the very beginning. How information is managed, controlled, and protected has a significant impact on delivery of services and on the trust instilled in the users of electronic services.

In order to achieve the State's mission and vision, DTS will continue to focus on enterprise security through every area of strategic focus, working to protect the

State's information resources, reduce vulnerabilities, and manage risk. The Department will have a security plan for every IT system in the State.

Agency Services

DTS Agency Services continues to provide business direction and leadership for the Department. Agency Services must continue to communicate with agency business leaders on a regular basis in order to achieve required business objectives. DTS Agency Services will:

- Continue implementation of transparency and measures for DTS provided services in alignment with agency business objectives;
- Assist agencies in the identification of automation opportunities;
- Provide guidance to DTS operations on service level requirements and price point expectations; and
- Work closely with State leadership in developing programs for enterprise automation.

DTS Agency Services will measure success through the effective achievement of IT Plan objectives, target service levels and expectations as defined in SLAs, and DTS Enterprised Plan objectives. Agency Services will measure and report achievement of DTS services and administrative functions to Agency leadership on a regular basis.

Collaboration

Technology solutions are now available that can enhance the ability for State government to collaborate. Many of these services represent limited costs to the State with a high potential for value to citizens and business partners. There is a need to identify collaboration solutions as part of an overall collaboration strategy and architecture that will be supported through IT policies and standards. DTS plans to:

- Identify recommended collaboration tools and prepare associated standards;
- Measure the adoption, utilization, and effectiveness of approved tools on agency Websites, and collaboration processes; and,
- Assess the costs and benefits of implementation and use of collaboration tools.

Data Center Consolidation

DTS is in the process of consolidating the current 27 data centers and a majority of the state's 1700 servers into the DTS Salt Lake City and Richfield data centers. Utah will save \$4 million annually in server, support, and energy costs through effective implementation of the Data Center Consolidation. The consolidation will allow resources to be broken into smaller, more flexibly used components and pooled for more effective utilization. Through the consolidation process, DTS will:

- Reduce the number of physical servers throughout the State by 75% through effective data center consolidation;
- Reduce the support requirements for statewide server farms through effective training and personnel management programs;
- Reduce consumption of electrical power as part of a green initiative;

- Coordinate the development and communication of standards through the Architecture Review Board (ARB); and,
- Save \$4 million annually in server, support, and energy costs.

The Data Center consolidation is currently underway, with approved funding and support from the Governor. The objectives stated above will be implemented by the end of FY2010, and the Department will continue to optimize the Data Center Consolidation efforts in coming years.

Mainframe

The number of business systems and databases on the DTS mainframe has diminished greatly over the past several years. The mainframe has become a costly operating environment and the usage may not justify the expense of the system. DTS will continue to evaluate the capabilities of the current environment, as critical agency business still resides on the State operated mainframes. The cost to re-write or migrate several key Agency systems from the State mainframes could be significant. Although the current environment has been optimized for minimizing operational costs through a reduction in staff, negotiating better hardware and software maintenance contracts, and lowering costs by consolidating all production environments to the Salt Lake main data center system, there will be difficulty in justifying the costs beyond three or four years.

It is possible that an alternative to the current Mainframe will be needed. If it is determined that the capabilities of the current system are lacking, DTS will define an exit plan and assist agencies in finding and implementing the alternative system. Current Legacy applications must be removed from the current mainframe system by 2013.

Desktop Management

There is a need to utilize desktop resources in the most efficient and effective way to reduce costs, simplify operations, and provide a high level of customer service. DTS is continually conducting a holistic assessment of the desktop environment, which has resulted in a need to provide a common remote access management tool and a common desktop imaging tool. The Department has identified the following initiatives:

- Vertical alignment of staffing and service delivery across the enterprise for a full enterprise operational model, with implications that desktop management will be operated and organized much like Voice and Network as enterprise services;
- Formation of desktop services oversight teams, tasked with driving customer focused configuration standards, purchasing, deployment and decommissioning processes; and
- Improved performance management and problem management processes within the enterprise desktop services product in order to align with the SLAs.

The executable components of Desktop Management have been identified in the operation plan. The Department will continue to move forward with the analysis, as defined in the operation plan.

E-Government

There is a compelling need to continue to move in the direction of IT-enabled, E-Government services for the citizens of Utah. The State will continue to build upon its leadership role by working with agencies to identify needed services and increasing the adoption rate of those services. This requires added focus on advanced networking and Web portal skills and solutions, effective data management approaches, and a focus on security and information protection capabilities that can provide appropriate protection without unnecessarily complicating citizen access.

DTS will continue to improve interoperability between currently siloed services and systems while increasing the effectiveness of Web-based interaction between government and citizens, including:

- New State transparency Web site and a new Portal for Utah.gov;
- Utah Forms portal, enhancement of local and county government data and information, and new multimedia resources; and,
- Implementation of advanced semantic, location awareness, and search functionality on Utah.gov

Through the implementation of the E-Government initiative, the Department will support agencies in achieving:

- Implementation of an anticipated 50 new online services each year for the period 2009-2012;
- An increase in average monthly unique visitors to the Utah.gov domain to 1.2 million;
- Over 10 million secure payment transactions; and,
- Increased government transparency and openness.

E-Discovery

E-mail policy and retention must be addressed, as archiving and retention requirements differ between agencies. The Department will support each individual agency's implementation timeline and plan. The IT e-mail infrastructure must be able to support the archival and retention business requirements of agencies. Federal and State law now requires that the State provide information in electronic records, in litigation and discovery, with sanctions and penalties for failure to do so. DTS will address the overall e-mail issue, and will:

- Consolidate existing GroupWise post offices to a smaller and more manageable number, with associated cost reductions;
- Implement email policies and guidelines to ensure consistency among agencies;
- Preserve State employee e-mail based on approved policies and practices as a comprehensive centralized retention solution;
- Provide advanced search capabilities to meet the needs of agencies, the Division of Archives, employees, and e-discovery requirements; and,
- Establish appropriate operational policies for e-mail retention with agencies and DTS.

Voice

Manufacturers are updating technology for voice products which are not compatible with the State's current voice system, resulting in a lack of support and maintenance. DTS will examine alternatives to the current product, including adopting a converged network that will deliver voice, video and data on a common backbone. The converged network topology will deliver real-time services such as voice over the existing data network along with everyday data applications, referred to as Voice over IP (VoIP). DTS will assess all options to the current voice system and will develop a solution that will comply with the agency business requirements.

Network Bandwidth

As technology provides exponentially broadening opportunities and capabilities for interfacing with and serving our citizens, it also demands ever-increasing consumption of network bandwidth. State facilities are finding it difficult to run computer applications across shared connections even with increased capacity in recent years.

DTS will perform a comprehensive analysis of the network needs of its customers and work cooperatively with agencies to deliver increased bandwidth necessary to support the ever increasing array of applications and services needed to support agency business. The Department will analyze appropriate use of the resource, and will review what is deemed to be appropriate activity with each agency.

Wireless Mobility

Wireless Mobility is a societal trend that has increased usage every year. In addition to voice traffic, more users demand mobile data access, including services such as email, texting, and mobile internet access. DTS provides mobile services to several distinct communities that demand enhanced wireless mobility.

Utah citizens take advantage of a growing number of mobile technologies, and have become accustomed to accessing Utah government services from home and work. Many citizens now seek access for many services while on-the-road, or away from a fixed location. There are also a growing number of smart phones which support these services in a more elegant way, for which the State must plan as a service provider.

Most State agencies are using mobile technology to improve the productivity and availability of busy executives and others who regularly travel or are required at multiple locations throughout the workday.

DTS will achieve the following with wireless mobility enhancements:

- Increased reliability;
- Better access to mobile data and services; and,
- More mobile services to citizens.

The Department will continue to increase the availability of wireless mobility while performing an assessment of activity. A more defined plan will be determined in coming years.

Communications Interoperability

On March 8, 2007, Governor Jon M. Huntsman created the Utah State Interoperability Executive Committee (SIEC) whose duties include coordinating and resolving interoperability and wireless communication issues among Local, State, Federal, and other agencies. State Legislature codified the SIEC with House Bill 411 in the 2009 session. Agencies throughout the State have actively participated in SIEC discussions, and together have created a strategy for interoperability that will allow and support a 'system of systems' approach. Common standards ensure interoperability without mandating one-size-fits-all solutions. DTS will continue to support the SIEC in the effort to promote communications interoperability and optimization.

Data Integration

The State of Utah currently has in excess of 1,000 operational databases across all State agencies. Although these databases contain a wealth of information that is of value to State government and the people of Utah, much of this information is duplicated, as is the time and effort to keep it current. Data categorization reviews data for its most effective and efficient use, with the objective of reducing data duplication, as well as enhancing the opportunities to share data resources. DTS will create a data catalog for the purpose of categorizing enterprise data into a useful and efficient format. A well-planned data categorization resource makes essential data easy to find and less expensive to maintain.

Once started, data categorization and integration is an on-going process. However, DTS will implement this effort in a phased approach.

- Phase I:* Establish the process for identifying, categorizing, and establishing enterprise data and the conditions for sharing this information, including processes for keeping such information current.
- Phase II:* Analyze and document information in State databases.
- Phase III:* Analyze and document authoritative data available from Federal and Local government resources.
- Phase IV:* Analyze and document authoritative shareable data from non-governmental resources that may be of value to the State.

There will be a nominal cost to establish the catalog for such enterprise data, but the completion of this effort will result in the following:

- Opportunities to share data instead of to duplicate it, eliminating programming and testing costs associated with building applications to gather, store and display such duplicate data;
- Eliminate the need for, and the costs associated with, creating and maintaining 'sync' processes, built to reconcile changes occurring in like data across disparate applications;
- Create the opportunity for 'richer' applications that share data instead of requiring the user to search multiple systems; and,
- Enhance the integrity of data presented to users in various applications, as data can be shared from a single source.

Application Development

As IT becomes increasingly integral to the functioning of business processes across all agencies, the ability to manage all IT projects effectively has become essential. DTS must deliver accurate results on time and within budget, and continually seek to improve efficiency and productivity. In order to support Enterprise and Agency business needs, DTS must define and implement Application Development processes pertaining to:

- Requirements Definition
- Design Documentation
- Project Management
- Change Control
- Coding Standards
- Practice of Developing and Consuming Reusable Code
- QA Testing
- Structured Deployment
- Support/Maintenance Planning

As a result of the standardized process implementation, DTS will achieve:

- Better management of customer expectations and satisfaction through a defined set of project requirements and an approved design;
- Closer adherence to the project budget and time lines resulting from the oversight of structured project management and defined change management process;
- Improved quality of product and reduced maintenance costs due to testing, not only for usability, but for fulfillment of documented requirements before the application is deployed;
- Reduction of operational costs and faster turnover times, as hosting is able to use repeatable, consistent processes to deploy applications; and,
- Better planning and preparation for on-going costs when the user has planned for support and maintenance as part of the overall expense for the project.

Though funding for additional hours will be required to implement this process, project savings will be realized after the implementation. This is a consistent, repeatable process and should be implemented across the enterprise as soon as possible.

Document Management

Currently 18 Agencies utilize electronic document management for business operations. Document management systems utilize similar capabilities, offering opportunities for standardization and optimization that will enhance transparency, will benefit the business through enhanced service levels and lower costs, and streamline DTS operations. DTS will review current Document Management practices and will request input on the appropriate environment from the Business Enterprise Group. DTS will execute based upon the input received from this Group.

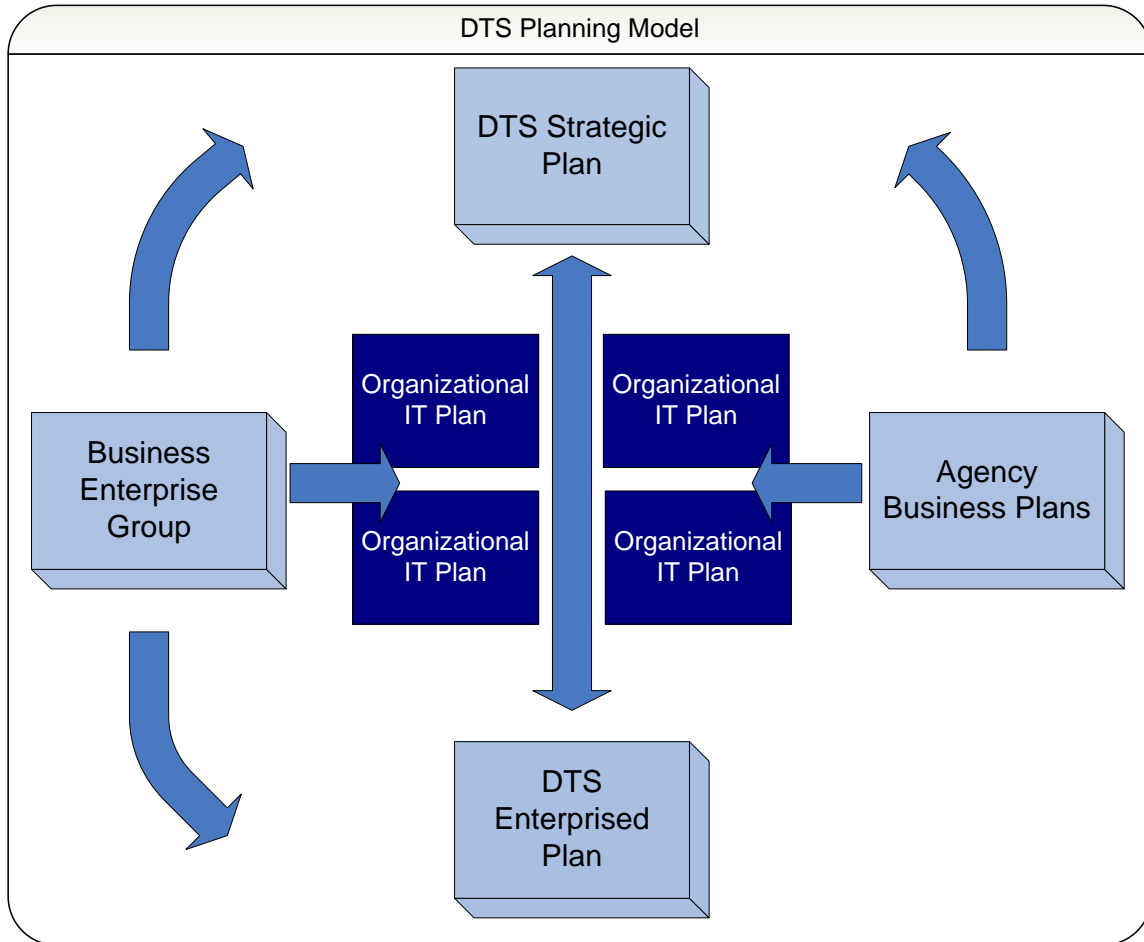
Plan Execution and Measurement

Information technology strategic goals and initiatives should be measurable in terms of results, completion of deliverables, and adherence to cost estimates and project timelines. The Balanced Scorecard (Appendix 2) will be utilized to measure DTS' success in achieving goals and will demonstrate areas where improvement is needed. DTS will continue to develop Balanced Scorecard metrics based on the Strategic Plan that will be useful for the Department, and will enable better business practices and measurements for the success in providing excellent service to customers.

The DTS Strategic Plan will contribute to the Enterprise Plan and will be utilized for the IT Plans as developed by agency business requirements. The DTS Planning Model (Appendix 1) ensures successful coordination of the Agency Business Plans and the DTS Strategic Plan. DTS Operation Plans will be developed in order to ensure successful execution of the strategic goals. The DTS Annual Report will highlight the accomplishments and activities during the year, as defined in Utah Code Section 63F-1-201.

Appendix 1

The DTS Planning Model demonstrates the relationship and coordination between the Agency Business Plans, DTS Strategic Plan, Organizational IT Plans, and the DTS Enterprised Plan. The Business Enterprise Group will review enterprise business opportunities that will contribute to the Plans.



	DTS Planning Model
AGENCY BUSINESS PLANS	<ul style="list-style-type: none"> Individual Agencies provide Annual Business Plans with IT requirements based on budget and legislation
DTS STRATEGIC PLAN	<ul style="list-style-type: none"> Establish and maintain a clear alignment of the State's IT resources to its business needs Define long term IT direction and initiatives
ORGANIZATIONAL IT PLANS	<ul style="list-style-type: none"> Identify IT requirements that directly address the business needs of customers Proactively collaborate with customers on the delivery of IT strategies and solutions to meet these needs
BUSINESS ENTERPRISE GROUP	<ul style="list-style-type: none"> Comprised of representatives from GOPB, DTS, DAS, and DHRM Provide direction for DTS on Enterprise initiatives
DTS ENTERPRISED PLAN	<ul style="list-style-type: none"> Identify similar Agency needs and integrate an Enterprise plan when possible Provide DTS internal initiatives to meet multi-agency or Statewide needs

Appendix 2

Department of Technology Services

Balanced Scorecard



Reporting Period: 03/15/2009 (February 2009)

Mission Statement: Bringing value and innovation to Utah through service and technology

Contacts: J. Stephen Fletcher, Director - 801-538-1758 Dan Frei, Finance Director 801-538-3459

Key Indicators	Status	Trend	Target	Current	Previous	Frequency	Metric Definition																																		
Infrastructure Optimization: Strive for operational excellence that includes streamlining organizational processes																																									
Customer satisfaction with DTS		↑	4.20	4.70	4.64	monthly	Ongoing Help Desk customer satisfaction metrics (surveys are sent to all customers upon submission of Help Desk ticket).																																		
Infrastructure Uptime		↓	90%	92%	95%	monthly	Number of days with no infrastructure outages. Products include: Network, Wireless, Voice Telephony Network, Email System, PDAs, Security, Data Center, Remedy.																																		
DTS Productivity		↓	55%	57.36%	57.61%	Quarterly	DTS activities are defined as <i>discretionary</i> (new application, new services, etc.) and <i>non-discretionary</i> (break-fixes, maintenance, etc.) use of resources. The current target for this metric is 55% non-discretionary use of DTS resources. Ultimately, the target for DTS will be 40%.																																		
Enterprise Optimization: Provide service our customers expect with innovation and value (see SLA tab for detail information on each Agency)																																									
Service Level Agreements: Application Availability target achieved		↑	99%	99.92%	99.76%	monthly	IT Directors report the availability of key agency business applications.																																		
Service Level Agreements: Total Time to Resolution target achieved		↑	75%	87.17%	85.18%	monthly	Reported through Remedy - Identifies the average time to resolve customer's issue.																																		
Service Level Agreements: Time to Initial Response target achieved		↑	75%	85.04%	83.96%	monthly	Reported through Remedy - Identifies the average time to respond to customer's need.																																		
Service Level Agreements: First Contact Resolution target achieved		↓	75%	66.65%	67.74%	monthly	Reported through Remedy - Identifies percentage of customer's issues that are resolved with first point of contact.																																		
DTS Interaction with Agency Business Leaders		↓	100%	90.00%	95.00%	monthly	IT Directors meet with Agency Business Leaders monthly.																																		
Procurement - Number of Days to Process Customer Order		↑	4.00	5.00	2.00	monthly	Reported through Remedy - Based on medians days from Purchase Request date to Order Submitted to Vendor Date																																		
Projects on-time		↑	100%	91.90%	89.66%	monthly	Activities within projects are on time: 329 of Total 358 Projects																																		
Projects within budget		↑	100%	96.65%	95.76%	monthly	Activities within projects are within budget: 346 of Total 358 Projects																																		
<table border="1"> <thead> <tr> <th colspan="6">Major Project Summary:</th> </tr> <tr> <th rowspan="2">Project</th> <th colspan="2">On Time</th> <th colspan="2">On Budget</th> <th rowspan="2"></th> </tr> <tr> <th>actual</th> <th>target</th> <th>actual</th> <th>target</th> </tr> </thead> <tbody> <tr> <td>eRep</td> <td>95%</td> <td>100%</td> <td>100%</td> <td>100%</td> <td></td> </tr> <tr> <td>BudgetPrep</td> <td>99%</td> <td>100%</td> <td>99%</td> <td>100%</td> <td></td> </tr> <tr> <td>Arches (Tax)</td> <td>100%</td> <td>100%</td> <td>99%</td> <td>100%</td> <td></td> </tr> </tbody> </table>								Major Project Summary:						Project	On Time		On Budget			actual	target	actual	target	eRep	95%	100%	100%	100%		BudgetPrep	99%	100%	99%	100%		Arches (Tax)	100%	100%	99%	100%	
Major Project Summary:																																									
Project	On Time		On Budget																																						
	actual	target	actual	target																																					
eRep	95%	100%	100%	100%																																					
BudgetPrep	99%	100%	99%	100%																																					
Arches (Tax)	100%	100%	99%	100%																																					
Financial: Achieve financial targets																																									
DTS Revenue targets achieved		↓	100%	97.1%	100.1%	monthly	Revenue is within 3% of target (above 100% = over-budget, below 100% = under budget) This figure ties directly to DTS Rates																																		
DTS Cost targets achieved		↑	100%	98.1%	97.7%	monthly	Cost is within 3% of target (above 100% = over-budget, below 100% = under budget)																																		
eGov																																									
Number of Online Services		↑	850	830	825	Quarterly	Number of services that all Agencies provide online																																		
Security Enhancements																																									
Security Vulnerabilities Resolved		↑	100%	52.29%	44.59%	monthly	Number of Security Vulnerabilities that are identified and resolved Number of Vulnerabilities: 604 Number of Resolved Vulnerabilities: 1155																																		

Note: The Service Level Agreement metrics indicate the impact of the Working 4 Utah initiative on DTS Customers. DTS is currently working on another metric, Utilization of Online Services, that will also indicate the impact on customers.