
IT Portfolio



Introduction to the IT Portfolio

I'm pleased to present the Washington State Department of Transportation's 2012 Information Technology Portfolio. This portfolio provides a snapshot of WSDOT's information technology (IT): our IT investment, an update of IT projects, IT's relationship with the WSDOT 2011-2017 Business Direction Plan, and plans for the future.

WSDOT strategically invests in information technology to improve our business processes and to provide the best possible transportation services to the citizens of Washington. The Office of Information Technology (IT) is responsible for strategic and operational information technology management. IT's vision is to leverage technology to maximize efficiencies, improve our services, demonstrate accountability, and provide the best possible return on investment to the State of Washington. Technology services and systems are a **key enabler** and **management tool** in our mission to keep people and business moving on the state's transportation systems.

Taking advantage of IT innovations and new technology WSDOT is moving forward during this period of economic challenges. WSDOT will continue evaluating and implementing recent advancements in new technologies and developments which can assist with critical business functions. A clear example of a WSDOT IT success is the Project Management and Reporting System that is now supporting our capital construction program.

Rarely do future requirements get smaller. As WSDOT moves forward there will be both challenges and opportunities with tolling expansion, the Ferries Vehicle Reservation project and potential new traffic management systems.

WSDOT will take advantage of opportunities to develop innovative ways to assist in getting critical IT equipment back on best practices for life cycle replacements. There will be opportunities to leverage state enterprise requirements to assist in moving major WSDOT projects forward. One example of leveraging state requirements is the need to replace the state enterprise financial system. Working with OFM on this project will assist WSDOT in the replacement of our agency core financial system. We are currently working as the pilot agency on the Enterprise Time and Attendance System (ETAS) with OFM and other state agencies. This project will provide an opportunity for WSDOT to meet the Ferries Divisions' business requirements. Shared services will provide additional opportunities for partnerships. We will find ways to do our work better and faster. IT will always be part of any WSDOT required business solution. Working together, internally or externally WSDOT will meet the state's vision and goals for our transportation systems and put tax payer dollars to the most effective use.

Sincerely,

A handwritten signature in black ink that reads "Paula Hammond". The signature is fluid and cursive, with a large loop at the end of the last name.

Paula Hammond, P.E.
Secretary of Transportation

The 2012 WSDOT IT Portfolio is produced by:

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1 - WSDOT IT Portfolio 2012 Overview

*"Always invest for the long term."
--- Warren Buffett*

With the financial down turn over the last several fiscal years, the importance of Information Technology (IT) continues to grow. The goal of IT is to reduce costs and to improve efficiencies through automation of existing systems and building new systems to support emerging business process changes. More and more of the critical missions of the Washington State Department of Transportation (WSDOT) depend on IT. The direct relationship between IT support and business requirements cannot be over stated. Maximizing what IT can do for WSDOT is critical to overall cost reductions for the agency. The WSDOT IT Portfolio is a method to allow senior executives to understand the magnitude of the agency's investment in IT and the capabilities these investments bring to WSDOT business units.

A. Purpose of the Information Technology Portfolio

RCW 43.41A.110, Information Technology Portfolios mandates that the "IT Portfolio "Information technology portfolios shall reflect (1) links among an agency's objectives, business plan, and technology; (2) analysis of the effect of an agency's proposed new technology investments on its existing infrastructure and business functions; and (3) analysis of the effect of proposed information technology investments on the state's information technology infrastructure."

The IT Portfolio organizes information for all WSDOT's Office of Information Technology (IT) resources into the perspective of an investment portfolio. The major components of the IT Portfolio are found in the following document. The portfolio is responsive to the needs of a variety of decision-makers, including executives, technical managers, program managers, Office of the Chief Information Officer (OCIO), the Office of Financial Management (OFM) management, Department of Enterprise Services (DES), the Governor, and Legislature. Information is structured to facilitate recognition of trends, analysis of problems and opportunities, and the evaluation of alternatives within the context of an agency's overall IT investment.

For the state enterprise IT Portfolio, the information is reported as directed in the OCIO Managing Information Technology Portfolios Standard (# 112.10). Other related information will be manually entered into DES's Clarity product which then is available for the legislature, OCIO, DES and OFM to produce various reports. WSDOT continues to encourage DES into automating this process by providing an interface into this system. WSDOT, along with various other state agencies, continue to electronically manage and use the IT Portfolio for decision processes at the agency level. At the end of FY2012, WSDOT IT has geared up for the Information Technology Financial Management System (ITFMS) with training scheduled the first quarter of FY2013.

B. Portfolio Support of WSDOT's Mission

Information Technology exists to support the WSDOT business missions and represents a substantial investment of WSDOT funds. To be successful there must be a convergence of business mission and the IT vision. This section of the IT Portfolio describes that convergence. First the agency's business is described, legislative mandates are reviewed, the agency mission is laid out, and then primary business objectives are identified. This provides a foundation for understanding WSDOT. Next the IT alignment of current IT investments to business objectives is defined, the importance of IT in meeting agency goals is reviewed, and then future investments needed to strengthen IT support of the agency's mission are outlined. This convergence becomes more important each year as IT support for WSDOT programs becomes greater each year while reduced funding impacts the agency. **There is little that WSDOT does as an agency that does not depend to some degree on IT.**

State Policy Goals for WSDOT

In 2007, the Governor and Legislature enacted a law establishing five policy goals for transportation agencies in Washington; an additional goal was added in March 2010. These goals which continue to guide WSDOT are:

- **Safety:** To provide for and improve the safety and security of transportation customers and the transportation system.
- **Preservation:** To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services.
- **Mobility/Congestion relief:** To improve the predictable movement of goods and people throughout the state.
- **Environment:** To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment.
- **Stewardship:** To continuously improve the quality, effectiveness, and efficiency of the transportation system.
- **Economic vitality:** To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy.

WSDOT's Mission and Primary Objectives

The mission of the Washington State Department of Transportation is to "keep people and business moving by operating and improving the state's transportation system vital to our taxpayers and communities". IT supports this mission on a 24/7 basis. To accomplish this mission WSDOT works towards achieving five State Policy goals set by the legislature.

WSDOT business objectives directly support the Governor's Priority to provide a "seamless transportation system to the prosperity of our state that also addresses the safety of our travelers". The Governor's priorities for Transportation include;

- Putting Safety First,
- Seamless Regional Transportation,
- Building a better future for Washington,
- Keeping the ferries moving,
- Maintaining our infrastructure.

All IT investments must support and facilitate these goals. As overall resources decline due to economic circumstances, WSDOT must count on IT to help close the gap between mission and resources that support business requirements.

The Secretary of Transportation's defined primary business objectives are found in the department's strategic plan. The www.wsdot.wa.gov/Accountability/PerformanceReporting/StrategicPlan.htm URL address provides a copy of the 2011-2017 plan. The WSDOT strategic plan items are linked to the IT strategic plan in Section 2 of this IT Portfolio.

The Business of Transportation

WSDOT is the steward of a large and robust transportation system, and is responsible for ensuring that people and goods move safely and efficiently. In addition to building, maintaining, and operating the state highway system, WSDOT is responsible for the state ferry system, and works in partnership with others to maintain and improve local roads, railroads, airports, and multimodal alternatives to driving.

WSDOT works towards achieving six goals: safety, preservation, mobility, environmental quality, system stewardship and economic vitality. These goals are consistent with the statewide transportation policy goals established by the Legislature.

WSDOT's vision is an integrated transportation system that is reliable, responsible, and sustainable. In order to achieve this, WSDOT's investment strategy is to preserve and maintain the current system, keep the traveling public and WSDOT workers safe, protect our environment, and reduce congestion and improve mobility through our three-pronged Moving Washington plan.

WSDOT, working closely with private contractors, is in the midst of delivering the largest capital construction program in our history, with more than \$15 billion in capital projects, including 421 highway projects. Currently, we are in year eight of this twenty-year program.

As WSDOT delivers transportation services, we also work to preserve and restore environmental quality. Programs such as stormwater treatment, construction site erosion control, fish passage barrier removal, wetland protection, air pollution control, and adaptation to climate change are important to the future health and safety of citizens. Each process helps protect priceless natural resources.

WSDOT's diverse programs and projects are supported by 7,200 full-time employees, including engineers, vessel captains, maintenance technicians, environmental specialists, planners, and many others. We take pride in our workforce and strive for excellence and integrity in everything we do.

Alignment of Current IT Investments to Business Objectives

Information technology investments support the following WSDOT services:

IT Support for WSDOT Services

Direct Services to the Public

Traffic Flow & Congestion Maps
Live Traffic Cameras
Road Closures, Construction Status
Ferry Schedules & Routes
Ferry Vessel Location Maps
Mountain Pass and Weather Reports
Incident Response Team Communications
Ferry Online Ticket Sales

Environmental & Engineering

Environmental Assessments
Bridge Design Engineering
Computer Aided Drafting & Engineering
Roadway & Right of Way Designs
Commitment & Permit Compliance

Construction:

Manage & Track Construction Contracts through the use of the Project Management and Reporting System
Construction Materials Test Tracking
Cataloging Pavement Deficiencies

Ferries Division

Labor Management
Automated Vessel Dispatch
Electronic Fare System
Vehicle Reservation System

Planning & Programming:

Construction Project Identification, Scoping & Prioritization
Traffic Data Capture and Reporting
Highway Systems Inventory
Accident & Hazardous Locations Tracking
Statewide Transportation Improvement Programs (STIP)
Transportation Improvement Programs (TIP) for Metropolitan Planning Organizations (MPO's) & Regional Transportation Planning Organizations (RTPO's)

Project Management:

Project Planning & Resource Scheduling
Progress Tracking & Reporting
Project Management and Reporting System

Maintenance:

Highway Maintenance Tracking
Equipment Inventories
Facilities Management
Traffic Monitoring & Signals
Emergency Operations Center

Financial and Administrative Management

Budget Management
Accounting Services
Performance Monitoring, Track State, Federal & Local
Program Funds
Contract Management & Payments
Transportation Executive Information System (TEIS)
Federal Highways Administration Billing & Reporting
Payroll, Training, Human Resources Management
Purchasing, Inventory

Importance of IT in Meeting Agency Goals

WSDOT strategically invests in information technology to improve our business processes and to provide the best possible transportation services to the citizens of Washington. It is the vision of WSDOT IT to leverage technology to maximize efficiencies, improve our services, and provide the best possible solutions to WSDOT. WSDOT Executive management embraces the use of technology services as a **key enabler** and **management tool** in our mission to provide the citizens of Washington with the best possible state transportation infrastructure.

During the 2011-2012 Fiscal year, IT focused on the following initiatives to support WSDOT Goals:

- **2013 Legislative Session / 13-15 Budget Cycle.** WSDOT has submitted two decision packages in the 2013 budget cycle. The first decision package requests funding for increased costs of software licensing. Budget reductions due to the recession have severely constrained WSDOT's ability to fund the \$1,381,000 increased cost of current software licenses.

The second decision package is for additional infrastructure to increase web availability. The increased capacity is critical for WSDOT's winter operations and emergency response duties. Weather events of the last few years have strained the agency's ability to deliver timely information to employees and the general public.

The Department of Enterprise Services (DES) is funding the initial phases of the Time Leave Attendance (TLA) project. DES has submitted a decision package which moves the TLA funding (\$10.2 Mil) to next biennium for the additional phases of the project.

- **2011 – 13 Budget & Legislative Session.** WSDOT has delivered a new service ("Save A Spot") to enable enhanced vehicle reservations on the Port Townsend-Coupeville route, for the International sailings to and from Sidney, B.C., and for commercial vehicles in the San Juan Islands and at Port Townsend-Coupeville. This service comprises the scope for Phase One of the Vehicle Reservation Solution (VRS), as directed by the Legislature in the 2010 Supplemental budget.

This solution is integrated with WSDOT's existing "Wave2Go" ticketing and Electronic Fare System (EFS). Tickets are issued to customers holding reservations based on the current fare for a crossing, less any deposit already paid by the customer to hold that reservation. Penalties for reservations not canceled during a configurable time window are automated, to reduce abuse of the system as observed at Port Townsend-Coupeville using the system that has now been replaced.

Save A Spot has been designed and implemented in such a way as to allow its use on any route and at any terminal that would benefit from having a portion of the vessel deck space allocated on a reserved basis. Sophisticated algorithms compute reservation deposit amounts based on the kind of customer being served (commuter, commercial, general public). Portion of deck space to be reserved can similarly be allocated on a per-sailing basis for different types of customers and based on characteristics of peak demand.

- **Improvements in IT Portfolio and Disaster Recovery.** In June 2012, IT implemented the Application and Database Information System (ADIS) which collects application interface information, interface information and is linked to the WSDOT Data Catalog system to provide the OCIO's IT Portfolio reporting requirements about applications. ADIS provides the application, interfaces and down-stream impact information based upon the application's links to the database(s), datamarts or geo-datasets. In addition to the IT Portfolio, the ADIS supplies a complete picture of the inter-relationships between applications and databases, providing the Executive Management the information necessary for Disaster Recovery or operational planning. The next phase for ADIS is linking the information electronically to the Continuity of Operations Plan (COOP) for a more comprehensive COOP.
- **Improvements in Operational Processes.** In support of implementing Information Technical Information Library (ITIL) processes to be implemented in the future, WSDOT IT has implemented changes to the Technical Review processes. This year, WSDOT IT split out the Initiative and Operations Support Teams to Initiative Support Team and Operational Managers to better utilize review processes. The Initiative Support Team supports and reviews new initiatives which may progress into projects. This team supplies a review process along with support for resources or processes for new initiatives moving forward. The Operations Support Team provides review and support processes for the technical staff. Both teams work together to provide a united approach to provide support and review processes to IT staff.
- **Enterprise Time, Leave and Attendance System.** WSDOT, in collaboration with the Office of Financial Management (OFM) and Department of Enterprise Services (DES), will be a pilot agency in the implementation of a new configurable off-the-shelf (COTS) TLA system. The new system will address some of the issues faced by the agency with the current timekeeping systems. These systems currently require manual processes to track Family and Medical Leave Act (FMLA) leave accruals and liquidations necessary to ensure compliance with FMLA standards. In addition, it will remove the limitations in the current timekeeping systems which make it difficult to implement and track provisions of the numerous collective bargaining agreements and minimize the risk to the agency as it relates to the maintenance of the current systems, which were built in the 1980's. These limitations increase the risk of grievances being filed and the lack of legacy programming expertise (due to outdated technologies) required to maintain the existing timekeeping systems.
- **Total Cost of Ownership.** WSDOT IT participated in the statewide Total Cost of Ownership (TCO) survey coordinated by the OCIO. IT staff collected information on investments, resources and provided this information to the Gartner Group consultants. Results from the TCO shows how WSDOT IT continues to provide services considerably below the industry averages for public companies and public entities.
- **OMWBE Support Initiatives.** In supporting the Governor's state initiatives, WSDOT is working with the State Office of Minority and Women's business Enterprises (OMWBE) to develop a system that will automate the certification review/approval process for M/WBE certification requests. Also in support of the Governor's initiatives, WSDOT is upgrading OMWBE's IT environment, and moving its IT infrastructure into the WSDOT IT environment.
- **Improvements in Technology Project Delivery and Accountability.** WSDOT IT upgraded the Microsoft Project Server software to 2010 which included portfolio management, SharePoint 2010 and Performance Point. IT is in the processing of implementing Project Server to collect Project Information required by the OCIO office and to track progress of Projects. By utilizing Microsoft Project Server, IT will also be able to track major KPI (Key Performance Indicators) real-time providing the ability for Executive Management the information necessary to make key decisions during this financial recession.
- **2009-2011 Legislative Session/Governor Mandate.** While the replacement of Critical Applications is a high priority project, the funding restrictions focused IT priorities to those items which were operational in nature such as hardware equipment replacements (PC's, servers and network).

WSDOT was tremendously impacted by the August 2008 Governor mandate and spending adjustment which effectively froze infrastructure purchases. The governor's mandate effectively pushed WSDOT IT from a 4-year (while most state agencies were able to retain a 3-year) to a 5-year lifecycle. WSDOT purchased approximately 50% of the lifecycle replacements which should have been purchased during FY2008 and FY2009. WSDOT staff continued to use 5-year old devices. In FY2010 and FY2011, while on a new 5-year lifecycle, WSDOT IT purchased over 4000 PCs. Under a 4-year plan this would have been significantly higher in order to replace the PCs due from the previous biennium.

During this biennium, WSDOT IT is faced with a "catch-up" situation where last biennium's PC lifecycle replacements in conjunction with this biennium's replacements coupled with a budget crises with no available funding will prolong WSDOT IT's ability to provide adequate equipment to some staff while sustaining critical services for the agency.

C. Summary of IT Plans, Proposals, and Acquisition process

The Office of Information Technology develops plans and proposals for the formal information technology program (C Program). If an information technology enterprise service is provided by the department, or the agency has a specific requirement to acquire hardware, software, or purchased or personal services directly, WSDOT will seek the best possible cost and consult with the Department of Enterprise Services (DES) and the Office of the Chief Information Office (OCIO) in developing the plan. The plans and proposals will include input from business stakeholders. These plans and proposals are reviewed and approved by the agency leadership team prior to submission.

Acquisition Process

The Office of Information Technology (IT) Contracts Office follows a documented formal process providing an open and fair opportunity to qualified vendors. This open and fair process culminates in a vendor or service provider selection. Selection is based on criteria which may include such factors as consulting fees, cost, ability, capacity, experience, reputation, responsiveness to time limitations, responsiveness to solicitation requirements, and quality of previous performance. The acquisition process is in compliance with statutes and rules relating to contracts and/or services and follows all OCIO or Technology Services Board (TSB) policies, standards, and guidelines issued under RCW 43.41A as well as RCW 39.29.

Adherence to State Technical Standards

The architectures approved by the OCIO and Technology Services Board (TSB) provide the framework for WSDOT IT internal technical standards. The only deviations are as required by Federal Intelligent Transportation Systems (ITS) standards and agreements between WSDOT and WSP for radio communications. OCIO policies and TSB published standards are linked from the WSDOT Information Technology Manual (M3017.00) as a reference point for all agency staff.

Adherence to State Complaint and Protest Procedures

The IT Contracts Office uses the OCIO and TSB recommended "Resolution of Complaints and Protest" language from the State IT Investment Standard and inserts it into all competitive acquisition documents issued from the office for the contracts that involve an IT related service.

D. Enterprise View of Information Technology Infrastructure

This section provides an overview of **Section 3** of the IT Portfolio which contains the detailed information of the technology infrastructure including technology environment, computing hardware, computing software, networks, critical applications, and a description of who is doing IT work.

WSDOT supports a complex environment as outlined below:

** Note: PC/workstation figures include the 7500 total number of lifecycle PC's which are deployed to FTE usage or other services.*

Computing Software

WSDOT's infrastructure environment contains a variety of software tools to support the mainframe, server, and network environments. The agency has adopted workstation standards for all desktop software documented as "Level Playing Field (LPF)". The mainframe runs a suite of IBM software products as well as many independent software vendor (ISV) software products. Server environment is primarily Microsoft software with small additional products to support various business groups, i.e. Geographic Information Systems (GIS) products, and computer-aided engineering software.

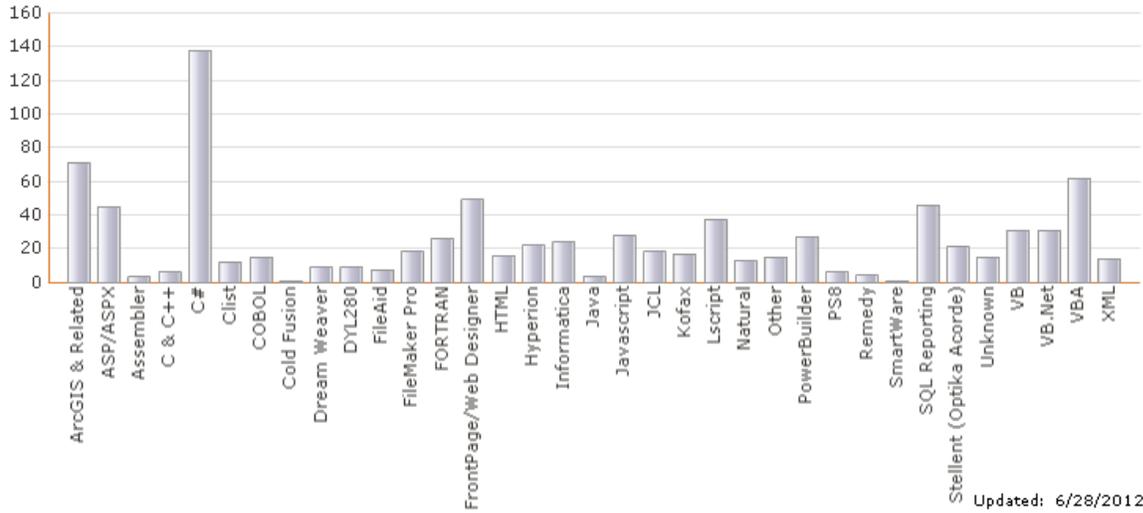
The LPF development platform for new application or system develop is Microsoft's .NET framework with C#. All new applications are being developed on this platform for thin client on Microsoft's Internet Information Services (IIS) web servers. By utilizing the latest Microsoft development Web platform, WSDOT has eliminated individual PC deployment needs for the new systems and applications.

Applications & Systems

Many of the agency's strategic objectives rely upon the specialized applications which are supported and maintained by WSDOT IT. There are 497 applications or interfaces developed on various technology platforms. Many of the applications use multiple programming languages or customized Commercial off-the-shelf software requiring the limited staff to have very diverse skillsets.

Application Programming Languages

FY2012



Critical Applications

The state of our Critical Applications varies depending on the platform. There are newer technologies which WSDOT relies upon to perform our business in new ways reaching more of the citizens of our state. These technologies which use the internet, including Twitter, blogs, and Flickr, provide additional challenges to WSDOT in that the application becomes less critical than the network access. When reviewing the COOP (Continuity of Operations Plan), which identifies the critical applications from the business perspective and business required recovery times, we found that there is a significant increase in the number of applications which have been identified as mission critical, showing how reliant WSDOT is upon technology.

There are 61 critical applications which have been identified in the COOP plan as critical applications to WSDOT Operations. For additional information on the description of each application, see Section 3.

In addition to the mission critical applications identified by the WSDOT business units, there are seven applications which are integrated creating an inter-related 'Critical Application' system. These systems constitute the Department's primary financial management, timekeeping, program management, project management, and asset management systems. Performing a range of business functions for the Department including needs identification and project prioritization, development and monitoring of the Department's capital construction program, asset management, project management, procurement, management of the revenue cycle, and financial reporting and general ledger. The Critical Applications project was able to complete the feasibility study during the '07-'09 biennium, however, the remaining phases of the project were not funded. Due to Washington State's financial climate, WSDOT will continue to maintain these critical applications in their current development platform.

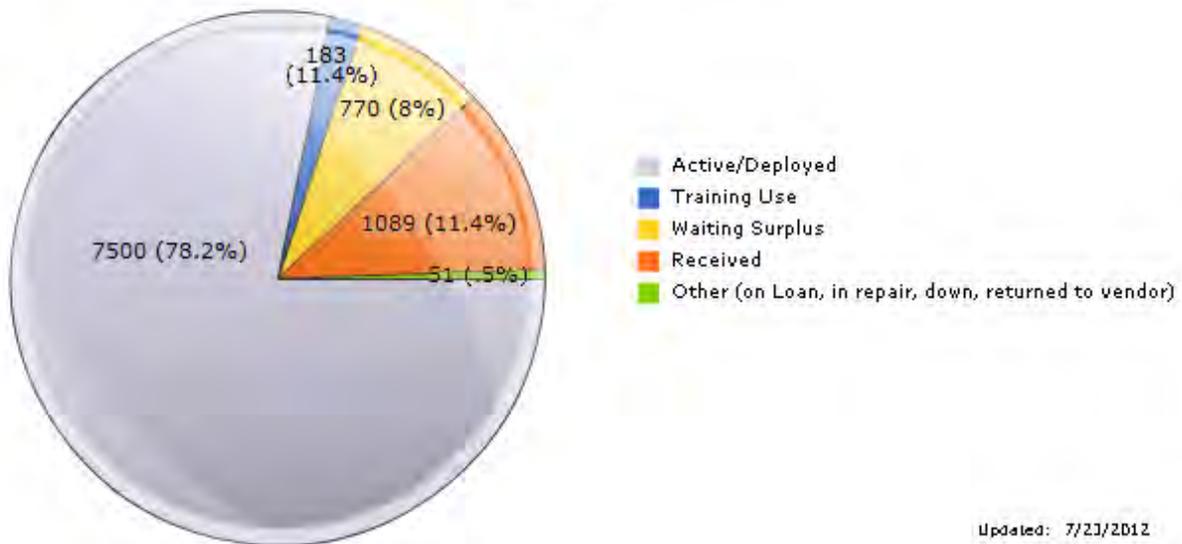
In the new OCIO strategic plan, action item 11 for the state is to replace legacy systems. WSDOT will be working with the OCIO to find funding for the upgrade of the 'Critical Application' system. Until there is funding, WSDOT IT will continue to plan for the upgrade in order to bring these systems into a development platform which can be maintained more efficiently and accessible by the current technical equipment.

Hardware

WSDOT has mainly Intel based desktops across the agency running Windows XP or Windows 7 connecting by twisted pair cabling to the WSDOT data centers. Throughout the state, the various data centers are connect using Fiber optics, creating the WSDOT WAN (Wide Area Network). WSDOT servers run on the Microsoft platform and are scattered through various data center locations throughout the state. In addition to the servers, WSDOT supports one primary data center in Olympia, which runs both the servers and a mainframe.

With 7000+ deployed workstations (desktop and laptop) across the state, WSDOT has a constant flux of new devices being received and old devices being disposed. Due to staffing shortages, and continued competing business priorities, WSDOT IT has not been able to deploy newly received workstations as quickly as in the past. This has led to increased quantities of devices, which have already been received, lagging behind in replacement of aged devices. Additionally, with the current DES focus on closeout of Liquor Control Board, WSDOT stockpiles of aged hardware pending surplus or disposal has grown. As a result of staffing challenges and DES priorities, WSDOT increasingly has larger amounts of non-deployed PCs in the inventory. WSDOT IT is endeavoring to reduce the lag time in deployment of newly purchased devices, and working with DES to ensure we get all end-of-life devices disposed in a timely manner.

2012 WSDOT Desktop & Laptop Lifecycle
by Status



WSDOT Data Center Facility

WSDOT's datacenter is located in the Olympia Headquarters Transportation Building. The infrastructure consists of multiple power and cooling systems, with built-in redundancy, which has contributed to the datacenter's excellent uptime record. The datacenter has not experienced an unplanned outage in the past decade.

The carbon footprint of the datacenter has been reduced significantly over the past four years. In 2007 a heat exchanger was installed as part of the HVAC upgrade, which uses the warm air from the HVAC system to heat the building. In just the past two years, the power requirements of the datacenter have been reduced by 25 percent due to advancement in hardware technology and the use of server virtualization.

This co-location facility hosts the following critical functions in an integrated and collaborative manner to maximize the benefits of common infrastructure and support services. All of these services require the highest level of availability.

- Headquarters Emergency Operations Center (EOC)
- Information Technology Operations Center (ITOC)
- After Hours Service Desk
- Mainframe Services
- Server Services
- Network Services
- Voice Services

The HQ Data Center’s raised floor area (floor tile raised above the subfloor which allow network cables, power cables and air coolant usage in square feet) has a total of 6,329 total square feet. The raised floor area is utilized by the following:

- 2,380 occupied by EOC/ITOC
- 3,034 occupied by IT Equipment
- 884 available for usage

WSDOT’s ensures the datacenter by having regular maintenance and testing on the support systems.

Equipment	Details	New/Upgrade Date	Lifecycle	Maintenance
Uninterruptible Power Supply (UPS)	Dual 225 kVA	Oct 2011	15 years	Semi-annually
Generator	Primary 350 kVA	Jan 1995	40 years	Bi-weekly
Generator	Backup 400 kVA	Oct 1999	40 years	Bi-weekly
Heating, Ventilation and Air Conditioning (HVAC)	180 Tons	Jan 2007	25 years	Quarterly
Halon	Fire Suppression	Jan 2007	25 years	Semi-annually

Mainframe Services

In January 2011, WSDOT replaced its aging mainframe equipment with a new IBM z10 mainframe and DS6800 storage subsystem. Today, seven of the original 11 critical legacy applications are still running on the mainframe. These applications are absolutely critical to the mission of WSDOT and must have the highest level of availability.

Benefits derived from acquiring the new Z10 mainframe include:

- Continue to provide a solid platform for legacy applications
- Positions WSDOT for the next 8-10 years
- A Return on Investment (ROI) of 18.6 months
- Five year cost savings of \$ 412,000

Service Availability

System availability has been maximized by implementing cost effective system redundancy and failover features that all services depend upon to maintain exceptional service levels.

- **After Hours Service Desk:** A Help Desk is available 24x7 and support staff is on-call 24x7 to ensure high availability of services.
- **Critical Applications:** Critical applications are distributed across multiple hardware instances to eliminate single points of failure.
- **IT Equipment:** IT computer equipment components are powered by multiple circuits and a power distribution unit to ensure high quality power.
- **Power:** All computer equipment is fed by an Uninterruptable Power Supply (UPS) that has three fully redundant battery arrays, with a battery life of 40 minutes.

- **Power Backup:** The facility has a dedicated generator and a backup generator that is capable of running a minimum of 72 hours before refueling. If an extended outage should occur, onsite fuel delivery has been contracted.
- **Cooling:** The facility has a dedicated cooling system with a backup system available in case of failure.
- **Fire Suppression:** The facility has a fire sprinkler system installed exclusively to protect the EOC, ITOC, and After Hours Service Desk areas. A Halon fire suppression system is installed to protect the remaining IT equipment.

All of the services hosted in the ITOC and EOC require the highest level of availability and have benefited from its excellent performance record.

Security

Facility security is integrated with the agency-wide security system and managed cooperatively by WSDOT Capital Facilities and the Office of Information Technology. The ITOC/EOC is vital to WSDOT's business, and the following measures have been employed to secure it:

- Multiple points of access control are enforced throughout building and facility.
- Access is restricted by use of a card-key system and photo identification.
- Authorization requires written approval from management.
- The security system is hosted in this facility and access is tightly controlled.
- All visitors are required to sign in with date, time, and reason for visit. All visitors are escorted by an IT sponsor.

The IT Operations Center security conforms to the Technology Services Board standards and maintains the confidentiality, integrity, and availability of data. To date, there have been no instances of failure in this regard.

Network

WSDOT has a complex and widespread configuration of wide area and local area networks to serve internal and external customers. The major components of the WSDOT network include:

- 1) WSDOT Data Network;
- 2) the WSDOT Voice and Video Network, and
- 3) WSDOT Traffic Networks.

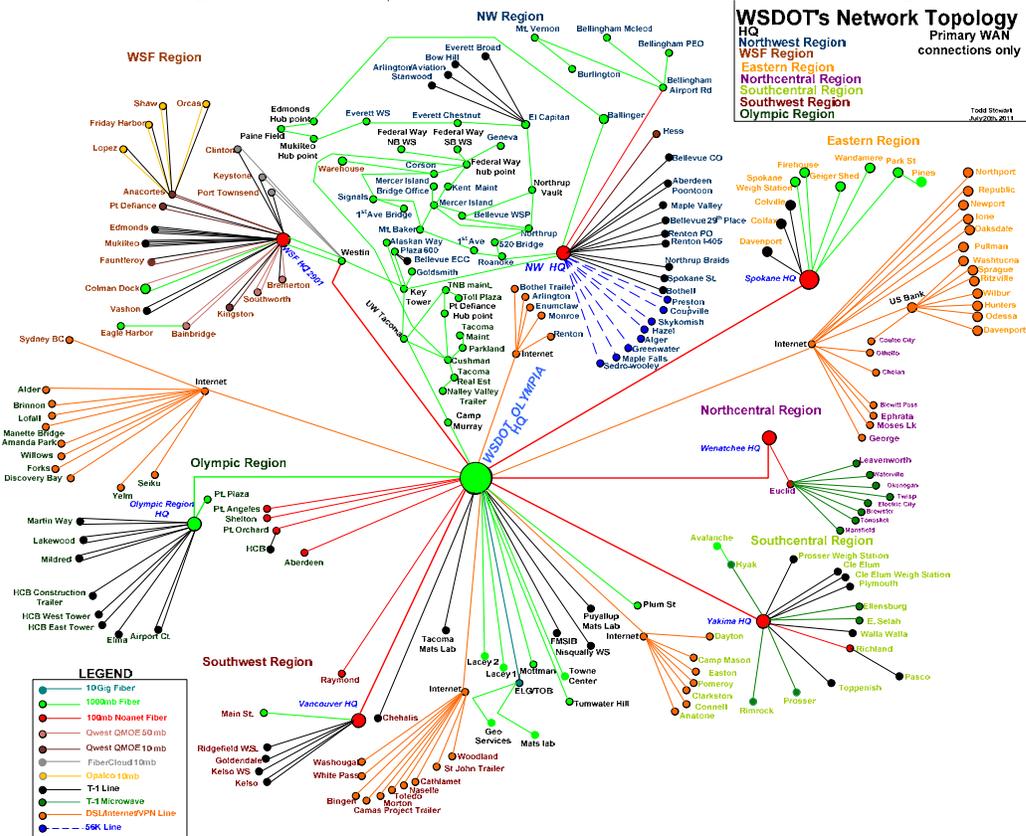
The WSDOT network environment is based primarily on Microsoft Windows and uses TCP/IP as the primary network protocol. A description of the major components is provided in Section 3.

IT Locations

WSDOT IT has two central locations, Tumwater and the other at the Olympia Transportation Headquarters building. WSDOT IT has additional distributed locations at each of the 6 regions, Ferries division and the Materials Laboratory, to serve the agency's business. The locations are as follows:

Headquarters (Olympia includes ELG building in Tumwater) – supporting the agency infrastructure (network, mainframe, servers) services, applications, field services, enterprise architecture and planning.	
Materials Laboratory (Tumwater)	North Central Region (Wenatchee)
Northwest Region (Shoreline)	South Central Region (Yakima)
Ferries Division (Seattle)	Southwest Region (Vancouver)
Eastern Region (Spokane)	Olympic Region (Tumwater)

The network topology map displays WSDOT locations and network nodes throughout the state:



Northwest Region

The Northwest Region (NWR) IT service center provides additional services beyond critical support for helpdesk, desktop support, servers, data storage and network availability for the many WSDOT offices in North West Washington. The NWR IT center is leading DOT's effort in offering Virtual Desktop Infrastructure (VDI) as an alternative to the traditional desktop and laptop replacement plan. Virtual desktops make the user hardware independent. The user will be able to access their desktop from any DOT connected device on virtually any hardware platform and by doing so we will be able to extend the lifecycle of current hardware 2-4 years. This alternative will make DOT data more secure, provide greater and quicker response to traditional support of users and offer access from anywhere they can access the Internet.

North Central Region

North Central Region IT is a Headquarters' IT organization, placed based in Wenatchee Washington to support the North Central Region Administrator's staff and operations. The region supports three maintenance areas and 14 maintenance sheds throughout the 1500 square mile of state roadway. The IT department is made up of 4 technicians supporting server operations (20 virtual servers, 4, virtual hosts, 13 physical servers), workstation support (250+ Personal and Laptop computers), telephone and multi-media communications, TMC and radio operations support, support to traffic systems and help desk support. North Central Region IT also provides one technician who works at the agency's full time computer security analyst and 1 manager who is the Agency Computer Security Officer and Regional IT Manager. This group is extensively involved in projects that not only span the agency but also affect other agencies statewide.

Eastern Region

The Eastern Region (ER) IT service center provides additional services beyond critical support for helpdesk, desktop support, servers, data storage and network availability for the many WSDOT offices in Eastern Washington. The ER IT center is leading DOT's effort in mobile technology as an enhancement to the traditional desktops and laptops in use throughout the department. Specifically, ER IT is working with HQ IT and HQ Maintenance on maintaining and enhancing the current system of mobile technology that utilizes handheld PDAs. The current PDAs in use at WSDOT operate on an older version of Microsoft Windows Mobile OS that is being phased out and ER IT is helping look at more current alternatives including Google Android and Microsoft Windows Mobile 8.0. In addition, ER IT is piloting the use of tablet computers and smartphones to replace laptops and PDAs or in areas in which no technology is currently in use. Given the high portability and increased power of these new devices and prices that continue to decrease, ER IT is hopeful these new tools will enable WSDOT employees throughout Engineering and Maintenance to be more productive when working in the field.

Southwest and Olympic Regions

The Olympic (OR) and Southwest (SW) Region IT service centers provide support for technology users, both staff and the public, from the coast through the I-5 corridor and beyond. In addition to "keeping the public informed", the critical support provides WSDOT staff access to helpdesk, desktop support, servers, data storage and network availability for the many WSDOT offices in 14 counties from Klickitat to Clallam. The Southwest region is leading WSDOT's efforts with Video Conferencing technology, and provides that same critical support to the multi-billion dollar Columbia River Crossing project.

Olympic and Southwest IT Departments are pioneering efforts in shared assets to provide those, and improved, critical services to the public and staff. Being overseen by one manager; ignoring traditionally restrictive borders of responsibility; technicians crossing regional boundaries; leveraging "Place Based" staff, and combined funding are but a few of the ideas being applied in the spirit of OneDOT.

Materials Laboratory

The Materials Laboratory (MATs Lab) IT provides highly specialized support services for helpdesk, desktop support, servers, and data storage. In addition the MATs Lab also supports six WSDOT regional Materials Laboratories located throughout the state. The State Materials Laboratory is an AASHTO Accredited laboratory which serves as the central testing laboratory for the Washington State Department of Transportation and includes the Bituminous, Chemical, Electrical, Physical Testing and Soil Laboratories. The various tests are performed to ensure the materials used meet the appropriate American Society for Testing Materials, American Association of State and Transportation Officials, or Department specifications. The MATS lab staff is dedicated to providing materials testing and research in order to further the field of transportation and provide new and enhanced solutions for long-lasting and cost-effective design, construction and maintenance.

Additional services Fabrication Inspection, Pavements, Geotechnical Engineering and Engineering Geology are provided. WSDOT is nationally known for its Geotechnical Services, which provide a lead role in developing and setting national public sector standards of practice for the geotechnical profession. By providing the following services, the MATS lab ensure that the soil or rock beneath the ground surface can support the loads and conditions placed on it during road construction and maintenance: subsurface field investigations, geologic site characterization, laboratory testing of soil and rock, structure foundation and retaining wall design, soil cut and fill, stability design, rock slope design, unstable slope management, unstable slope mitigation due to rock fall, landslides, and debris flow. Materials and Fabrication Inspection test and approve a variety of materials for use in construction projects. Some of the services include visual inspections of materials to assure compliance to contract provisions, Collect samples of reinforcing bar, paint, bolting material, etc. for testing, and review material certifications and documentation as required by contract. The Pavements Division manages 18,500 lane miles of state highway pavements by providing structural analysis and design, and conducting pavement research which are vital to ensure smooth, safe and economical pavements across Washington's highway system.

The State Materials Laboratory IT team provides mission critical Just in Time (JIT) support to highly specialized applications. These applications are a vital and integral part of WSDOT business and are now being used by 40+ Project offices, HQ Materials Lab, six Region labs, Local Agencies and also by private entities who do business with us. There are between 80-90 unique applications at the Materials Laboratory, such as Statistical Analysis of Materials (SAM) and Construction Audit Tracking System (CATS) application, which saves WSDOT an average of one million dollars per design build project. In addition, the MATs Lab team provides software and hardware support for specialized testing equipment to ensure the mission readiness of the Materials Laboratory and how it directly impacts construction projects state-wide.

Who is Doing the Work

The Office of Information Technology (IT) is the core technology service provider for the Department of Transportation. Technology services are managed and maintained by IT and provide essential support for the agency statewide. Services provided include all facets of technology such as, infrastructure/networks, mainframe operations, web operations, technology equipment, statewide business applications, desktop services and support, technology strategic planning and governance.

Subprogram C1 Business and Administration		12.2 FTEs
Provides the executive management of Information Technology and the C program. Key activities:		
<ul style="list-style-type: none"> IT Director IT Planning & Administrative Operations Management IT Communications Customer Relationship Management Strategic Planning IT Key Performance Indicators, Measurements and Tracking (IT Dashboards) 	<ul style="list-style-type: none"> IT Portfolio Management and Technology Governance Disaster Recovery Planning Performance Reporting IT Administrative Support IT Accounting Support (Program C) IT Budget Support (Program C) IT Prompt Pay Initiative 	
Subprogram C2 Field Services		100.9 FTEs
Provides strategic and operational coordination in support of the statewide infrastructure backbone along with region and ferries technology activities. Key activities:		
<ul style="list-style-type: none"> Application Deployments Level Playing Field (LPF) Software Support Workstation Configuration and Security Software Upgrades & Maintenance Releases 	<ul style="list-style-type: none"> Hardware Upgrades and Replacements IT Help Desk HQ Desktop Services 	
Region IT (includes Ferries Division)		(FTE count included in total for subprogram C2)
Includes regional Information Technology support. Key activities:		
<ul style="list-style-type: none"> Local Area Network and Server Planning Region Computer Equipment Purchase Planning Region Help Desk Administration Region Software Technical Support 	<ul style="list-style-type: none"> Regional Application Deployment Local Area Network, Server Installation & Support Computer Workstation Installation & Support 	
Subprogram C3 Infrastructure Services		40 FTEs
Provides enterprise management and operational support for mainframe operations. Key activities:		
<ul style="list-style-type: none"> Mainframe Operations Network Planning & Operations Server Management and Support LAN/WAN Design Datacenter Management Server Services Administration (E-mail, SharePoint, Oracle, EMC, SIEM, Web Server, etc.) Web Application Deployments 	<ul style="list-style-type: none"> Voice/Video Planning, Design & Operations Voice Help Desk Network Security Operations Cloud Services Electronic Storage Management Remote Access Services Management Information Technology Operations Center (ITOC) 	

Subprogram C4 Enterprise Implementation	9 FTEs
--	---------------

Provides consulting, business analysis and project management knowledge, expertise and methodology for Information Technology Projects. Key activities:

- | | |
|--|--|
| <ul style="list-style-type: none"> IT Project Management Guidelines & Policy Integration Project Planning/Scoping Project Management Project Tracking & Reporting Change Management | <ul style="list-style-type: none"> IT Customer Consulting and Business Needs Assessment Build/Buy Analysis & Recommendations Project Post Implementation Reviews Enterprise Architecture |
|--|--|

Subprogram C5 Enterprise Application Services	45.7 FTEs
--	------------------

Provides application and Tier 3 application support for enterprise applications. Key activities:

- | | |
|--|---|
| <ul style="list-style-type: none"> Application Development Application Enhancements Application Maintenance | <ul style="list-style-type: none"> Software Testing & Quality Assurance Product Support Tier 3 Application Support (including SharePoint, Oncore, Remedy (Asset Management) & Workflow Management) |
|--|---|

Subprogram C6 Software Maintenance	0 FTEs
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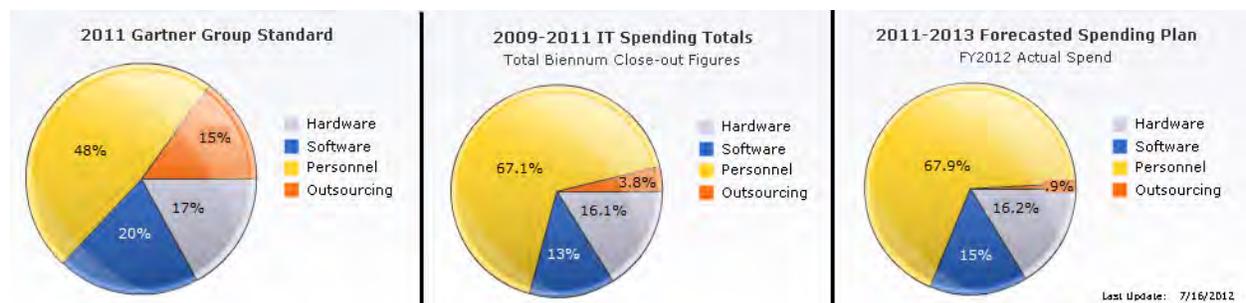
Provides budget codes for software maintenance agreements, contracts, and subscription services.

Subprogram C7 Data Management Services	19 FTEs
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Provides data management support for Enterprise. Key activities:

- | | |
|---|---|
| <ul style="list-style-type: none"> Data Analysis and Modeling Data Mart Development and Support Data Administration Customer Query Tool Support/Datamart Administration | <ul style="list-style-type: none"> Data Security Administration Data Storage & Capacity Planning Data Catalog Administration |
|---|---|

In addition, there are a number of other IT specialists employed in business units that are funded under program budgets. Budget reductions in the C program will directly impact on IT's ability to meet mission requirements. As seen below, WSDOT has invested heavily in Personnel rather than outsourcing, budget cuts will impact personnel.

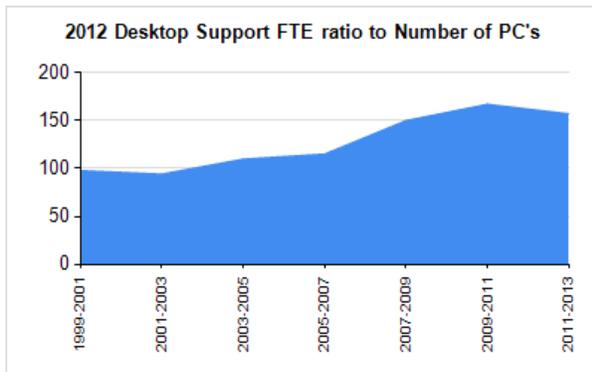


E. Analysis

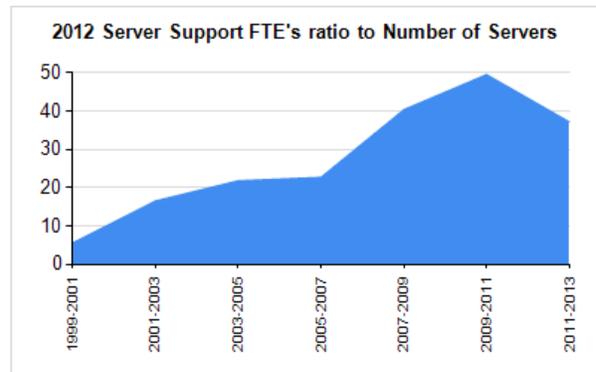
IT enables the use of technology throughout WSDOT. IT is responsible for the management of the department's technology program and provision of all core technology services.

The department's technology usage has shown dramatic growth over the last decade. Even with the projected drop in FTEs due to a drop in construction projects, WSDOT's needs for technology will continue to grow. WSDOT IT continues to innovate with solutions such as server virtualization to cut down the costs of hardware and support while providing better service in the area of recovery. Innovations, such as virtualization, have provided the ability for WSDOT to prolong IT equipment use while continuing to provide essential services. If funding availability increases, IT will plan to improve infrastructure and desktops.

WSDOT's dependency on desktop hardware relates directly to the number of support staff necessary to maintain the desktops. The following two charts are examples of the growth in hardware to be supported and that the growth expected in FTEs proportional to the amount of equipment growth has lagged considerably behind.



1999 There were 97.9 PC's for every Desktop Support Staff.
2012 There are now 157.3 PC's for every Desktop Support Staff.



1999 There were 5.5 Servers for every Server Support Staff.
2012 There are now 37.2 Servers for every Server Support Staff.

WSDOT has also continued to increase its *online* presence to deliver vital services to the traveling public on the web such as construction project reports, traffic camera images, travel time forecasts and pass information, to name just a few of the services provided. These have quickly become essential services to the public — not just nice to have. Technology is at the bedrock of WSDOT work and services. It takes a reliable network of hardware, software and technology professionals to keep the systems, services and supporting infrastructure running to support WSDOT business needs. Investments in personnel need to grow proportionally to the amount of hardware and software being maintained.

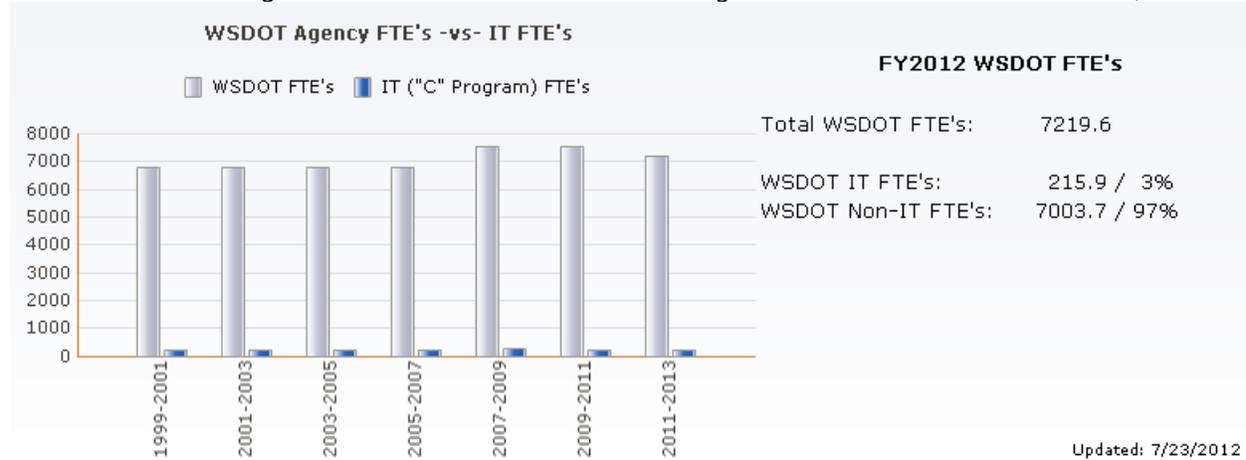
F. IT Challenges and Opportunities Faced by WSDOT

WSDOT's workload and workforce continues to decrease due to:

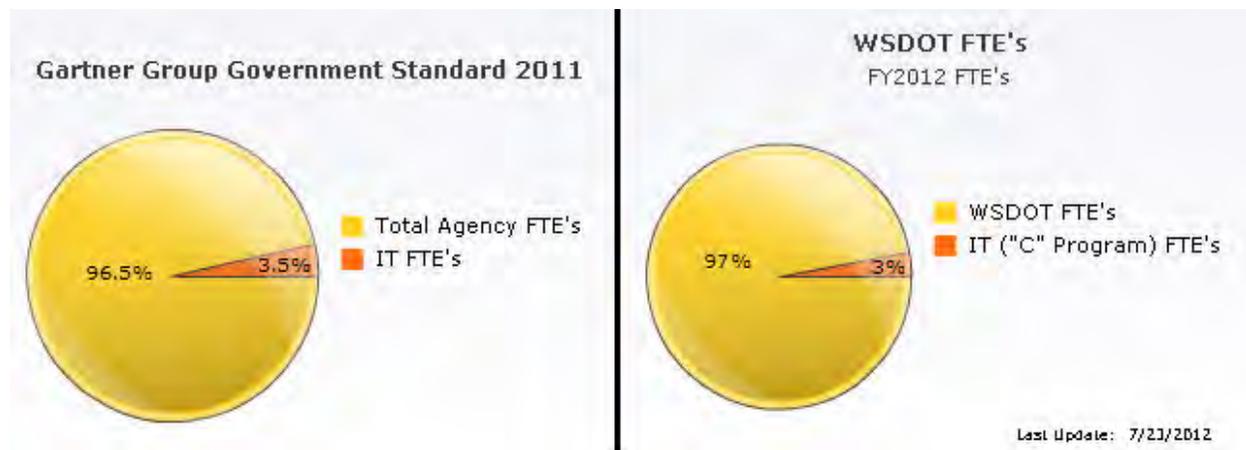
- The ramp-down of implementing the \$15 billion capital construction program;
- Legislative changes in the current and previous Biennium;
- Furlough bill (SSB 6305);
- Temporary Compensation Reductions for State Employees (SB 5860);
- Streamlining central service functions (ESSB 5931);
- Hiring freeze bill are impacting all core technology services;
- and cuts to the Capital budget due to reductions in federal funding

Technology resources are finite and have not increased correspondingly with the department's growth and project delivery demands during the capital construction program boom. In addition to this legislation, the FY2009-11 equipment purchase freeze and the expected cuts to the capital budget due to a staggering reduction of federal funding, has resulted in restricting the replacement of equipment to when the equipment is unusable. The restriction of equipment replacement has moved WSDOT IT out of the preventative planning mode and into a reactionary task responsive.

This chart shows the growth in overall WSDOT FTEs to a slight decrease in the level of IT FTEs;



These two charts depict the ration of WSDOT FTEs to C Program IT FTEs and the Gartner average for state government. The Gartner Group Standard recommends a slight increase to WSDOT IT FTE's.



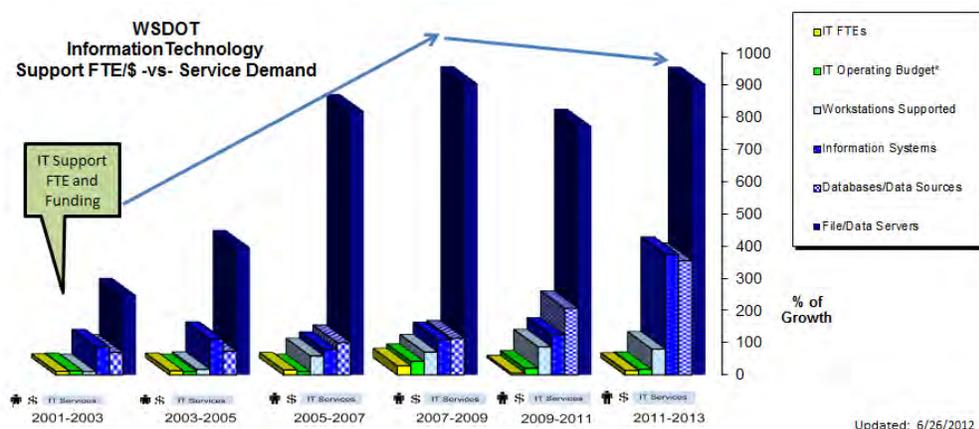
*Gartner offers the combined research capability of 1,200 research analysts and consultants who advise executives in 75 countries every day. Gartner publishes tens of thousands of pages of original research annually and answer 200,000 client questions every year. They are a world recognized company for IT research.

Challenges faced by WSDOT IT

The other challenges facing the Office of Information Technology include;

- Providing technology services on an aging infrastructure where growth is outpacing the ability to meet demand. Funding cuts for IT infrastructure have resulted in an inability to maintain the current level of support. Workstations which were slated for replacement on the expanded 5-year lifecycle fell short in FY11 and due to expected cuts to the capital budget, will continue to lag behind industry standards.
- IT continues to manage dramatic increases in workload while meeting the operational demands of delivering comprehensive core technology services for the agency. Utilizing virtual technology platforms has helped in the shortfall as we strategize how to meet the increasing needs of WSDOT without the support through funding.
- Balancing the agency's technology support needs while delivering WSDOT's new technology initiatives. These initiatives were highlighted in the WSDOT 2008 IT Portfolio. The results of the '09-'11 budget reductions continue in the '11-'13 biennium:
 - Critical Applications Modernization & Integration Strategy – Remains on Hold. WSDOT IT continues to look for ways to coordinate with OFM & other agencies.
 - Enterprise Architecture Program – FTE's have been reduced dramatically due to the budgetary impacts.
 - Statewide Government Network (SGN) Reconnect– HRMS connection only.
- Additional workload on major projects (Vehicle Reservation System and OMWBE Certification Systems) have created significant workload impacts to staff resulting in delayed application maintenance.
- Ensuring WSDOT can adapt and use the best of rapidly changing technologies while meeting the agency growing business needs and technology service demands. This includes key agency technology capabilities such as Tolling, Web Services (traffic cameras, traveler information), Data Security, Network Access/Connectivity, Voice/Video technologies and Geographic Information Services.

Statistically overall, since 2002, IT staff has increased by 6 FTE's positions in C Program. However, since 2009, IT has dropped 27 FTE positions in the C Program due to budget reductions. During this period the number of PC's, Applications/systems and database continue to soar. Efficiencies have allowed IT to reduce the number of Servers using virtual services. The following chart provides service growth and infrastructure requirements since 2001.



What WSDOT IT Needs to Succeed

Success for information technology is measured by how effectively and efficiently IT organizations meet the needs of their constituencies, either internal or external. From a financial perspective IT success is focused on Cost Effectiveness – How efficiently IT uses IT expenditures, and Value – The value information technology provides to the agency. However, IT **must be funded adequately** to be cost effective and to provide increasing value. Extended under-funding will, in the long term, reduce cost effectiveness and value to the agency. The current underfunding will result in old software that fails to work and old hardware that is obsolete. The results of this decline in capability will ultimately result in citizens losing confidence that WSDOT can support their needs.

Efficient service delivery and customer satisfaction are the results of the ability of IT to identify key processes at which they must excel and then to monitor those processes to ensure that outcomes will be satisfactory. The use of the IT dashboards is contributing to this management capability.

From the internal process perspective, IT success is focused on: infrastructure planning, acquisition, operations, and maintenance; application planning, integration, acquisition/development, testing, support, and maintenance; data consistency, availability, reliability; project management; and productivity tools available and used.

Two of these processes requiring immediate attention are effective resource management to better identify and manage the competing demands for limited IT resources and obtaining the funding necessary to replace workstation equipment to get back onto the 5-year replacement cycle. Based upon a 5-year replacement cycle, which IT was not able to fully met since FY2011 and the projected costs to return to the state standard of a 5-year cycle for all agency PC's, there will be long lasting impacts to the IT Budget.

Processes will only succeed if adequately skilled and motivated staff supplied with accurate and timely information, are driving them. Additionally, executive management must take a key role in the prioritization and planning of IT resources. In order to meet changing requirements and customer expectations, staff have been asked to take on new responsibilities, and may require skills, capabilities, and technologies that were not available before. From an innovation and learning perspective, IT success is focused on:

- **Training** - Ability of staff to support accomplishment of organizational goals;
- **Innovation** - Quality of information technology solutions; and
- **Organizational Alignment** - Effects of IT alignment in accomplishment of WSDOT goals.

Opportunities for Data or Resource Sharing

WSDOT currently shares GIS, Accident, Environmental, Real Estate, and other data with other state and local government entities, as well as actively participating and providing layers of GIS data to the inter-agency portal. Additional opportunities for data sharing should be exploited with improved data standards and procedures, as well as additional funding for staff and other needed resources.

Internal data sharing continues to thrive through datamarts. By creating data warehouses of information, multiple systems can contribute to the data and staff can use cubic drill-down reports or features to retrieve linked data. Since 2002 with the CPMS datamart, the need to interconnect database information into data marts has resulted in 10 datamarts which tie multiple systems worth of information into useable reporting options without creating additional collection systems.

How Challenges Will Be Addressed

Challenges will be addressed by continued integration of project delivery information systems, revitalizing application development, strengthening infrastructure security, enhancing network reliability, consolidating data management, providing a new focus for project management, reducing the cost of hardware, and enhancing software management. IT will continue to search for ways to reduce costs while improving services. Specifically IT will:

- Continue to **standardize** where appropriate and use economies of scale to gain efficiencies in technology service delivery, statewide.
- Implementation of industry **best practices** in service management including resources management, resource use and planning. Implement effective software tools to support service delivery and management objectives while utilizing dashboards to manage key performance indicators (KPI's).
- Effectively **communicate agency technology needs** in the legislative forums and utilize the supplemental and biennial decision package processes to request funding in support of priority technology initiatives.
- Continue to monitor and **manage projects** through the IT Project Management Office with reporting to agency executives. This is in conjunction with the oversight and monitoring of major projects provided by OCIO.
- Make the **best use of limited FTEs** to support the new technology initiatives.
- Use contract staff to **supplement** WSDOT resources.
- Continue to implement a supportive **technology foundation**, thus reducing possible future change costs while supporting the agency's existing business applications and newly developed systems.
- IT has implemented the OCIO's recommended 5-year replacement cycle for PC's which has a short-term effect on IT budget challenges. Long term, with the impact of reduced federal funding and budget cuts, this will create financial impacts to the agency including the inability to upgrade software. This continues to impact IT projects such as the Windows 7/Office 2010 upgrade project, due to the limitations of the aging hardware. WSDOT IT continues to work towards upgrading PC's as quickly as the funding will allow.
- Maintain an Information Technology **organizational structure** that can support agency's priorities and have long-term sustainability.
- Implement **software tools** to help improve efficiencies in program delivery.
- Continued investment in e-tools, e-learning and remote computing
- Increased use of **virtual servers** and desktops
- Increased monitoring and identification of KPI's, focusing on areas which have opportunities for improved service delivery.
- Leveraging WSDOT's Microsoft Enterprise Agreement and the E-Cals

G. High-level View of Current and Future IT Investments

Current “In-development” Projects Overview

Investments / projects enable WSDOT to meet the demand for IT beyond the ongoing IT services. Current investments/projects (funded & ongoing) are listed below. For additional information see Section 4 of this portfolio.

Investment/Project	Oversight Level
Tolling & Statewide Tolling Customer Service Center	Level 2
Washington State Roadway Toll Systems (405 & 99 Tunnel)	Level 2
Ferries Vehicle Reservation System (Presented to ISB on 7/8/2010)	Level 3
Ferries Division Enterprise Security System Upgrade (ESSU)	Level 2
Time, Leave and Attendance system TLA (in coordination with OFM/DES)	Level 2
OMWBE Support Initiatives	Level 2

Planned Investments/Projects Overview

Planned Investments/Projects are projects that have not yet started but initial work has started to define the project and where appropriate obtain investment approval. Planned investments/projects are found in section 5 of this portfolio.

11-13 Biennium Projects & Decision Packages	Oversight	Status
Tolling (Hwy 405 & Hwy 99)	Anticipated Major Project Oversight	Not Started
C6 Program Decision Package for increases in cost of software licenses	No additional oversight anticipated	N/A
Infrastructure / Web Availability	No additional oversight anticipated	N/A
DES submitted decision package for Time, Leave and Attendance system decision package to move \$10.2 mil to the 2013-2015 budget	No additional oversight anticipated	N/A

Non-funded Future Investments/Projects	Oversight	Status
Critical Applications Replacement Project	Pending Oversight 2	NOT FUNDED
Traffic Operations Performance Monitoring & Management System	Pending Oversight 2	NOT FUNDED

H. WSDOT's Prioritization Process for Selecting IT Projects

Screening criteria and prioritization criteria are used to prioritize IT investments. Screening criteria include strong executive support, clear alignment to agency goals, clear benefits for completing the project or acquisition, and the probability of success given the current IT environment. The initial screening of projects or investments will take place with the WSDOT Executive Team.

For IT work requests, the business sponsor will submit a Pre-Project Analysis Report (PPAR). The PPAR requires signatures from the office level director, assistant Secretary, and the IT Director as a means to establish executive support for effort being proposed. The business sponsor will submit this to the project management office which will assign a business analyst to the project and take the project initiation request to the Project Review and Prioritization meeting. The business analyst will meet with the business to prepare a Project Summary statement, identify the high level background requirements, scope, objectives and the vision/goals prior to starting the project and assigning a Project Manager.

Prioritization criteria include strategic alignment, business value, probability of success, maintainability, urgency, and funding. WSDOT uses a Severity and Risk Assessment matrix and the Investment Plan to set prioritization. A Major Project or a particularly challenging ranked project in the Severity & Risk assessment evaluation will cause a project to "float to the top" of the prioritization. Likewise any project that has a legislative mandate driving it, proviso funding attached or meets any of the OCIO's major project criteria will also raise to the top of the prioritized list.

The WSDOT IT Director meets bi-weekly with the Project Management Office Manager and weekly with his Executive Team to review prioritization and align new investments opportunities with the business priorities.

2 - WSDOT Strategic Business Plan

“Always focus on the front windshield and not on the review mirror.”
 --- Colin Powell

The WSDOT Strategic Business Plan allows the Office of Information Technology (IT) to ensure that current and proposed technology investments are aligned with the WSDOT business vision for the future and directly supports WSDOT business processes. The strategic direction in WSDOT is laid out in the **Business Directions: WSDOT’s 2011-2017 Strategic Plan**. For an electronic copy of the complete WSDOT Strategic Plan, visit the WSDOT Internet page on accountability at: <http://www.wsdot.wa.gov/Accountability/PerformanceReporting/StrategicPlan.htm>. A summary of key parts of the plan and the alignment of IT strategic planning is contained in this section. This information has been included in the IT portfolio to help strengthen the bond between the agency’s use of technology and its mission, strategies, and business processes.

Performance reporting is provided quarterly in the WSDOT Gray Notebook in support of the WSDOT Strategic Business Plan. In turn IT evaluates the IT Strategic Plan on a quarterly basis.

2013-2017 WSDOT IT Strategic Plan

The mission of IT is to provide world class Information Technology Support to Washington State Department of Transportation.

Our vision is working together for a safe transportation.

Goals	Objectives	Strategies	Activities
<i>Goals are broad, high-level, issue oriented statements of future direction or outcomes to be achieved.</i>	<i>Objectives breakdown goals into smaller, more specific pieces. (What)</i>	<i>Strategies are statements of the methods for achieving goals. (How)</i>	<i>Activities or action steps are specific actions, initiatives, or projects.</i>
1) Manage systems to support WSDOT’s operational and strategic objectives. WSDOT 2011-2017 Strategic Actions: Safety 1.5, 1.7, 1.8 Preservation 2.5, 2.11 Stewardship 5.3, 5.12 Economic Vitality 6.1, 6.5	1.A Provide IT infrastructure	1.A.1 Document equipment life cycles	Replace equipment per life cycle
			Determine risk assessment & configuration criteria
			Implement CMDB
	1.B Provide voice & data networks	1.B.1 Replace equipment before failure	Use optimal lifecycle replacement times
		1.B.4 Provide vendor DMZs	Establish vendor DMZs as required
	1.C Provide critical IT systems during disasters	1.C.1 Update DR Plan to keep current	Conduct annual testing, training and update of DR Plan
	1.C.2 Update COOP as required	Publish WSDOT IT COOP Annex when changed	

	1.D Provide current policies, standards, & procedures	1.D.1 Operate with current policies, standards, & procedures	Review and update policies as required	
	1.E Provide IT systems that support safety	1.E.1 Continue current projects with a safety component.	E-CVISN & Ferries ESSU	
		1.E.2 Establish IT team for any projects with a safety component.	Develop teams as required	
	1.F Maintain Change Management Process	1.F.1 Update Process Documentation as required	Conduct weekly change management meetings	
<p>2) Provide technology services & tools that support & maintain WSDOT operations & project delivery goals.</p> <p>WSDOT 2011-2017 Strategic Actions: Preservation 2.9, 2.11 Mobility 3.3, 3.4 Stewardship 5.3, 5.10. 5.12 Economic Vitality 6.1, 6.5</p>	2.A Implement best practices for continuous improvement in service & delivery	2.A.1 Document best practices as developed in all areas of IT	Develop & implement best practices	
			Use best practices	
			Train on best practices	
	2.B Recruit, train and maintain a knowledgeable, & qualified staff.	2.B.1 Develop training to support career paths of ITS levels	Train personnel as required	
			Certify personnel as needed for positions	
			Match needs to position descriptions	
			2.B.2 Coordinate IT recruiting plan with HR	Recruit to plan
			2.B.3 Develop succession & cross training plans	Publish and train personnel to plans
	2.C Continuously optimize quality, effectiveness, & efficiency of infrastructure, systems, & services	2.C.1 Determine what needs to be to measured & monitored	Provide IT Dashboards for executive management use	
			2.C.2 Establish feedback mechanisms for IT service customers	Regular contact with business areas
		Update IT websites to collect feedback		

			Use feedback determinations
		2.C.3 Partner with OCIO, other states, agencies to take advantage of existing systems & expertise	Document partnerships & information shared
		2.C.4 Reduce infrastructure demands through optimization of systems, new technology and data designs	Optimize systems & data in all areas
		2.C.5 Proactive involvement with business units by IT	CIO & executive managers visits to business units
		2.C.6 Improve communications with internal and external customers	Proactively communicate Tech news/alerts using , email and appropriate web pages
	2.D Provide professional IT Project Management and project team for IT projects and business projects with an IT component	2.D.1 PMO assigns PM	Certified PMs for each project
		2.D.2 PMs will be certified (or have equivalent experience)	Send PMs to certification training as needed
		2.D.3 Provide IT team to specific business projects	Support business projects as needed
		2.D.4 Develop a project prioritization process to the extent possible	Implement priority process to extent possible
			Get Executive approval for system
		2.D.5 Use documented best practices for project management	Best practices followed for project reporting
	2.E Provide timely & consistent information to WSDOT on IT assets, systems & services	2.E.1 Ensure data alignment with key business areas' needs & priorities	Appoint and use data stewards
			Establish & continue the Data Stewardship Council
			Establish and maintain Business Analysis personnel

	2.F Identify technology that enhances the productivity of every WSDOT employee	2.E.2 Publish an IT plan	Conduct annual IT planning
		2.E.3 Improve IT portfolio management	Implement automated portfolio system
		2.F.1 Provide technology platforms & tools to enhance productivity	Deploy Office 2010, review and schedule Office 2015
			Deploy SharePoint 2010
		2.F.2 Provide IT training to WSDOT employees	Work with staff development on e-training system
Continue customer outreach training			
2.F.3 Provide "self-service" for routine IT employee needs	Establish on-line support self-help system		
3) Develop & maintain IT that is reliable, adaptable, scalable, & driven by WSDOT business requirements. WSDOT 2011-2017 Strategic Actions: Preservation 2.12 Mobility 3.4 Environment 4.1 Stewardship 5.12 Economic Vitality 6.1, 6.5	3.A Provide a robust & agile architecture for the future to meet WSDOT needs	3.A.1 Continue the EA program	Implement Service Oriented Architecture (SOA)
		3.A.2 Use EA principles to update core WSDOT IT systems	Replace critical WSDOT applications
			Align current & future financial applications with OFM (consistent with funding)
			Team with OFM to develop TLA system
			Phase replacement of critical WSDOT business applications
		3.A.3 Support the Tolling business requirements	Continue priority support for Tolling
		3.A.4 Improve relationships with internal and external customers to work in coordination with IT sections not in ITD	Establish MOUs, SLAs, and OLAs as required
3.A.5 Determine requirements for the WSDOT consolidated data warehouse	Change warehouse to meet changing business requirements		

		3.A.6 Evaluate the viability of having one Enterprise Content Management (ECM) System	Continue planning for single possible ECM solution
<p>3) Develop & maintain IT that is reliable, adaptable, scalable, & driven by WSDOT business requirements.</p> <p>WSDOT 2011-2017 Strategic Actions: Preservation 2.12 Mobility 3.5 Environment 4.1 & 4.3</p>	3.B Provide innovative IT solutions to customers	3.B.1 Investigate state-of-the-art technology	Bring best of new technologies to WSDOT
		3.B.2 Proactive review of industry trends, tools, and best practices.	Adopt appropriate technology
	3.C Provide IT systems that are green and show responsible stewardship of resources & environment	3.C.1 Institute power saving technology to reduce energy use	Reduce energy requirements through virtualization and other means
		3.C.2 Increase public availability of transportation information on the web	Support traveler information projects as appropriate
	3.D Develop a comprehensive process for developing & sustaining the C Program budget	3.D.1 Work with WSDOT Budget Office to document current processes.	Document all C Program funding each budget cycle
			Document processes for carry forward funding and establishment of "base budget"
	3.E Review all applications (other than 11 critical apps)	3.E.1 Identify applications nearing the end of the expected life cycle	Update aging applications
		3.E.2 Determine which applications no longer meet business requirements	Retire and archive unnecessary applications
	3.F Provide IT support for WSDOT Emergency Operations Center (EOC)	3.F.1 Provide required IT staff during time of emergencies	Keep required names for support current
		3.F.2 Establish requirements for an emergency responder data repository	Provide & maintain a data repository
3.F.3 Establish & maintain an ITD emergency commutations strategy		Keep strategy up-to-date	

		3.F.4 Develop ITD test plan	Test to the plan on an unscheduled basis
		3.F.5 Maintain Network Operations Center (NOC)	Keep NOC plan current

WSDOT IT alignment to the OCIO's 2012 Technology Strategy Plan

Per RCW 43.41A.045, each agency must report how “the agency’s mission, goals and objectives for information technology support and conform to the state strategic information technology plan developed under RCW 43.41A.030”. The following list describes WSDOT IT’s Alignment to the State Strategic Action Item.

Action #	OCIO's Strategic Action Title	WSDOT IT's Alignment
1	Secure critical state government services and enable them to continue functioning after a disaster	<p>1.C.1 Update DR Plan to keep current</p> <ul style="list-style-type: none"> • Conduct annual testing, training and update of DR Plan <p>1.C.2 Update COOP as required</p> <ul style="list-style-type: none"> • Publish WSDOT IT COOP Annex when changed <p>3.F Provide IT support for WSDOT Emergency Operations Center (EOC)</p> <p>3.F.1 Provide required IT staff during time of emergencies</p> <ul style="list-style-type: none"> • Keep required names for support current <p>3.F.2 Establish requirements for an emergency responder data repository</p> <ul style="list-style-type: none"> • Provide & maintain a data repository <p>3.F.3 Establish & maintain an ITD emergency commutations strategy</p> <ul style="list-style-type: none"> • Keep strategy up-to-date <p>3.F.4 Develop ITD test plan</p> <ul style="list-style-type: none"> • Test to the plan on an unscheduled basis <p>3.F.5 Maintain Network Operations Center (NOC)</p> <ul style="list-style-type: none"> • Keep NOC plan current
2	Improve accountability and insight into technology investments	<p>2.C Continuously optimize quality, effectiveness, & efficiency of infrastructure, systems, & services</p> <p>2.C.1 Determine what needs to be to measured & monitored</p> <ul style="list-style-type: none"> • Provide IT Dashboards for executive management use <p>2.E Provide timely & consistent information to WSDOT on IT assets, systems & services</p> <p>2.E.3 Improve IT portfolio management</p> <ul style="list-style-type: none"> • Implement automated portfolio system <p>3.D Develop a comprehensive process for developing & sustaining the C Program budget</p> <p>3.D.1 Work with WSDOT Budget Office to document current processes.</p> <ul style="list-style-type: none"> • Document all C Program funding each budget cycle • Document processes for carry forward funding and establishment of “base budget”

3	Encourage adoption of public cloud platforms where appropriate	<p>2.F Identify technology that enhances the productivity of every WSDOT employee</p> <p>2.F.1 Provide technology platforms & tools to enhance productivity</p> <ul style="list-style-type: none"> • Deploy Office 2010, review and schedule Office 2015 • Deploy SharePoint 2010 <p>3.B Provide innovative IT solutions to customers</p> <p>3.B.1 Investigate state-of-the-art technology</p> <ul style="list-style-type: none"> • Bring best of new technologies to WSDOT <p>3.B.2 Proactive review of industry trends, tools, and best practices.</p> <ul style="list-style-type: none"> • Adopt appropriate technology
4	Encourage adoption of Software-as-a-Service (SaaS) for applications purchased by state agencies where appropriate.	<p>2.F Identify technology that enhances the productivity of every WSDOT employee</p> <p>2.F.1 Provide technology platforms & tools to enhance productivity</p> <ul style="list-style-type: none"> • Deploy Office 2010, review and schedule Office 2015 • Deploy SharePoint 2010 <p>3.B Provide innovative IT solutions to customers</p> <p>3.B.1 Investigate state-of-the-art technology</p> <ul style="list-style-type: none"> • Bring best of new technologies to WSDOT <p>3.B.2 Proactive review of industry trends, tools, and best practices.</p> <p>Adopt appropriate technology</p>
5	Adopt Enterprise Resource Planning (ERP) applications systematically and incrementally in order to enable Washington to function as a cohesive enterprise	<p>3.A Provide a robust & agile architecture for the future to meet WSDOT needs</p> <p>3.A.1 Continue the EA program</p> <ul style="list-style-type: none"> • Implement Service Oriented Architecture (SOA) <p>3.A.2 Use EA principles to update core WSDOT IT systems</p> <ul style="list-style-type: none"> • Replace critical WSDOT applications • Align current & future financial applications with OFM (consistent with funding) • Team with OFM to develop TLA system • Phase replacement of critical WSDOT business applications
6	Consolidate where appropriate to drive savings and deliver improved services	<p>3.A Provide a robust & agile architecture for the future to meet WSDOT needs</p> <p>3.A.5 Determine requirements for the WSDOT consolidated data warehouse</p> <ul style="list-style-type: none"> • Change warehouse to meet changing business requirements <p>3.B Provide innovative IT solutions to customers</p> <p>3.B.1 Investigate state-of-the-art technology</p> <ul style="list-style-type: none"> • Bring best of new technologies to WSDOT <p>3.B.2 Proactive review of industry trends, tools, and best practices.</p> <p>Adopt appropriate technology</p>

7	Adopt private cloud platforms across agency technology teams to enable easy movement of workloads across pools of servers	<p>2.F Identify technology that enhances the productivity of every WSDOT employee</p> <p>2.F.1 Provide technology platforms & tools to enhance productivity</p> <ul style="list-style-type: none"> • Deploy Office 2010, review and schedule Office 2015 • Deploy SharePoint 2010 <p>3.B Provide innovative IT solutions to customers</p> <p>3.B.1 Investigate state-of-the-art technology</p> <ul style="list-style-type: none"> • Bring best of new technologies to WSDOT <p>3.B.2 Proactive review of industry trends, tools, and best practices. Adopt appropriate technology</p>
8	Efficiently manage all of the state's suitable data centers	<p>1.A Provide IT infrastructure</p> <p>1.A.1 Document equipment life cycles</p> <ul style="list-style-type: none"> • Replace equipment per life cycle • Determine risk assessment & configuration criteria • Implement CMDB <p>1.C.2 Update COOP as required</p> <ul style="list-style-type: none"> • Publish WSDOT IT COOP Annex when changed <p>1.C.4</p>
9	Encourage state agencies to systematically free up data (including geospatial information) for public consumption	<p>2.E Provide timely & consistent information to WSDOT on IT assets, systems & services</p> <p>2.E.1 Ensure data alignment with key business areas' needs & priorities</p> <ul style="list-style-type: none"> • Appoint and use data stewards • Establish & continue the Data Stewardship Council • Establish and maintain Business Analysis personnel <p>3.A Provide a robust & agile architecture for the future to meet WSDOT needs</p> <p>3.A.4 Improve relationships with internal and external customers to work in coordination with IT sections not in ITD</p> <ul style="list-style-type: none"> • Establish MOUs, SLAs, and OLAs as required <p>3.B Provide innovative IT solutions to customers</p> <p>3.B.1 Investigate state-of-the-art technology</p> <ul style="list-style-type: none"> • Bring best of new technologies to WSDOT <p>3.B.2 Proactive review of industry trends, tools, and best practices.</p> <ul style="list-style-type: none"> • Adopt appropriate technology

10	Make it easier for Washingtonians to interact with state government	<p>2.E Provide timely & consistent information to WSDOT on IT assets, systems & services</p> <p>2.E.1 Ensure data alignment with key business areas' needs & priorities</p> <ul style="list-style-type: none"> • Appoint and use data stewards • Establish & continue the Data Stewardship Council • Establish and maintain Business Analysis personnel <p>3.A Provide a robust & agile architecture for the future to meet WSDOT needs</p> <p>3.A.4 Improve relationships with internal and external customers to work in coordination with IT sections not in ITD</p> <ul style="list-style-type: none"> • Establish MOUs, SLAs, and OLAs as required <p>3.B Provide innovative IT solutions to customers</p> <p>3.B.1 Investigate state-of-the-art technology</p> <ul style="list-style-type: none"> • Bring best of new technologies to WSDOT <p>3.B.2 Proactive review of industry trends, tools, and best practices.</p> <ul style="list-style-type: none"> • Adopt appropriate technology
11	Inventory and plan for replacement of critical legacy IT systems	<p>1.A Provide IT infrastructure</p> <p>1.A.1 Document equipment life cycles</p> <ul style="list-style-type: none"> • Replace equipment per life cycle • Determine risk assessment & configuration criteria • Implement CMDB <p>2.C Continuously optimize quality, effectiveness, & efficiency of infrastructure, systems, & services</p> <p>2.C.1 Determine what needs to be to measured & monitored</p> <ul style="list-style-type: none"> • Provide IT Dashboards for executive management use <p>3.B Provide innovative IT solutions to customers</p> <p>3.B.1 Investigate state-of-the-art technology</p> <ul style="list-style-type: none"> • Bring best of new technologies to WSDOT <p>3.B.2 Proactive review of industry trends, tools, and best practices.</p> <ul style="list-style-type: none"> • Adopt appropriate technology <p>3.E Review all applications (other than 11 critical apps)</p> <p>3.E.1 Identify applications nearing the end of the expected life cycle</p> <ul style="list-style-type: none"> • Update aging applications <p>3.E.2 Determine which applications no longer meet business requirements</p> <ul style="list-style-type: none"> • Retire and archive unnecessary applications
12	Study how to attract and retain highly skilled technology staff and build up technology interest groups that function as robust communities in state government.	<p>2.B Recruit, train and maintain a knowledgeable, & qualified staff.</p> <p>2.B.1 Develop training to support career paths of ITS levels</p> <ul style="list-style-type: none"> • Train personnel as required • Certify personnel as needed for positions • Match needs to position descriptions <p>2.B.2 Coordinate IT recruiting plan with HR</p> <ul style="list-style-type: none"> • Recruit to plan <p>2.B.3 Develop succession & cross training plans</p> <ul style="list-style-type: none"> • Publish and train personnel to plans

3 – 2010 Technology Infrastructure

*“Not everything that can be counted counts, and not everything that counts can be counted.”
--- Albert Einstein*

The Technology Infrastructure section defines the current inventory of systems, defines their functionality, describes the architecture and provides the core of IT capacity for the current period. It also addresses operating environment requirements including planning related to IT security and continuity of operations planning (COOP), business continuity (BC), and disaster recovery (DR). It also includes an inventory of specific components in the agency's IT infrastructure.

An agency's technical infrastructure is a platform for future technology investments and a constraint limiting the investments that can be cost-effectively pursued. Failure to continually update infrastructure/equipment replacement in a timely manner will result in an increase of obsolete systems on platforms that are only maintained at a very high and increasing cost. This section of the portfolio provides a convenient reference for executives engaged in planning and managing the agency's use of IT.

A. Current and Projected Budget

These tables show the combined IT Budget for the Office of Information Technology, Washington State Ferries, and Regional IT. This budget is administered under program C. The budget does not include the Business Unit IT budgets.

	Hardware Purchase/ Lease	Software Purchase/ Lease	Hardware Repairs/ Maintenance	Software Enhancement/ Maintenance
FY 2007 Actual	5,078,300	1,134,143	5,298	4,914,525
FY 2008 Budget	5,450,000	0	0	4,213,000
FY 2008 Actual	2,972,321	1,193,484	9,810	4,046,538
FY 2009 Budget	7,734,000	0	0	4,381,000
FY 2009 Actual	4,624,954	1,024,933	42,455	7,655,967
FY 2010 Budget	4,043,000	0	1,228,000	3,895,000
FY 2010 Actual	4,441,975	356,965	740,822	4,377,473
FY 2011 Budget	7,275,000	See Note below	987,000	2,838,000
FY 2011 Actual*	4,494,466	360,466	979,380	4,061,126
FY 2012 Budget	3,506,000	124,000	508,000	394,900
FY 2012 Actual	4,583,528	110,608	551,869	4,628,960
FY 2013 Budget	3,595,000	155,000	510,000	5,114,000
FY 2014 Budget*	3,479,500	136,500	499,000	4,441,000
FY 2015 Budget*	3,479,500	136,500	499,000	4,441,000

* *Note: FY2011's increase in budgeted hardware is a combination of: The "Replace Ferries Ticketing Equipment" and "Network Security for Credit Cards" provided in the 2010 Supplemental Budget account for the majority of increase (\$1.7 million).*

* *FY2011's Software Purchase/Lease budgeted amounts have been merged with the software Enhancement/Maintenance object codes due to the amount of data entry necessary by the budget staff in creating the budget. The Software Purchase/Lease expenditures will be broken-out to this category upon purchases.*

* *At this time the FY2014 & FY2015 budget figures estimates based upon trends.*

Continued from previous page:

	Telecomm	Data Processing Services (CTS)	Other Major IT Expenses	Total Agency IT Budget
FY 2007 Actual	1,521,065	283,244	1,184,931	34,927,660
FY 2008 Budget	1,465,000	180,000	722,000	41,375,000
FY 2008 Actual	1,272,927	236,244	553,848	36,969,127
FY 2009 Budget	1,725,000	217,000	852,000	45,445,000
FY 2009 Actual	570,961	305,127	801,477	45,699,469
FY 2010 Budget	1,007,000	248,000	565,000	37,804,000
FY 2010 Actual	822,837	201,488	825,184	37,610,238
FY 2011 Budget	1,229,000	238,000	773,000	37,880,000
FY 2011 Actual	898,860	216,830	416,861	35,639,728
FY 2012 Budget	935,000	207,000	754,000	33,731,000
FY 2012 Actual	1,391,616	198,606	587,356	33,952,708
FY 2013 Budget	964,000	210,000	1,255,000	35,350,000
FY 2014 Budget	930,500	204,500	984,000	33,850,000
FY 2015 Budget	930,500	204,500	984,000	33,850,000

B. IT Personnel

The tables show IT Personnel for the Office of Information Technology, Washington State Ferries, and Regional IT. The table does not include FTEs working on IT activities in various Business Units.

	Salaries & Benefits	Personal & Purchased Services	Professional Development of IT Staff	Total Agency IT FTEs
FY 2007 Actual	17,635,863	3,549,767	356,319	222.3
FY 2008 Budget	24,621,000	4,385,000	339,000	249.4
FY 2008 Actual	21,690,960	4,573,366	419,629	235
FY 2009 Budget	25,025,000	5,049,000	462,000	254.4
FY 2009 Actual	22,737,416	7,728,121	208,058	243.8
FY 2010 Budget	23,295,000	3,222,000	154,000	239.3
FY 2010 Actual	23,412,915	2,322,140	108,438	243.7
FY 2011 Budget	23,364,000	987,000	189,000	234.3
FY 2011 Actual	22,770,315	1,289,438	151,986	227.5
FY 2012 Budget	23,190,000	400,000	158,000	226.8
FY 2012 Actual	21,471,690	277,705	150,770	215.9
FY 2013 Budget	23,114,000	274,000	159,000	226.8
FY 2014 Budget	22,689,000	330,500	155,500	225
FY 2015 Budget	22,689,000	330,500	155,500	225

C. Personal and Workgroup Computing

WSDOT will be at our 5-year replacement cycle by June 2012 for a majority of desktops and laptops. However, due to freeze on equipment purchases and the state's financial crisis, WSDOT will not be replacing all equipment based upon the lifecycle. The current refresh cycle is 48 months for laptops and 60 months for desktop equipment, due to the state's financial crisis, some of WSDOT's PC's will be forced into a 6 year or older replacement cycle.

PC's, Laptops and Tablets

FY	Total Agency FTEs	Total PCs	Planned PC Replacements	Actual Replaced	Refresh Cycle	PCs Donated to Schools
FY2007	7575	7961	3980+	1085	48 months	
FY2008	7575	8573	2050+	955	48 months	
FY2009	7585.5	9441	2050+	867	48 months	
FY2010	7507.13	9366	3510	2158	48 months laptops / 60 months PC	
FY2011	7278.7	9270	3499	1915	48 months laptops / 60 months PC	
FY2012	7147.2	9596	839	1331	48 months laptops / 60 months PC	562 PC's were donated in FY11 for a total potential cost savings to Schools of \$ 1,880,478.65 WSDOT has surplused 6392 PC's to Schools since 2000
FY2013 Planned	7219.6	8000	1700		48 months laptops / 60 months PC	WSDOT's policy is to surplus the majority of our equipment to GA
FY2014 Planned	7219.6	8000	1800		48 months laptops / 60 months PC	WSDOT's policy is to surplus the majority of our equipment to GA
FY2015 Planned	7219.6	8000	1800		48 months laptops / 60 months PC	WSDOT's policy is to surplus the majority of our equipment to GA

Platform and P-25 Compliance

Only 2% of staff has access to the CTS backbone due to business requirements. The additional information required by OCIO for the IT Portfolio which doesn't fit in other sections of this report include the Network operating system, desktop office suite and P25 compliant Radios:

% of WSDOT with inside WA Access	2%
WSDOT Primary Network Operating System	Windows 2003 R2 (Note: WSDOT is in the process of migrating all the servers to Windows 2008)
WSDOT Desktop Operating System	Windows XP
WSDOT Desktop Office Product Suite	Office 2007
WSDOT XML Enabled?	Yes
WSDOT Radio's with P25 Compliant	2
WSDOT Radios without P25 Compliant	4560

WSDOT is working on an implementation plan for Windows 7 to start sometime in second quarter FY2011 and completed by the end of the calendar year 2013.

Servers

This year's reduction in the number of physical servers being used can be directly related to continuing efforts by staff in all regions to decommission servers running unused services, consolidation, and migrating older physical machines to WSDOT's virtual server environments. There have been major efforts agency wide to improve storage and virtual environments that will allow WSDOT to further decrease the amount of physical servers agency wide. The IT goal for virtualization of servers in the regional headquarters was 50% by the end of FY 2011 which was met and exceeded. Starting FY2012, the HQ percentage was 58%, well on the way to reach the goal of 60% by the end of the fiscal year.

Replacing existing physical servers with virtual servers will allow the agency to avoid spending money on new server equipment with the added benefit of saving money on power and cooling costs. Additionally, there will be significant savings in server licensing since WSDOT will not require as many licenses that are currently maintained. Over the next 5-10 years the cost avoidance for IT will be found in these areas.

Additionally long-term savings will be realized by the consolidation of OR, MATS, and GeoMetrix servers into the HQ Data Center.

Fiscal Year	Server Type	Total Number of Servers	Total Number to be replaced	Total Number to be Added	Factors Driving Server Acquisition Strategy
FY2007	Physical Servers	985	200	100	New business applications need for infrastructure elements not provided in existing configurations, i.e. web enabled applications
	Logical Servers	106		100	
FY2008	Physical Servers	1003	200	100	
	Logical Servers	190		100	
FY2009	Physical Servers	1131	40	20	A reduction in the amount of servers being used can be directly related to efforts to decommission servers running unused services, consolidation, and migrating older physical machines to WSDOT's virtual server environment. Looking forward WSDOT will further decrease the amount of physical servers. The agency's existing virtual environment currently has the ability to host roughly another 100 servers. Over the course of the next biennium WSDOT will be upgrading our existing storage and further enhance our virtual server hosts.
	Logical Servers	249			
FY2010	Physical Servers	1036	30	20	This year's reduction in the amount of servers being used can be directly related to continuing efforts by staff in all regions to decommission servers running unused services, consolidation, and migrating older physical machines to WSDOT's virtual server environments.
	Logical Servers	304			
FY2011	Physical Servers	575	63	20	This year's reduction in the amount of servers being used is based upon WSDOT IT's strategic plan to decommission servers running unused services, consolidation, and migrating older physical machines to WSDOT's virtual server environments.
	Logical Servers	508			
FY2012	Physical Servers	506	49	6	This year's reduction in the amount of servers being used is based upon WSDOT IT's strategic plan to decommission servers running unused services, consolidation, and migrating older physical machines to WSDOT's virtual server environments.
	Logical Servers	685		177	
FY2013 Planned	Physical Servers	480	12	4	WSDOT plans to be at 75% virtualization within 5 years, depending upon budget.
	Logical Servers	695	30	10	
FY2014 Planned	Physical Servers	460	42	2	
	Logical Servers	705	30	10	
FY2015 Planned	Physical Servers	440	48	2	
	Logical Servers	715	30	10	

Operating Systems	FY 2010	FY 2011	FY2012
Microsoft Server 2000	64	30	6
Microsoft Server 2003	833	808	630
Microsoft Server 2008	5	36	42
Microsoft Server 2008 R2	0	16	307

Active Directory Domains Servers	FY 2010	FY 2011	FY2012
WSDOT.LOC	1030	988	1034
WEBDOT.PUB	58	82	59
DOTT.LAB	18	27	25
WSDOT-INTER-AGY.PUB	12	12	8

Virtual Server Assets	FY 2010	FY 2011	FY2012
Virtual Hosts	40	38	81
Virtual Servers	249	304	735
Agency Virtual Server Percentage	22 %	29.3%	62%

For detailed information on servers contact the WSDOT IT Server Support Manager.

Networks

The WSDOT network environment is based primarily on Microsoft Windows for servers and workstations and uses TCP/IP as the primary network protocol. A brief description of the major components follows.

WAN

The Washington State Department of Transportation has an extensive data transmission system to meet its internal operational needs for information sharing between its offices across the state. The data network is the WSDOT communications medium used primarily for file and print services, electronic mail, calendaring, document transfer, Client/Server systems, file transfer, and mainframe access. The WSDOT network backbone consists mostly of Cisco routers/switches and Enterasys switches.

Internet access is provided to WSDOT through the Consolidated Technology Services (CTS). A few outside devices, from both the Internet and from other state agencies, are allowed to connect directly to any machine within the WSDOT class B address via a secure encrypted pass through of the firewall. Email, HTTP, and FTP (pull only FTP) connections are allowed through the WSDOT firewall.

The backbone of the WSDOT network is a WAN that connects the Olympia headquarters building to approximately 235 (this changes often as offices are moved/added/deleted) offices including six Regional Headquarters sites, and the Ferries Division (FD) facilities. The network backbone infrastructure is based on Cisco routers/switches and legacy Enterasys switches with a combination of dedicated Ethernet 10/100/1000 mb and T-1 point to point circuits to all regional headquarters, and a mix of T-1 point-to-point (P2P) and T-1 Frame Relay (FR) circuits to all Project Engineer and non-maintenance satellite offices. Area Maintenance Offices are currently also connected via DSL, Cable, T-1 P2P, and T-1 FR from Qwest, Century Tel, Verizon and various third part Telecommunications vendors. DSL and Cable connections are used with IPSEC VPN to provide secure access to the DOT network over the Internet. The WAN is also the communications medium used for access to mainframe and Client/Server applications, Email, calendaring, document transfer, and file transfer.

Communications for all of the services offered on the network are vital to the business operations of WSDOT and depend heavily on the availability and reliability of the Wide Area Network.

WSDOT Regional Local Area Data Network

There are six Regional Headquarter sites (not including Ferries Division) which vary in size. Each Regional Headquarters acts as a hub for the portion of the WAN that it serves. The regional network infrastructure is based on Cisco routers/switches, Enterasys switches, and various Intel server platforms operated and administered in concert with IT Infrastructure Services. Network topologies include 10BaseT, 100BaseT, 1000BaseT, Switched 56K, T-1 P2P, FR T-1, Ethernet fiber, and Spread Spectrum Radio components. WSDOT IT centrally contracts, manages, and arranges installation and supports 56K, T-1 P2P, FR T-1, Fiber and other transmission modes to remote offices. Local Area Network (LAN) cabling ranges from Category 3 to Category 7 and supports 10/100/1000 MB twisted pair Ethernet services to workstations and other nodes on each LAN.

Region Traffic Systems Network

The Traffic Management Centers (TMC) in region headquarters operate a network application for several traffic management systems. The Northwest Region Intelligent Transportation System (ITS) is part of the Traffic Division and operates over 100 miles of optical fiber on Interstate 5, Interstate 90, Interstate 405, and SR 520 and SR167. Near-term projects will expand the coverage in many of the other regions, specifically Southwest, Olympic, North and South Central combined and Eastern. The traffic management system consists of the following components:

- Fiber connected cameras (800+) used for traffic management, emergency services and for the public at large. Public images are presented to the wsdot.wa.gov web page and update every one to five minutes. They are also used by the news agencies for traffic information to the public.
- A series of loop detectors (counting devices) imbedded in the roadways at one-half mile intervals on major Seattle area freeways.
- Optical fiber cables for transmission of loop sensor data to a central computer at the Traffic Management Center (TMC).
- A VAX 6420 minicomputer to process the traffic data.
- A workstation gateway between the VAX minicomputer and other workstations that dial in to get traffic data, which is subsequently displayed, in graphical format.
- A set of traffic management system file servers.

The information generated by this system goes to the public via WAN to the Internet, television and radio stations, the Seattle Times information line and WSDOT traffic information numbers as well as directly into malls and major employment sites throughout the region.

Voice and Video Network

WSDOT has its own PBX and video conferencing infrastructure linking most of the major sites in Washington. A separate network of T-1 links handles voice and video transmissions between locations with "Voice over Frame" and "Voice over IP/Data Network" available between regional HQ sites and the Transportation Building.

WSDOT has its own PBX and video conferencing infrastructure linking all six of the Region HQ sites, Ferries and most of the major office sites in Washington. For the last five years WSDOT PBX staff has been moving towards using more Voice over IP (VoIP) to take advantage of higher bandwidth over the Ethernet data network and to eliminate Voice T-1 infrastructure. This has saved the department huge amounts of monthly recurring costs by reducing the number of T-1's that are no longer needed to transmit Voice traffic. In the future, WSDOT will continue to use more and more Ethernet (high bandwidth) services to increase performance of the Voice, Video and Data networks statewide and to save money on monthly circuit costs.

D. Geographic Information Systems (GIS) Resources

WSDOT's GIS is a collection of people, data, computers, software products and applications. WSDOT's GIS supports a broad environment of GIS training and technical support, mapping tools, data stewardship, spatial analysis, cartographic production and application development. GIS enables the mapping and spatial analysis of our transportation system and the surrounding landscape. GIS provides desktop, server, mobile and web environments which enable the integration, storage, analysis, and presentation of data that describe the transportation system, how it is used, its condition, and how it performs. GIS is an information analysis tool for discovering issues and making decisions about the management of the transportation network and its assets that are necessary for successful transportation planning, and efficient use of public resources. The data, applications, cartographic and geo-processing services, maps and reports produced by our GIS facilitate the Agency's communication and public involvement efforts and help foster understanding and support from our customers.

WSDOT strives to bring together accurate, up-to-date, geographic information and spatial analysis tools in an easy to use format thereby increasing the efficiency of WSDOT's ability to identify the best transportation solutions, develop programs that can be delivered on time and on budget, track assets, operate the system efficiently, and communicate internally and externally to the public. GIS directly contributes to WSDOT's safety, preservation, mobility, environment, and stewardship goals.

WSDOT GIS delivers accurate, up-to-date, geographic information and spatial analysis tools together in an effective product. To improve WSDOT's ability to identify the best transportation solutions, deliver projects on time and on budget, track assets, operate the transportation system, and communicate internally and to the public. GIS directly contributes to WSDOT's strategic planning, maintenance and operations, system management, mobility enhancement, emergency operations, environmental stewardship and public communication goals.

Staff

Staff Location/WSDOT Division	Number of GIS Staff (FTEs)	Indicate here if included in Total Agency IT FTEs
Central Support (IT)	5	Yes
Program Area Support (GIS & Roadway Office)	15.5	No
Program Area Support (Materials Lab)	1	No
Program Area Support (Environmental)	3.5	No
Program Area Support (Public Trans)	1	No
Program Area Support (Traffic)	1	No
Program Area Support (NW Region)	0.5	No
Program Area Support (South Central Region)	1.5	No

GIS Software

Product Name	Vendor Name	Number of Licenses	Number of Installations Workstation	Number of Installations Server
Advanced Tactical Mapping	PRINTRAK	2		2
ArcEditor Concurrent Use Licenses	ERSI	2	2	
ArcEditor Single Use	ERSI	2	2	
ArcGIS Server Advanced Enterprise	ERSI	6		6
ArcGIS Server Basic Enterprise (a.k.a., ArcSDE)	ERSI	5		5
ArcGIS Server Standard Enterprise	ERSI	8		8
ArcIMS	ERSI	3		2
ArcInfo Concurrent Use Licenses	ERSI	19	43	
ArcView 3.2.1	ERSI	13	8	
ArcView Concurrent Use Licenses	ERSI	82	1845	
ArcView Single Use	ERSI	29	29	
Motorola GeoFile Utility	PRINTRAK	1		1

Hardware

Operating System Platform	Hardware Type	Number
Intel based/Windows XP or Windows 7 configured for WSDOT Level Playing Field software	Desktops - deployed ArcGIS	1845
Microsoft Windows Server 2003	Geodata Catalog Servers	10
Microsoft Windows Server 2003	ArcGIS Server Basic Enterprise	5
Microsoft Windows Server 2003	ArcGIS Server Standard Enterprise	8
Microsoft Windows Server 2003	ArcGIS Server Advanced Enterprise	6

Is this included in Total PCs?	Yes
Is this included in Total Servers?	Yes

Major GIS Applications

Name	Description
GIS Workbench	<p>The GIS Workbench is a custom ArcGIS extension that presents menus of data from the WSDOT GeoData Catalog, and custom tools that have been tailored for defined business areas. GIS Workbench (GISWB) is designed to serve all business areas of WSDOT without having to spend resources to create separate GIS applications for each group or business area. Currently the GISWB contains seven business areas (BA) with customized views of the WSDOT GeoData Catalog.</p> <ul style="list-style-type: none"> • Environmental BA, owned by Environmental Services Office, provides access to data and tools that support project environmental review, documentation and permitting processes. • Transportation Data Office BA, owned by the Transportation Data Office, provides access to data collected by TDO as part of their ongoing roadway inventory programs. • Facilities BA, owned by the Equipment and Facilities Office, provides access to data and tools that are used to assist in the location, identification, and management of WSDOT owned or maintained facilities across the State. • Transportation Analysis BA, owned by Systems Analysis and Program Development, provides quick access to corporate engineering data required for high-level scoping and design decisions. • Emergency Operations Center BA, owned by Emergency Operations, provides access to data commonly needed in the event of local and regional emergency situations. • Northwest Region, owned by the NW Region Maintenance Office, provides access to Region specific GIS data and is used to support the Regions' on-going maintenance operations. • Geotech BA, owned by the Geotechnical Services, provides access to data needed by geotechnical engineering and engineering geology specialists to support the design, construction, and maintenance needs of the state's transportation system.
Airport Mapping Application	<p>Promote informed land use decision making through the proliferation of aviation information. The Airport Mapping Application(AMA) is an easy to use web-based GIS mapping application that provides online access to critical information contained in Airport Layout Plans (ALP) and Airport Master Plans (AMPs). The application allows users to select and view specific airport facility features, such as runways, aprons, taxiways, buildings, safety areas, airspace, and property boundaries. The application also provides a variety of beneficial tools and features; including: an address locator, Lat. / Long. locator, measuring tool, a highway mile post locator and the ability to zoom to specific airports, cities and geographic regions.</p> <p>http://wsdot.wa.gov/data/tools/geoportal/?config=airport</p>

Construction Impact Analysis (CIA)	The Construction Impact Analysis (CIA) application provides internal GIS maps and tools for analyzing construction project work in terms of location and time so WSDOT can more effectively keep people and goods moving while completing construction projects. 2011 updates included the addition of bus routes, transit data and other minor enhancements.
Freight Map Application	The Freight Map Application is a browser based system that provides easy and free access to detailed Truck Performance Measure (TPM) data and freight related information. Map information includes Average Speed, percentage of truck spot speeds falling below 60 percent of the posted speed limit and many reference layers. http://www.wsdot.wa.gov/data/tools/geoportal/?config=freight
Functional Class Map	An application that reflects the Federal Functional Classifications for Washington State as defined and approved by the Federal Highway Administration (FHWA). http://www.wsdot.wa.gov/MapsData/Tools/FunctionalClass/
GIS & Roadway Data Office GeoPortal	Publicly available, general purpose browser based, GIS mapping application; providing access to a selection of WSDOT's GIS tools and data layers, such as Functional Class, several different jurisdictional areas, Interchange Drawing Diagrams and 12 base maps. It also provides several tools such as: Locate a state route, milepost and ARM, Get latitude/longitude Find an address, Measure distance/area. http://www.wsdot.wa.gov/data/tools/geoportal/
GIS Catalog Maintenance Application	This is a VB.Net application that provides a graphical interface for maintaining WSDOT's GIS Data holdings in a SQL database. The application provides reporting functionality for error tracking and usage reporting for the GIS Workbench application. This application is part of the agencies 3-tier solution to providing simple access to our enterprise data to our desktop GIS users.
Highway Activities Tracking System Mobile (HATS Mobile)	HATS MOBILE is a combination of two independent applications which support the M & O inspection efforts. The two applications have parallel functionality in terms of walking maintenance staff through various required steps as they perform an inspection. The handheld PDA application has the additional functionality of allowing field crews to see previously collected features on a map, to inspect the attributes of those existing features. Field crews can enter new features into the database either by using SRMP text input, or by getting a GPS x/y coordinate of the new feature.
Incident Location Tool	GIS based desktop system to improve the process of creating collision data. The ILT provides a set of tools that help to establish and record the location of a collision event; and another set of tools that perform spatial queries in order to populate the data record with jurisdictional and environmental information. The more accurate, and complete, collision data is facilitating improved safety analysis.
Integrated Vegetation Management	Integrated Vegetation Management is used to manage control programs for nuisance and noxious weeds. WSDOT HQ Maintenance staff use the system.

Interactive Collision Analysis Tool Update	The Interactive Collision Analysis Tool automates the Capital Program Development and Management (CPDM) Office's process for comparing collision data for a selected corridor to averages experienced statewide. A series of charts, maps, and tables are produced by the tool. The tool was updated to produce more types of charts and to simplify some of the user interaction.
M & O Operations Application 2011	Winter Operations is a real time GPS vehicle tracking system which monitors the location, and activity, of WSDOT Maintenance Vehicles and IRT trucks. A web browser GIS map displays road conditions, road surface treatment and various vehicle activities such as speed, direction, plow blade position, chemical application, air temperature, road temperature and many more. 2011 updates to the Operations System included access to live statewide Weather Radar an expansion to include other operations vehicle activities such as culvert cleaning and incident response vehicles.
Monument Map Engine	Monument Map Engine provides WSDOT engineers and the public access to a database of geodetic survey monuments via an Internet map.
Roadside Feature Inventory Program	RFIP is an enterprise program for collecting, storing and reporting roadside features such as guardrails, culverts, signs, objects in clear zones, and other features.
Roadside Features Inventory Program Map Application	The RFIP (Roadside Features Inventory Program) Map application provides quick and easy map based access to RFIP data. RFIP is a statewide program for collecting, storing and reporting locations of roadside fixed objects. RFIP data is used for preliminary design, scoping analysis, utility location and location of features for Maintenance inventory. Data is also used to meet the highway safety assessment and decision needs for building the Highway Safety Program and developing highway safety projects.
Spatial Web Services	These GIS web services can be used by software application developers in order to perform spatial tasks. X/Y coordinates can be converted to nearest state route mile post, accumulated route measures can be converted to X/Y, line features can be created along state routes. These, and additional, services can be used to build more complicated tools within an end-user application.
Stormwatch	Stormwatch allows WSDOT to manage snow removal during storm events. The system provides for tracking of weather and road conditions along with snow plow routes.
Traffic Planning Trends	This application displays Annual Average Daily Traffic (AADT) volumes maintained by the Washington State Department of Transportation (WSDOT) for the State Highway System. This application replaces the Annual Traffic Trend (ATR) report that was discontinued in 2008.
Transportation Mapper 2	TransMapper 2 is a free GIS viewer intended to support the growing interest for simple GIS mapping applications at WSDOT. GRDO has recently upgraded TransMapper to work with newer technology to provide a simpler interface and faster performance. TransMapper includes access to many new WSDOT map layers and basemaps along with continued support of custom WSDOT tools. These tools include ability to locate State Route Milepost locations, connectivity to SR View, and access to Metadata.
Unstable Slopes	Unstable Slopes provides WSDOT engineers access to unstable slope information via a map including rating information and possible design solutions.
Vessel Watch	Vessel Watch provides commuter updates on Washington State Ferry vessel locations via the internet.

Winter Operations	Winter Operations is a real time GPS vehicle tracking system which monitors the location, and activity, of WSDOT Maintenance Vehicles and IRT trucks. A web browser GIS map displays road conditions, road surface treatment and various vehicle activities such as speed, direction plow blade position, chemical application, air temperature, road temperature and many more.
WSDOT Traffic and Weather Web Site	WSDOT Traffic and Weather web site provides traveler information via the Internet. Available information includes pass reports, weather conditions, surveillance camera views, highway advisory radio messages, construction zones, traffic restrictions, and road conditions. Information is accessed through GIS generated map graphics.

GIS Database(s) Environment

Vendor Name	Number of Applications
ESRI Coverage (enterprise databases)	0
ESRI SDE (enterprise databases)	20
ESRI Shape file (enterprise/office/personal databases)	10
Microsoft SQL Server (enterprise databases)	23
Microsoft Access (office/personal databases)	2 (at least, probably more). Includes: Eastern Region – (1) Real Estate Services Parcel Tracking System.
Microsoft Excel (office/personal databases)	Unknown

Critical GIS Datasets

Database Name	Spatial Data Format Type	Server
Federal Emergency Management Q3 Flood Data for WA Counties	SDE Feature Class	ArcSDE Server
LiDAR, from the Puget Sound LiDAR Consortium w/index	GRID	File Server
State Route GIS Road Log	SDE Table	ArcSDE Server
State Route Milepost Markers of WA State	SDE Feature Class	ArcSDE Server
Liquefaction Zones, WA State DNR	SDE Feature Class	ArcSDE Server

E. Security and Disaster Recovery/Business Resumption Plans

Security Program Compliance

WSDOT tracks compliance with the OCIO Security Standards and provides an annual update on the state of compliance. WSDOT Security Plan, standards and procedures are maintained in the WSDOT IT Manual. Those portions of the IT Manual that are sensitive have restricted distribution and access is limited to those individuals with a need to know. The annual security program compliance verification letter is signed by the Transportation Secretary and submitted to OCIO by August 31st of each year. Every three years there is an independent audit of the IT security program conducted by the WSDOT audit Office. The last audit was started in 2009 and completed in 2010 and the next audit is due to be conducted in 2013 under the new OCIO standards.

2012 Security Report

The Office of Information Technology tracks compliance with IT security policies, standards, and guidelines. Changes to the security program are currently being worked as part of the effort to become compliant with The Office of the Chief Information Officer (OCIO) standards and Purchase Card Industry (PCI) standards. The Three Year Security Audit was conducted in 2009 with the next security audit scheduled for 2012. On July 31, 2012 WSDOT is required to be fully compliant with OCIO standards and where not compliant have identified, approved deviations, and mitigation strategies.

2012 Disaster Recovery Report

The Annual Disaster Recovery/Business Resumption Plan verification letter is signed by the Transportation Secretary and submitted to OCIO by August 31. The current plan has been reviewed and updated. The update is the result of linking the Continuity of Operations Plan (COOP) work, a plan for actions during any type of IT incident, the business continuity planning work and overall disaster recovery planning work. The resulting document is a working document available for critical personnel in IT. This effort began in September 2008 and continues through this biennium.

The 2012 IT Disaster Recovery (D/R) Plan identifies the escalation and notification processes used for issue resolution along with the procedures for identification of an emergency or disaster incident. The plan outlines the procedures and authorization of declaring an emergency or disaster incident and provides the procedures for each IT section in the appendixes to recover the systems identified in the COOP. The D/R plan is updated each year after the Mainframe recovery test in June. The current year results of the D/R test are located in Appendix C.

2012 Business Continuity Planning

WSDOT Business Continuity Planning is accomplished through the Agency's Continuity of Operations (COOP) Program. The purpose of the Continuity of Operations (COOP) Program is: (1) to manage the immediate aftermath of an emergency that has severely impacted agency staff, facilities, or information technology; (2) to ensure ongoing delivery of mission essential functions and essential supporting functions during any emergency; (3) to ensure availability of people, facilities, equipment, materials, technology, and records to support those essential functions; (4) to fully restore all functions after the emergency ends, and (5) to fulfill federal and state continuity of operations and pandemic flu planning requirements. IT business requirements are found in the COOP Needs document produced as a part of the COOP Planning process. The Office of Information Technology provides technical support for the Continuity of Operations Program and provides a major role in disaster recovery/business resumption planning.

F. Public Access

WSDOT continues to excel at providing electronic access to public information and enabling citizens to have appropriate two-way interaction for obtaining information and services, as requested in RCW 43.105.270.

The WSDOT website has been continually redesigned to improve public access to information and better serve the public. Using a customer-focused perspective, WSDOT evaluates how customers look at the site and designs navigation to support improved access by topic rather than the traditional navigation by organizational structure. The WSDOT website averages 800,000 page views each day, far exceeding the public usage of other Washington state agency web services. During winter storms then page views can exceed ten times the normal averages.

Information architecture is developed based on how real users actually look for information. Standardized navigation design across pages creates a more consistent and intuitive user experience that lets users know what to expect from one page to the next.

WSDOT's award winning, nationally recognized, real-time traveler information displays live images from more than 600 cameras and continues to be the most popular public access service provided by any government agency in the state. During the winter, mountain pass and cross-state travel conditions are also heavily used.

Public Interaction

In planning or implementing electronic access and two-way electronic interaction and delivery technologies, RCW 43.105.270 encourages agencies to increase their capabilities to communicate directly with the public.

WSDOT uses social media technologies and more traditional electronic mail services in combination to increase opportunities for public interaction.

- The WSDOT Blog helps us break down bureaucratic barriers and establishes a direct, casual, interactive conversation between the agency and the public.
- The Flickr photo and video hosting website lets us share images with the public.
- WSDOT's YouTube channel allows us to share and discuss videos.
- Twitter provides instant text messages with Puget Sound traffic information, mountain pass reports, Canadian border wait times and aviation weather reports.
- WSDOT provides e-mail and text message alerts for more than 200,000 subscribers using software as a service provided by GovDelivery.
- WSDOT's construction projects publish the contact information for the individual directly responsible for that project to encourage direct public correspondence.
- Online tools such as SRweb allow citizens to take a virtual drive across state highways.

Electronic business transactions are well established on the WSDOT web, including the following transaction services:

- Contract ads and awards on the web provide contractors with information on construction projects.
- Contractors can research and find qualified products to use for construction projects.
- Citizens, contractors and other public agencies can order technical manuals and publications and receive e-mail notices when there are updates.
- Encouraging citizens to take alternative transportation and receive incentives for doing so.
- Reserving space on a Washington State Ferry

Electronic commerce applications include:

- Tolling transponders and payments for toll bills for the Tacoma Narrows Bridge, 520 bridge and other tolling systems.
- Purchasing Ferry tickets, Vanpool and Carpool online
- Monthly passenger passes for frequent travelers on Washington State Ferries.
- Reservations for international ferry travel.
- Aircraft registration for Washington pilots.
- Issuing permits to move oversize and/or overweight loads

Continuous Access

RCW 43.105.270 also encourages agencies to use public access technologies that allow continuous access twenty-four hours a day, and seven days per week. More than two thirds of the views on WSDOT web servers are recorded outside of traditional business hours. The busiest hour for WSDOT web services is typically between five and six in the evening.

Among the 24x7 services provided by WSDOT's web are services for consumers, businesses, and other government agencies. These include:

- The WSDOT News Room provides easy access to news items and social media services.
- Real-time traveler information includes traffic cameras and weather forecasts.
- Travel alerts to warn drivers about highway slowdowns.
- RSS (Real Simple Syndication) feeds provide news bulletins and other information directly to subscribers.
- Automated e-mail bulletins and text messages provide timely updates on road conditions and many other WSDOT services.
- The most current information of the status of hundreds of major transportation projects.
- Public transportation options, such as car pools, bicycling, bus travel and more.
- Mountain pass reports provide an important public safety service for Washington travelers.
- A guide to Washington airports and flight service stations including the most current communications frequency chart.
- On line access to Washington State Ferry schedules and service information for commuters and tourists.
- Highway construction updates all around the state.
- A property boundary monument locator provides a popular resource for surveyors.

Commercial news organizations regularly use the WSDOT Web site and WSDOT traffic cameras as their original source material for timely and accurate information. Newspapers, radio and television stations provide links to the WSDOT Web site to enhance their own public service activities.

G. Applications and Software Information

As WSDOT applications age, the Total Cost of Ownership (TCO) is met and increasing maintenance and support costs negate any cost savings. Older applications which have not been converted to the newer technologies run on out-dated platforms and provide a challenge to support. The support for these older applications requires specialization in the out-dated technology which becomes increasingly hard to find. These technologies are no longer taught in Colleges and many of the WSDOT support staff have retired, are reaching retirement or have moved to the newer technology which provide better career opportunities.

WSDOT IT continues to identify and plan upgrades for the technologies which are more than 15 years old. Many of these applications are mission critical and with limited resources will continue to age until funding can be found for converting the applications.

Applications by Age	
0 - 5 Years	151
5 - 10 Years	120
10 - 15 Years	77
15 - 20 Years	19
20+ Years	40
Unknown	71

Application Portfolio

WSDOT has 497 applications which are maintained by IT Enterprise Application Group. The Materials Laboratory maintains 20 of their mission specific applications. The Roadway/Transportation Data Office maintains 15 mission specific applications while the remaining applications are spread among the other business units of WSDOT. In addition, there are small, business centric applications that do not require IT support and therefore are not included in this count. WSDOT IT continues to coordinate with the business units to identify and report on application information.

Applications by Technology Platform	
<i>Client/Server</i>	76
<i>Content Management</i>	3
<i>Document Management</i>	22
<i>Mainframe</i>	34
<i>Mobile</i>	3
<i>Other</i>	15
<i>SharePoint</i>	2
<i>Web</i>	151
<i>Windows</i>	155

Applications by Data Base Platform	
<i>Access</i>	19
<i>Archibus</i>	3
<i>Excel</i>	49
<i>Mainframe ADABAS</i>	25
<i>Mainframe VSAM</i>	5
<i>Microsoft SQL</i>	181
<i>Oracle</i>	4

Applications by Programming Language			
<i>ArcGIS & Related</i>	71	<i>Javascript</i>	28
<i>ASP/ASPX</i>	45	<i>JCL</i>	18
<i>Assembler</i>	3	<i>Kofax</i>	17
<i>C & C++</i>	6	<i>Lscript</i>	37
<i>C#</i>	139	<i>Natural</i>	13
<i>Clist</i>	12	<i>Other</i>	15
<i>COBOL</i>	15	<i>PowerBuilder</i>	27
<i>Dream Weaver</i>	9	<i>PS8</i>	6
<i>DYL280</i>	9	<i>Remedy</i>	4
<i>FileAid</i>	7	<i>SmartWare</i>	1
<i>FileMaker Pro</i>	18	<i>SQL Reporting</i>	46
<i>FORTTRAN</i>	26	<i>Stellent (Optika Acorde)</i>	21
<i>FrontPage/Web Designer</i>	49	<i>Unknown</i>	15
<i>HTML</i>	16	<i>VB</i>	31
<i>Hyperion</i>	22	<i>VB.Net</i>	31
<i>Informatica</i>	24	<i>VBA</i>	62
<i>Java</i>	3	<i>XML</i>	14

There are 75 applications which WSDOT business has identified as mission critical. WSDOT IT continues to coordinate with the business units to keep these applications available under all circumstances:

Mission Critical (COOP) Applications	
Agency Web Site	Geodata Catalog Maintenance Utility
BizTrak	GIS Workbench
CCIS – Pre-Qualification	Human Resource Management System
CICS Regions	IT Contracts
Diskeeper Administrator	Labor Collection/Payroll Expenditure Reporting
MS Outlook (email)	Merlin Dash
Shake Map (UW)/Bridge Damage	Minor Capital Inventory
SharePoint	Payroll System Reporting
Splice	Personal Services Contracts Database
Stellent – SAMP	PG Super
TMS	Public Disclosure Request Tracing System
WSF Maintenance Management System	Purchase and Order System
511 System	Real Estate Information System
Automated Fuel System (MAS90)	Record Services
Barlist	Remedy Action Request System
Bid Express	Remedy Equipment Inventory System
Bridge Engineering Information System	Road Access Management Permit System
Bridge for Windows Load Rating Structural Analysis	Roads
Bridge Repair	Spatial Metadata Management Systems (SMMS)
Bridge Website Admin Interface	Structural Inspection Laptop Program
CADD and Orthophoto Information System	Task Order (10-010)
Capital Program Management System (SRA)	Traffic & Weather Portal Website

CCIS Word Macros	Traffic Accident and Roadway Information System
Computer Aided Facility Management	Transportation Asset Reporting and Tracking System
Condition Acquisition and Reporting System	Transportation Executive Information System
CONSPLICE	Transportation Reporting and Accounting Information System (TRAINS)
Construction Contracts Information System (CCIS)	Washington Bridge Inventory System
Consumable Inventory System	Washington Electronic Bid System
Content Management Server	Washington State Aviation System Plan
Contract Administration and Payment System	Web EOC
COOP Planning	Work Order Authorization
Credit Card Services	WSDOT Data Catalog
Employee Phone Book	WSF Automated Operations Support System
Estimate and Bid Analysis System	WSF EPI Suite
Financial Information Retrieval System	WSF Material Management System
Fleet Equipment Management System	WSF Vigilos
Force Account	WSP Computer Aided Dispatch

The follow Application list contain all the applications which are supported and maintained by the Office of Information technology. WSDOT IT implemented a new application tracking system which collects the additional detailed information required by the OCIO's office and provides additional Application Portfolio management for internal use. For this additional information, sign on to the IT Application and Database Information system (ADIS) at:

<http://webprod4.wsdot.loc/InformationTechnology/EnterpriseApplications/SystemDocumentation/> .

Application Name	Description Summary
167 HOV Office Documents	Document management application for Scan/Store/Retrieval of documents.
511 Voice Interactive System	511 system is the state-of-the-art speech recognition technology allows callers to verbally tell the system what they want, such as traffic or mountain pass, highway roads incidents and traffic congestion information.
AADT Truck Percentage - Map Service	This map service displays AADT data for the Freight Map Application.
Accounting Data mart	Detailed view of agency Expenditures, Agreements, Revenues, Deferred Revenue and Cash Receipts.
Accumulated Route Mile Calculation Module	This application replicates the TRIPS mainframe function, given a SRMP or an ARM with a Reference Date, this program will return the requested SRMP or ARM for the specified Response Date, for a PC application. A file containing several values that have to be converted can be processed in batch mode. Common module for any PC system to convert/validate SRMP to ARM and ARM to SRMP. Limited support due to resources shortages.
Activity Reports Online	Allows participating Adopt a Highway organizations to file their litter pickup reports via the web.
Administrative Services Contracts	Document management application for Scan/Store/Retrieval of documents.
Adopt A Highway	Tracks groups signed up for the Adopt a Highway program and the litter picked up
AFRS FTE Monthly Interface	FTE data compiled from TRAINS ledger and sent to AFRS.
AFRS Payment Interface	Detail information sent to facilitate payments.
AFRS Payment WR Interface	Warrant information (Warrant/EFT#, Payment date)received from AFRS for posting in TRAINS.
AFRS Weekly Interface	Summarized TRAINS general ledger activity sent to AFRS.

Agency Web Site	Web pages for internal and external stakeholders
Aggregate Source Approval	This application lists all aggregate sources (7400+ pit sites) that have been used for WSDOT construction purposes and identifies whether or not they are currently approved for use.
Airport Information System	Airport Information System (APIS) is a secured external facing application developed for Aviation department of WSDOT. The application will be used by WSDOT trusted partners that include Airport Representatives, Federal Aviation Administration employees along with WSDOT Aviation staff. Some report will be available to general public. The application is ADA compliant. This application will provide information about the airports and aircrafts in Washington State.
Amtrack Cascades	Rail services information.
Application and Database Information System	Contains the applications and interfaces used and/or maintained by WSDOT. Used to extract official list for reporting to OFM, DES, Secretary of State and other agencies.
Apprentice Journeymen Participation	Application for contractors to report apprentice and journeyman hours and DBE compliance on state construction contracts
As Builts	Document management application for Scan/Store/Retrieval of documents.
ASCIICheck	The ASCII Checker program is a traffic count utility program designed to read through an ASCII file deleting lines that meet a specified criteria. A new file is then written without the deleted lines.
Audit Tracking	Tracks internal and external auditing data.
Automated Fuel Tracking	Provide systems interface between a vendor supported system and TRAINS (AM) system.

Automated Training Management System	ATMS supports internal and external training programs for over 6,000 agency and various county city employees. The system is an integral part of the department's training program.
Available4Adoption	Shows adopt a highway segments that can be adopted as well as those segments not available.
Average Speed - Map Service	This map service contains data for segments of Washington's State Routes that have been analyzed to locate and rank truck bottlenecks.
Aviation Internet Registration	The Aviation Division registers Washington aircraft, pilots and aircraft mechanics. Annual registration is required by law. Registration fees and excise taxes are collected using a web-based e-commerce application.
Barlist	Reinforcing steel quantity estimating tool. Distributed under the terms of the Alternate Route Open Source License.
Basic Accounting Transaction System	The BATS system is responsible for transmitting the Materials Lab billing transactions to the WSDOT accounting systems, TRAINS.
Better Mousetraps	A web based system to provide a place to share ideas among public works employees about ideas and home-grown equipment to save time and money on projects.
Bid Express	
Bids Tab Pro/Plus	Bid Tabs Pro is software provided by a private company using Bid Tabulation data from EBASE. It analyzes all Standard Bid Item and Contractor bid data for contacts let by WSDOT. It makes this data available with a multitude of predefined query areas, and creates reports or exports to excel the results based on those queries.
Bids unit price analysis	Used by public and internal staff to view bid history, unit price and bid items and analysis unit price and history
BPO Web Scheduler	Schedule for bridge preservation employees

Bridge Design Issues	For the bridge office to keep track of and monitors design issues that arise during bridge construction or repair projects.
Bridge Engineering Information System	Web-based application that provides access to inventory data, plans, rating reports, inspection reports, photographs, and related files for bridge structures in the WSDOT inventory.
Bridge Load Rating Structural Analysis	Load Rating
Bridge Opening Schedule	Used by the Traffic Management Centers for scheduling when a movable bridge opening is required
Bridge Repair	Web-based application that provides information pertaining to bridge repairs.
Bridge Timesheets	Application for the Bridge Office to fill out and submit electronic timesheets
Bridge Web Site Admin Interface	
Business Card Order System	Used by all WSDOT personnel to order WSDOT business cards. Orders are processed by system, reviewed by Forms Management staff and electronically sent to Printing Services Docutech copiers for printing.
C12 TRAINS to Contract Manager	TRAINS to Contract Manager
C4 CAPS to Contract Manager	CAPS to Contract Manager
CADD and Orthophoto Information System	The system's business function is a tracking catalogue for the Department of Transportation in Geographic Services.
Capital Program Management System	CPMS helps establish, monitor, manage, and deliver the WSDOT statewide Capital Highway Program. CPMS does not manage individual project details, but does help plan and monitor the overall construction program.
CCIS Word Macro	To provide users at the Regional Project Offices the ability to add or modify Change Order Text of an existing DOT contract stored on the CCIS mainframe.
Cellular Equipment Data and Reporting System	Used to track cellular equipment and to package this information into a readable, searchable, and reportable format to allow regional delegates to be able to update this information as cell phone plans are added, modified, and/or deleted.
Census 2000 Data Engine	The Census 2000 Data Engine is an application/database designed and distributed by the U.S. Census Bureau.
Central Operations Support	This system assists Central Operations with managing tape requests.
CIA GIS components	Silverlight component and GIS services necessary to create map products for the application.
City Limits - Map Service	This map service displays incorporate city limits within Washington State.
City View	Application used to view streets in cities in Washington and the pavement condition of those streets
CLAS Collisions	This application provides the ability to scan and index collision report images; add, update and delete collision report data in the statewide collision repository database as well as feeding other systems, both inside and outside the department. Components of the CLAS-EDWMS System are: PTCR and Citizen Report Document Imaging, Workflow, CLAS Screens, Electronic Collision Report Processing, Collision Image Web Viewer, Online CLCF, DSHS Data feed Web Service, CVARS Web Service, City / County / CR
Collision Data Mart	This database is the repository for all collision data from 1999 – current. It provides the ability to search for a collection of collision reports based on the customer's request. It does not contain any personal identifiers. The Collision data mart is an integral component of the WSDOT Data Warehouse.
Collision Location and Analysis System	Processes collision reports form 2002 forward.

Collision Report Public Disclosure (Cash receipts)	This application is used to track cash and the status of all collision information requests. A request is received from a citizen or organization that includes the name of a person involved in a collision, the date of collision or collision number, and a \$5 payment. The WSP public disclosure office prepares and deposits the cash receipts and mails out a copy of the requested collision to the requestor. Due to OFM regulations, payments must be deposited the same day they are received. If this app
Commercial Vehicle Information Systems and Networks	CVISN provides the ability to weigh vehicles in motion, automatically clear those that meet state transportation standards, and check vehicle licenses and permits against state records.
Commercial Vehicle Restrictions Public Website	Display the current commercial vehicle restrictions on the public website.
Commercial Vehicles Restrictions	Verifies vehicle routes based upon the dimensions of the vehicle Trailer.
Commitment Tracking System	Provides an automated single point of entering and tracking environmental commitments. This system allows WSDOT to log, track, and document completion of environmental commitments.
Common Modules	These are common modules shared by various IT applications.
Commute Trip Reduction Survey	This application allows the Public Transportation Division to more effectively and efficiently meet its legal and contractual obligations to provide data analysis and statistical reporting including measuring of the changes in drive-alone trips and VMT per employee at the worksite, jurisdiction, regional and state scales. The CTR re-design automated and streamlined the transfer of data from raw survey format to a CTR database management system. Every two years employers survey their employees an
Commute Trip Reduction System	System to track participants activities in the commute trip reduction program
Computer Aided Engineering Systems	These systems support the roadway design process within WSDOT. They consist of VBA macros that run within the Bentley Microstation environment and C# applications. They port data between MicroStation, InRoads, and survey utilities/data collectors and ensure WSDOT engineering standards and practices are followed.
Computer Aided Facility Management	The Computer Aided Facility Management system provides data and functionality in support of all facility management functions. System includes the Archibus thick client and Informatical.Net thin client.
Condition Acquisition and Reporting System	The Condition Acquisition and Reporting System (CARS) is a standardized way for transportation department personnel to manually input and share information about traffic, incidents, construction, closures, and other activity on the roadway.
Congressional Districts - Map Service	Data represented here is the US Congressional District boundary lines as adopted by the Washington State Redistricting Commission.
CONSPLICE	
Construction Alerts	Report issues on construction projects to HQ management
Construction Audit Tracking System	Construction and audit system that provides a communication process in resolving noncompliance issues found during construction inspections.
Construction Contracts Information System	CCIS collects, analyzes, and reports on construction contract details, e.g. start dates, end dates, percent complete, fair hiring practices, fair wage rates, percent of work sublet, etc. System functions include:
Construction Impact Analysis	Provides the necessary functionality for data entry, analysis and reporting of traffic disruption projects in terms of location, impact, time and duration so WSDOT can more effectively keep people and goods moving while completing these projects.
Construction Water Quality Monitoring System	Construction Water Quality Monitoring (CWQM) is a project sponsored by ESO that is used to collect water samples at WSDOT construction sites.
Consultant Agreements	System for the Consultants Office to manage agreements with outside entities

Consumable Inventory System	Tracks consumable inventory for MVF, WSF, and Maintenance. Handles Orders, Receipts, issues, Physical Inventory and adjustments to the inventory.
Content Management Server	Content Management Server 2002 is an enterprise Web content management system that makes content authoring and delivery easy. Content Management Server 2002:
Contract Administration and Payment System	CAPS maintains administrative and payment information about highway and ferry construction contracts. System functions include:
Contractor Pre-Qualification System	The Contractor Pre-Qualification System handles contract pre-qualification, pre-contract administration, and district contractor inquiry.
COOP Planning	Filemaker Pro application which WSDOT uses to identify and report the COOP information
County Boundaries - Map Service	This map service displays Washington State County boundaries.
CPMS Data Mart	A SQL-based adhoc reporting database containing various snapshots of CPMS data. The database has been designed for ease of reporting. The types of snapshots include Production, Yesterday-Production, Book, Yesterday-Book, and Month end. Book is a generic name for a snapshot of the mainframe production data that is being matched to the latest Legislative Budget. The Production snapshot is updated nightly with the current information. The latest Book snapshot is updated nightly, while the data is b
Credit Card Services	Web-based WSDOT application provides a single interface through which WSDOT applications can process credit-card transactions.
Crew Manager	Manages and Maintenance TMC staff details, application helps to maintain staff information as group (crew) wise.
Culvert Inspection	The Culvert Recording application is a C# program that uses the VLC media player to record video and capture stills directly from the culvert inspection rover to a laptop's hard drive. The culvert inspection rover is a remote controlled mobile unit used by the Roadway Systems branch to inspect WSDOT culverts. The video and stills collected by "Culvert Recording" are then manually transferred to IT supported file storage when the laptop is reconnected to the DOT network.
Culvert Maintenance Management System	The Culvert Maintenance System allows the collection, storage and reporting of culvert inspections, cleanings and repairs to meet the requirements of the Department.
Culvert Video Inspection	An application used to capture live video during culvert inspections. These videos are then transferred to enterprise storage for sharing with other DOT staff.
Data Catalog	A Web application for retrieving and storing meta data about WSDOT data.
Data Warehouse	A collection of data designed to support management decision making. It allows reporting and analysis of data for those who need to make strategic decisions or analyze information on agency products, administration, or operations.
Delphi Web Survey	The goal of this survey is to evaluate the current acceptance process and refine them as necessary to be more beneficial to the department and the traveling public.
Design Variance	Used by the Construction Office to keep track of variances from design standards that occurs on projects.
DIRSEL	The Dirsell program is a traffic count utility program designed to delete a single direction from a traffic data file. The user selects a file, a direction, and a new file name and the program creates a new file deleting every line that is a reference to the elected direction. The original file is left untouched.
DIS Call Detail Report System	WSDOT Telecommunications receives monthly SCAN, SCAN Plus, and phone line reports from Department of Information Services (DIS) in two formats (paper reports and compact disk).

E-Discovery	Used by the Risk Management Office and the AGs Office to keep track of the status of litigation against WSDOT
Economic Gas Tax Reporting	The process reports on the state gas tax distribution to the counties and cities. It provides percentage of the allotments to the counties and cities.
eDocs Importer	.Net based application for the electronic importing of documents into the agencies document management systems.
Electronic Bid System	Electronic construction materials bid tracking system.
Electronic Statewide Network Overweight & Oversize Permit Issue	Web-base application allows agents to issue oversize, over weight trip permits to truckers. Replaced client/server based Electronic Statewide Network Overweight Oversize Permit Issue system Nov 1, 2003.
Employee Master File/Personnel Information System	Load employee data from HRISD to DOT-Employee-Master-File. Maintain employee data.
Employee Phone Book	Maintain employee telephone, location and e-mail address information. Create and maintain the "Blue Pages" of the WSDOT phone book.
Engineering Publications CD Library	Statewide external system used by local agencies, WSDOT contractors, vendors, Other state DOTs, and other foreign entities via subscription through Engineering Publications.
Enterprise Location Class	Web services that can be used by software application developers in order to perform spatial tasks. X/Y coordinates can be converted to nearest state route mile post, accumulated route measures can be converted to X/Y, line features can be created along state routes. These, and additional, services can be used to build more complicated tools within an end-user application.
EOC Video Wall	Emergency Operations Command center's collection of video monitoring systems.
ESS Safety Compliance Suite	Tracks Employee Safety Incidents
Estimate and Bid Analysis System	EBASE is used to develop estimates and reports for transportation construction projects, allow easy entry of contractor bid data, and award apparent successful bidders on those estimates.
ETCC Payment/JV Interface to TRAINS	Payment (refund) & Journal Voucher detail information for generating accounting transactions in TRAINS.
ETCC WR Interface	Detail information related to payments (refunds) generated in TRAINS and sent to ETCC.
Exchange Properties Update Project	Updates Active Directory and Exchange Email accounts with employee and consultant location, phone and work title information.
Executive TORT Claims Web Site	A secure web application for WSDOT Agency Executives, Risk Management and the Office of Attorney General (OAG) attorneys to provide accurate and timely information on tort liabilities brought against WSDOT.
Exit Interview	A system for the HR Office to distribute, collect, and report on responses to the exit interviews given when someone leaves WSDOR or state service
Expenditure History On-line Query System	Expenditure History is a reporting application that answers questions related to highway construction expenditures on a state route. The selection criteria includes fiscal or calendar year, region, county, state route, and subprogram
External Interface - Carfax - Collision Data	This is an external interface to Carfax.
External Interface - County Road Admin Board - Collision Data	This is an external interface between CLAS and CRAB collision processing system.
External Interface - DOL - Collisions	This is an external between CLAS and DOL's collision processing application
External Interface - DSHS - Collision Data	
External Interface - Experian - Collision Data	This is an external interface between CLAS and Experian.

External Interface - NHTSA - Collision Data	This is an external interface between CLAS and NHTSA's collision system.
External Interface - RMS - Collision Data	After CLAS receives and validates an electronic collision report, it sends back a "full collision report" to the local (police) agency for processing into their collision system.
External Interface - WSP - SECTOR	External interface from which the CLAS application receives electronic collision reports.
External Interface - WSP - WRECR	External interface between CLAS and WRECR
Federal Aid Tracking System	Federal Aid System supports the preparation, review and processing of federal funding authorization agreements and modifications to the federal Fiscal Management Information System.
Federal Reporting System	This system is used by the Economics Branch for detailed reporting to the Federal Highway Administration on highway construction, maintenance, and administration expenditures.
Ferries 3RAM Interface	Interface between Traffic Stats and vendor supported 3RAM system to help dispatch WSP personnel
Ferries Accounts Receivable Interface	This system provides an interface between the WSF Point of Sale system (POS), the WSF Automated Revenue Control System (ARCS), the US Bank, and TRAINS for the charge slip monitoring, limited charge slip data entry,
Ferries Automated Operations Support System	Washington State Ferries, in order to better serve its customers and to meet or exceed current and anticipated international safety regulations,
Ferries CCR Load	Loads credit card transaction data from Heartland close-of-day file into CCR Database for processing
Ferries Claims Management System	Claims Management System tracks and analyzes Jones Act incident reports and all public claims and associated dollar costs.
Ferries COA Ledger Data Loader	Monthly process to load transaction data from Trains close.
Ferries Coast Guard Docs Admin	Administrator interface to Coast Guard Documents
Ferries Coast Guard Documents	Electronic search, display and print of the scanned images of correspondence between WSF Vessel Library and the Coast Guard.
Ferries Contracts Admin	The WSF Contracts Admin application is designed to be used by the Legal Services & Contracts department within Washington State Ferries. Its main focus is to provide a flexible means to allow admins to easily publish contracts on the Internet.
Ferries Credit Card Refunds	Processes refunds to WSF credit card sales.
Ferries EFS Credit Card Utility	Void credit card sales before end-of-day processing. This activity is needed occasionally when a transaction has been accidentally processed and is too late to process a formal "Return" via EFS or other application system.
Ferries EFS Integration with Smart Card	WSF's point of sale system which includes three primary components, a Web Store, Kiosk, and Point of Sales system in each tollbooth. The primary functions of the system is to sell tickets, track usage of tickets and report on revenue collection activities in the tollbooths and terminals.
Ferries Electronic Personal Identification Suite	EPI Suite is a credentialing application. The application was developed by ImageWare Systems. Used by the Homeland Security department to issue ID cards to Employees, Venders, Contractors, Spouses, Dependents, and Retirees. This system is also used to store information about keys that have been issued.
Ferries Emergency Contact	An HR database to store emergency contact information
Ferries EpiSuite Person Roster Service	Information on Employees and Contractors recorded in EpiSuite.
Ferries Exception Parser Win	Harvests and caches exception data from Galaxy for Ferries Exception Report Web.

Ferries Exception Report Web	Assists both terminal agents and operations personnel to review and approve unusual auto booth transactions at the terminals.
Ferries Fleet Watch	Software provided by ECC Globe to monitor real-time vessel location and match to sailing schedules.
Ferries Foundation Base Administration	The Application(s) and the WSF Foundation database serve the Washington State Ferries needs for common data like Vessel, Terminal, etc.
Ferries Fuel Consumption	Data entry and reports of monthly vessel fuel consumption
Ferries Globe	GLOBE is an advanced plotting and navigation software application designed for the commercial marine industry.
Ferries Globe Server	Globe Server listens and records USCG AIS location, heading, speed, etc data from marine vessels in the WSF operating area.
Ferries Google Transit Feed	Transmission of our sailing schedule to Google for use by their trip planner
Ferries Home Page	Provides a simple way for customers to access transit, highway, and ferry tourist and travel information through the WSF and other regional transit Web home pages.
Ferries HR Employee Confidential Data Lookup	Tightly controlled HR lookup tool of confidential data for employees
Ferries Information System	Admin tool for various Ferries data sets: Bulletins, Alerts, etc.
Ferries Key Systems	Controls the release of keys by personal identification (card) that gets access rights information from the Vigilos volt.
Ferries Labor System	Supports Labor/Payroll, Human Resources, Budgeting, Accounting. Collects Time Sheet Labor Transactions for Employee Pay and Labor Expenditure Generation. Provides Labor costing for TRAINS, MPET and multiple reporting processes.
Ferries Leave Attendance	Interactive and scheduled reports showing current leave time earned/used by org or employee.
Ferries Letters of Time	A LOT (or Letter of Time, also a Letter of Sea Time) is a document that the WSF provides its vessel employees. It is a running tally of sea time and serves as proof that an employee has met certain standards as part of renewing or upgrading his/her document and/ license.
Ferries Lost and Found	To keep track of the items lost or found at the WSF ferries and terminals
Ferries Mandarin Library System	Used for tracking Vessel Library hard copy material
Ferries Material Management System	MMS - MPET application issues and tracks maintenance work requisitions, both corrective and preventative, for the WSF Terminal Maintenance Engineering, Terminal Engineering, Eagle Harbor Repair Facility and vessels.
Ferries Mobile Vessel Watch	Vessel location information for small format mobile phones
Ferries On Time Performance Client Sync	Scheduled harvesting of the OTP Reporting sailing data (the "Why" a vessel was late) from WSF Vessels and processing into a central HQ OTP Reporting database.
Ferries On Time Performance Reporting	As mandated by Legislature HB3209. WSF is required to track late departures and provide reasons for the late activity. The application runs standalone on each vessel and records data in a local database.
Ferries Permits	Interface for the public to register for carpool/vanpool permits.
Ferries Process Mileage Expenditures	Mileage Expenditures is a monthly process that matches employee mileage records from DOP (2 flat files FTP'ed from the mainframe) to the job position the employee was in.
Ferries Public Contract Web	The contracts web application displays WSF Contract files (RFPs, IFBs and RFIs) to the public in an organized fashion. It also includes all the pages that make up the Business with Washington State Ferries section.
Ferries Public Fare Service	Public Fare display and calculation. Uses the WSDOT Traveler API.
Ferries Public Fare Web	Public fare calculator for the Ferries routes.
Ferries Public Schedule Service	Provides Ferries Schedule data to the public. Uses the WSDOT Traveler API.
Ferries Public Schedule Web	Public interface to the Ferries sailing schedule by day and route.

Ferries Public Terminal Service	Public information on Ferries Terminals. Uses the WSDOT Traveler API.
Ferries Public Vehicle Reservations	Allows the public to make reservations for selected routes.
Ferries Public Vessel Service	Publicly available info on Ferries Vessels.
Ferries QDS Vessel Mode Admin	Admin Interface to change vessel in-service/maintenance status. Out of service vessels are not displayed on Vessel Watch.
Ferries Queue Delay System	Provides accurate information on departure and arrival times of ferries at each terminal by collecting data on the location, speed, heading, and capacity of vessels on the WSF fleet.
Ferries Reservation Web	Allows general public to make reservations on Pt. Townsend/Keystone routes over the web
Ferries Schedule Admin	Administration tool for the WSF Foundation database schedule and other common data.
Ferries Security Drill Log	Records and reports information about Security Drill events. The participants, date, terminal, event type, comments and lessons learned from the event.
Ferries Service Reports	Lookup of employee job class, pay code, hours, etc.
Ferries SMS Non-Conformity	The Safety Management System is used to track safety related issues and their resolution.
Ferries TechLib Web Service	Vessel data from Vessel Technical Library.
Ferries Terminal Records Resource System	Facilitates a librarian to file, index, and store Terminal Engineering contracts and their related information, along with any other related or non-related Terminal Engineering documents.
Ferries Traffic Statistics Loader	Data transform/loader from Galaxy POS to Traffic db.
Ferries Traffic Statistics System	WSF collects and stores ticket sales information and, for traffic statistics purposes, categorizes the ticket sales counts by type of fare.
Ferries Training Budget	The training office uses these reports to obtain updated budget information.
Ferries Transportation Allocation and Allotment System	Management tool to aid in the Budget process.
Ferries Uniform	Application to track uniform (clothing) purchases.
Ferries Vessel Technical Library Admin	An administration tool for recording and storing electronic and physical drawings for the Vessel Technical Library.
Ferries Vessel Technical Library Browser	TechLib Browser identifies the current documents, electronic and physical, of the Washington State Ferries Vessel Design Department's Technical Library and is used by Vessel Engineer to extract electronic drawings for local editing.
Ferries Vessel Technical Library Internet Explorer	TechLibIE locates and displays the current documents, electronic and physical, of the Washington State Ferries Vessel Design Department's Technical Library and is used by remote facilities and vessel crew.
Ferries Vessel Watch	Shows location of the ferry boats on the Web in real time
Ferries Vigilos	Video / Security System monitoring application.
Ferries WINDS	Terminal workforce resource planning/scheduling application.
Ferries Winds Web Service	Supplies Vessel, Terminal, schedule data to WINDS
Ferries WSF Labor Data Loader	Processes associated with reading mainframe extracts (Labor, Employee, Job Class, Position, Leave, etc.) into the WSF Labor system
Ferries WSF QDS Vessel Mode WS	Interface to change vessel in-service/maintenance status.
Ferries WSF Roster	Lookup of employee information by individual, bargaining unit or org code
Ferries WSF Employee Roster WS	Information on WSF Employees. Secured by shared password.
FHWA Federal Billing	Requests to FHWA for reimbursements for projects with federal funding

Financial Information Retrieval System	FIRS provides access to summarized accounting, spending plan, and work order information from TRAINS and TRACS. The FIRS database is read-only; data is retrieved and presented as an Excel spreadsheet.
Financial Service Admin	Application to view data submitted by clients to financial web services, manually run jobs to export data to TRAINS and other administrative tasks.
Financial Services	Suite of financial services to receive accounts information from various clients and send to TRAINS which is WSDOT's accounting system. Services are Journal Voucher, Payment Voucher, Cash Receipt
Fleet Equipment Management Interface	Provide system interface support between a vendor supported system (Fleet Equipment Management system) and TRAINS (AM) system.
Fleet Equipment Management System	FEMS interfaces transactions to TRAINS monthly.
Force Account	Force Account is a client-server based system that provides and tracks reliable construction project information. The system will track expenses for Labor, Equipment and Invoice Items.
Freight and Goods - Map Service	The Washington State Freight and Goods Transportation System (FGTS) is used to classify state highways, county roads and city streets according to the average annual gross truck tonnage they carry. The Washington State Department of Transportation (WSDOT), with the assistance of the Association of Washington Cities (AWC) and the County Road Administration Board (CRAB), updates the FGTS on a periodic basis. This map service is currently used by the WSDOT Freight Map Application.
Freight Map Application	This map application displays data for segments of Washington's State Routes that have been analyzed to locate and rank truck bottlenecks.
Functional Class Base Map	The service is intended to be used as a base map to display function class road data.
Functional Class Map - Map Service	This service displays function class road data
Functional Class Specifications	Document management application for Scan/Store/Retrieval of documents.
Functional Class Web Map	A web map application used by local agencies to verify the Functional Class status of their roadways. This application supports the submission of Washington all roads information to the HPMS program.
GAP001 Interface	Time/Leave/Attendance Data sent to HRMS
GAP008 Interface	WSDOT Employee Leave Detail Data received from HRMS
GAP009 Interface	WSDOT Employee Detail Data received from HRMS.
GAP010 Interface	WSDOT Position Detail Data received from HRMS
GAP011 Interface	Pay Cycle Actual Paid Data less retroactive applied payments received from HRMS.
GAP025 Interface	WSDOT Job Class Detail Data received from HRMS
GAP030 Interface	Pay Range file received from HRMS
Geodata Catalog Maintenance Utility	Application used to catalog and identify the location of the geo-datasets
GeoPortal Map Application	The WSDOT GeoPortal is an application that allows users to view WSDOT spatial data (like Functional Class, Interchange Drawings, City Limits and State Routes) via a web browser. Users can check a box to select from a variety of base maps and data layers. They can click on the map to return a State Route milepost value or type an address to zoom to.
GIS GEO Catalogue Data Maintenance Application	Provides a mid-tier administrative interface to build and maintain the GIS Workbench database and the WSDOT enterprise GeoData Catalog.

GIS Workbench	The GIS Workbench is a custom ArcMap extension that presents menus of data from the WSDOT GeoData Catalog, and custom tools that have been tailored for defined business areas. GIS Workbench (GISWB) is designed to serve all business areas of WSDOT without having to spend resources to create separate GIS applications for each group or business area. Currently the GISWB contains seven business areas (BA) with customized views of the WSDOT GeoData Catalog.
H&LP Conference/Workshop Tracking System	Used by HLP to keep track of registrants and finances when a conference is put on.
HES Risk	A system for on-line grant applications via the web to apply for Federal Aid grants for Hazard Elimination Safety projects to mitigate the risk of a collision at a high risk location. Used sporadically when grants are being accepted.
HES Safety	A system for on-line grant applications via the web to apply for Federal Aid grants for Hazard Elimination Safety projects for hazardous locations. Used sporadically when grants are being accepted.
Highway Activities Mobile Map	HATS MOBILE is a combination of two independent applications which support the M & O inspection efforts. The two applications have parallel functionality in terms of walking maintenance staff through various required steps as they perform an inspection. The handheld PDA application has the additional functionality of allowing field crews to see previously collected features on a map, to inspect the attributes of those existing features.
Highway Activities Tracking System	Highway Activity Tracking System Overview: The highway system is composed of thousands of assets that are managed by WSDOT Maintenance and Operations. Examples of these assets are bridges, culverts, barriers, guardrail, pavement, ditches, catch basins, signals, traffic signs, etc. The Highway Asset Tracking System is designed to be a tool for managing general activities (work operations) to a linear section of roadway and activities that are performed against a specific asset.
Highway Features Interface	.NET Web service used to interact with the Highway Features database.
Highway Performance Monitoring System Web Application	HPMS data is collected annually by all states and reported to the Federal Highway Administration (FHWA).
Highway Road Logs	Document management application for Scan/Store/Retrieval of Highway Road Logs.
Historic Materials and Conditions - Map Service	Provides historical material and condition information for Winter Operations web application.
Historical Photos	Document management application for Scan/Store/Retrieval of documents.
Hood canal bridge weather	Public web page used for reporting on the current weather conditions at the Hood Canal Bridge. Camera images from bridge are also available.
Hpms Segments	This service is intended to be used to display HPMS data in the HPMS Local Agency Web Application.
HPMS Submittal Application	The HPMS Submittal Application is an interactive application used to annually obtain HPMS roadway section data from Local Agencies. This application is "opened" to the local agencies each year so the agencies can update their HPMS road segment information. This is traffic and inventory data required annually for the FHWA HPMS submittal.
HPMSview	Application to combine Pathways Van imagery with existing HPMS data for use in field verification. Used by local agencies
Human Resource Management System	
HY8 Input Generator	Hydraulic design software for culvert design and analysis. Developed by FHWA, Requires Windows 2000 not approved for Windows XP.

Identity Management Application	Maintain additional employee location, photo and alternate job titles as well as consultant entries, long-term contractor entries and contacts for application security.
Illegal Sign Inventory	Internal application used by the Traffic Office to track advertising signs that have not been permitted or that do not meet standards IAW RCW.
Illicit Discharge Detection and Elimination	IDDE is a web application funded by the Environmental Services Office (ESO) which provide ESO's IDDE program participants the ability to track and report on the status of Illicit Discharges and Illicit Connections discovered within WSDOT's NPDES permit area to meet the IDDE program obligations as defined by WSDOT's Stormwater Management Program plan.
Incident Location Tool	A tool for use by STCDO Collision section to more accurately locate collisions. A version of this tool will also be used in SECTOR; an application enforcement officers use to electronically record ticket and collision information.
Incident Location Tool - City Limits	This dynamic map service displays incorporated city limit boundaries, and supports the Incident Location Tool.
Incident Location Tool - Road Labels	This dynamic map service displays road labels for the Incident Location Tool.
Incident Location Tool - Road Labels #2	This dynamic map service displays road labels for the Incident Location Tool.
Incident Tracking System	System is used to track and report field reports of Incident Response Team (IRT) participants.
Integrated Real Estate Info System	REIS replaced in 2008 by IRIS. IRIS is used to track the purchase, sale, rent, and inventory of real Estate owned by WSDOT.
Interchange Drawings - Map Service	This map service displays the point locations of associated Interchange Drawing diagrams.
Interchange Viewer	Allows the viewing of interchange drawings statewide. (This system is no longer being used and is currently being removed from workstations 7/25/06).
Internet Employee Search	Employee information is downloaded from the mainframe on a daily basis. This information is merged with other information that is maintained on SQL and the results are stored in a SQL database.
Inventory Control Points - Map Service	This map service displays inventory control points for the Winter Operations Map Application.
Inventory Process	Process that reconciles SCCM and Remedy Asset for annual IT inventory.
IP Addresses	A system for keeping track of IP addresses, who owns them what devices they are assigned to, and so on.
IT Account Master	Storage master and computer operations use this to validate logon accounts and billing accounts.
IT Administrative Support	This is an administrative function for overtime pay reporting, and monitoring of IT core expenditures.
IT Contracts	The Contracts database contains information technology contracts, administrative contracts and outsource contracts as well as some interagency agreements. Detail information includes products and amendments providing status and history.
IT Executive Dashboards	This is a HTML application which displays charts and graphs on IT KPI's from the Asset data mart, spreadsheets and other data sources.
IT SDC Common Routines	These are common routines used by all MIS Systems.
IT Task Management	Track tasks for and time spent on developing and supporting applications by IT application support analysts.
L1 CPMS to P6	CPMS to P6
L5 TRAINS to P6	TRAINS to P6
L5b TRAINS to P6	TRAINS to P6
Labor Collection / Payroll Expenditure Reporting	The Labor Collection and Payroll Expenditure Reporting systems collect and process data about employee hours worked, leave taken, and financial details associated with labor hours

Labor Data mart	Expenses, equipment hours and other Timesheet data from Payroll Labor, exclusively. Does not include labor journal voucher transfers done in TRAINS.
Laboratory Information Management System	Provides the Materials Laboratory staff with online access to the materials testing and other laboratory data.
Legislative Districts - Map Service	Data represented here is the 2010 US Legislative District boundary lines as adopted by the Washington State Redistricting Commission.
Lessons Learned	A system for keeping track and sharing construction lessons that are encountered in the course of a project. Keeping track of these will improve construction as time goes on by not repeating mistakes, or using better methods.
Local Highway Finance Tracking System	LHFT is a web application which enables all local cities and counties in Washington State to track and submit the road/street related financial information to WSDOT. WSDOT's Economic Analysis office collects and compiles this information to transmit the finance reports to the Federal Highway Administration.
Local View	Application to allow local agencies to view their streets and monitor pavement condition on those streets.
Locations with Very Slow Truck Speed Performance - Map Service	This map service contains data for segments of Washington's State Routes that have been analyzed to locate and rank truck bottlenecks.
LPILE PLUS	Lateral pile analysis.
Maintenance Operations Map Display	The Maintenance Operations application is a system of processes and applications that collect and display real-time information from maintenance equipment used to clear snow, ice, and perform other actions. This information is used to show where the vehicles have been operating and what materials they are deploying and actions they are taking. The GRDO portion of this system is primarily used to display this information on a map.
Maintenance Shed Sites - Map Service	This map service displays maintenance shed sites for the Winter Operations Map Application
Manual Counts	This application is used to read data from manual count boards, add header information, print out reports and produce intersection diagrams prior to a subset of the data being uploaded to the mainframe.
Marine Expenditure System	Extracts monthly WSF General Ledger Expenditures. Prepares and feeds expenditures to RT - BEARS. Generates Expenditure Reports for Accounting. FTP's Daily GL and Monthly GL Transactions to server for further reporting and ad hoc inquiry.
Materials Accreditation and Testing System	Standardize agency test information recording and provides a stable central data repository.
Materials Lab Documents	Document management application for Scan/Store/Retrieval of documents.
Materials Tracking Program	Provides the ability to record and assign construction documents and material information to agency Project Offices.
McDonald Mailing List Database	Application used by Secretary of Transportation Doug McDonalds office to keep track of contacts and all contact information.
Medicare Reporting	Reports Medicare cases to the Federal Government
Merlin-DASH	Analysis and design of steel bridges.
Metropolitan Planning Organizations - Map Service	This map service displays the location of MPOs within Washington State.
MGSFlood	Continuous Simulation Hydrologic design software for estimating storm water runoff and treatment facilities in western Washington.
Microsoft Dynamics Great Plains	Allows for automated approach to tracking and billing of damage to WSDOT property by the ERMO group
Milepost - Map Service	This map service displays the locations of mileposts.
Minor Capital Inventory	Tracks location of equipment and depreciates equipment over \$5000 for reporting to Statewide Asset Reporting System (SARS). Handles the physical inventory for Minor Capital.

Module Counts	Reformats outputs from GK serial data ports for upload and processing by mainframe programs.
Monthly Construction Reporting	Provides high-level construction contract information and specific project information for the public (reports and update the Trout web server) was well as internal use to answer ad hoc questions.
Monuments/Survey Information System	Set of entities and attributes as referenced to individual geographic locations (points).
Mountain Pass Web	Site used for entry of the current conditions on the mountain passes. This information is then published on the Traffic and Weather Web site and the 511 System.
National Flood Frequency Program	Hydrologic design software for estimating magnitudes and frequency of flood peak discharges and flood hydrographics.
NCR Daily Leave	Server based workflow approval application for regional leave slips in North Central.
NCR Shared Leave	Server based application for regional shared leave process in North Central.
Network Change Log	Internal application used by Network Services to track change tickets.
New Products	Review new products from businesses for use in WSDOT.
NewWim	The W.I.M. Database application was designed to error check data files received by the D.O.T. Data Office. It tracks missing days in the file, as well as patterns of bad data. It also creates data that can be graphed through a separate program. It also will file away reports to be viewed at a later date.
North Everett Timesheets	Timesheet system for the North Everett Project Office. Migrated from earlier versions of FileMaker.
NW Region Scoping Analysis and Budgeting System	Used by NW Region Program Development Office to create their biennial budget program
NWR Design	Document management application for Scan/Store/Retrieval of documents.
NWR Error Check	A traffic utility program that checks traffic count files for Seattle site errors and produces a list of sites whose data is not correct.
Olympic Region Photos	Imaging Application for storage and retrieval of bridge inspection photos for Olympic Region bridge department.
OMWBE Monthly Interface	Fiscal Year to date expenditures sent to OMWBE for minority reporting.
OMWBE Reporting	Extract expenditure data from TRAINS General Ledger for reporting to OMWBE (Office of Minority and Women's Business Enterprises) .
On-Line Training Registration System	This is the application that the T2 (Technology Transfer) Center in Highways & Local Programs uses to allow people to sign up for training classes.
Onboard Ferry data collection	Application to collect weather data using Campbell software from ferry vessels and send collected data to UW for analysis and publish on ferry weather site
Oncore data replication process	SSIS Process Collect PMP data from OnCore database and copy into the Northwest database to generate reports and other information
Out of State Travel	Authorization for out-of-state travel for attending conferences or training routing system.
Outdoor Advertising Inventory and Permitting System	System to keep track of outdoor advertising signs on state routes
Payroll Backup	Payroll Reporting information.
Payroll System Reporting	Payroll Expenditure Reporting. Also acts as the source of employee information for the Labor Collection System.
Payroll Workflow	Workflow and Imaging application for processing, storing, and retrieval of Payroll documents.
PCCSQL30EmployeeLoad	PCCSQL30EmployeeLoad
Percent of Truck Speed	This map service contains data for segments of Washington's State Routes

Below 60% of Posted Speed - Map Service	that have been analyzed to locate and rank truck bottlenecks.
Performance Management Program	WSDOT's Performance Management Program replaces the existing EDP/MDPP process. It is designed to foster a positive, performance-based culture.
Personal Services Contract Database	
Personnel Archive Database	Creates an easy web front to the Personnel Archive Database. Allows users to retrieve, edit, update, and add past employees of WSDOT.
PGSplice	Spliced precast pre-stressed concrete girder analysis software. Companion tool with PGSuper. Distributed under the terms of the Alternate Route Open Source License.
PGSuper	Prestressed Girder Superstructure Design and Analysis software. Distributed under the terms of the Alternate Route Open Source License.
PMRS External Reports	This application is used by the public to search for project pages and reports on the WSDOT capital projects.
PMRS Project ECM	Document management system for project delivery documents
PMRS Project Management Utility	.Net based application for setting up projects and applying permissions in the PMRS Project ECM system.
Primavera Contract Manager	Primavera Contract Manager is a document management, job cost and project controls solution which: provides visibility into contractor performance, facilitates coloration, and streamlines contract and document administration.
Primavera Project Scheduler	Primavera P6 lets you manage projects of all types and sizes. It combines scheduling, communication, resource management and reporting analysis in one software tool. This single solution adapts to various levels of complexities and scales to meet the needs of various users, functions and skill levels.
Professional Membership Tracking System	The agency is required to track the number of agency-paid memberships, along with the amount of funds used for paying these memberships. This application is used to approve, track and monitor all agency paid memberships.
Project Estimating and Scheduling	The Project Estimating and Scheduling database retains data and calculations on facility design and construction projects.
Project Reporting Information	The Project Information & Reporting (PRI) system is a web-based application for generating project management reports that aggregate data from Primavera Project Manager (P6PM), Primavera Contract Management (CM) and CPMS. It also provides data entry and storage of custom data fields, such as project comments, that don't exist in the other systems.
Project Summary	Project Summary collects project information during the initial phase of the project scoping process. Project Summary documents the WSDOT commitment for scope of work and communicates Design, Planning and Environmental decisions.
Public Disclosure of Collision Reports	Provides a need for tracking monies received from the public for copies of collision reports
Public Disclosure Request Tracking System	Used to track all requests for public records made to WSDOT.
Purchase and Order System	Purchase and Order System includes 5 forms/applications: Field Order Stores Issue (8420) Stores Withdrawal Purchasing Card Order Bid / Quotation Request
Purchase Card Management System	The PCard Management System (PCMS) provides the means for DOT purchasing cardholders to view their transactions, reconcile them, interface with Remedy, validate the accounting codes against TRAINS and export directly to TRAINS to generate payment documents, keeps tracks of Purchasing Card related administrative records and updates accounting data in the data warehouse.

QConBridge	HL93 Live Load Analysis for continuous bridge structures. Distributed under the terms of the Alternate Route Open Source License
Qualified Products List	Provides a list of products that have been pre-qualified for use on WSDOT construction projects.
Quality Assurance Specification	Stores test data related to paving, specifically to asphalt. Calculates the bonus or penalty a contractor may receive as test data on the asphalt is entered.
Quantity Tabulation Structure Notes	Smart Excel spreadsheet used for project bid item tracking. For each bid item entered quantities and notes are kept in an easy to follow 11X17 spreadsheet document.
Radio Log	Log radio communications between Region radio operators and highway maintenance workers
Radio Towers Information System	Secure inventory of government radio tower infrastructure. Secure web application with GIS interface from ArcIMS server. Established by Legislative mandate.
Rail - Map Service	This map service displays rail lines of Washington State. Each separately owned mainline route is depicted as a single line. Principle routes are shown with selected sidings and yards. This data set shows railroad ownership for geographic information systems at WSDOT. Includes only Surface Transportation Board (STB) decisions after 1996. May not reflect all rail banked lines.
Railroad Crossing Elimination Program	A system for on-line grant applications via the web to apply for Federal Aid grants for elimination of hazardous RR crossings. Used sporadically when grants are being accepted.
Range Tracking	This application is used to determine decision sight distances to support the identification of No Passing Zones. This is a non networked vehicle based application. Two computers - interfaced to distance measuring instruments - along with wireless modems compose the bulk of the system.
Real Estate Deeds Documents	Document management application for Scan/Store/Retrieval of Real Estate Deeds.
Real Estate Information System	REIS is a tool for estimating, tracking and management of projects. A modular development approach has been followed with REIS having several modules: - replaced by IRIS (note: Database is currently read only)
Real Estate Services - Electronic Review	This is an electronic workflow of the disposal requests for WSDOT properties. The system collects recommendations on the surplus or lease of properties and electronic key approval for this process to proceed.
Record of Materials	Record of Materials is a list of major construction items used on a contract. It is produced at OSC and then downloaded by the Project Engineer. The list is used as a base for tracking material items on a contract.
Record Services	Processing and Management of Records and Information. Record Archiving. This application is designed to keep track of and help locate WSDOT's business documents.
Region Technical System	Captures material test results at Regional testing centers for Asphalt, Grout, Ignition Furnace Calibration, Blends, Aggregate, Cylinders, Gauge Correlation, Multi-Grading and generates reports.
Regional Transportation Planning Organizations - Map Service	This map service displays Regional Transportation Planning Organization (RTPO) boundaries.
Reliable Travel Times	Public web page for reporting on how long a trip will take in the Seattle Metro area. Users choose a start and end location and an estimate for how long the trip will take is returned.

Remedy Action Request System	ARS is a programming tool which is client/server based. It is the foundation on which applications are created which includes employee database, user and permissions, notifications, escalations, email engine, and approval server which can be used by any custom built application.
Remedy Asset Management	This is DOTs official Purchasing and Inventory Management system for IT purchases and equipment. This includes the complete life cycle of assets from requisition to disposal.
Remedy Helpdesk Ticket Status	Display users' currently active Remedy Help Desk on an Intranet web page.
Remedy Library Reference & Request Management	Library Reference Request Management is a forms based application focused on trading request and effort.
Remedy Mats Lab Equipment Tracking	Mats Lab Equipment Tracking is a form based inventory system that also tracks scheduled testing and calibrations of equipment.
Remedy Payroll Request Tracking System	Service Desk application created for Payroll to manage requests and issues.
Remedy Service Desk	IT Service Management - incident and problem management system with service level management which includes notifications and escalation paths.
Report Generator	Generates reports of test results using Adobe Acrobat PDF 3.0 when a field ('Ready to Report') in the Lims Database is flagged as "Y". The PDF is stored and distributed by email from an email list in the Lims Database.
Research Project Management Database	Application to track WSDOT research projects
Retired Professionals	A HR web based system for retired professional engineers to post their resumes on-line so that they may be available for employment by local agencies.
Revenue Control System	Revenue Control System (RCS) - Used by WSF Accounting Services to perform all revenue accounting functions associated with POS revenues. The system uses data transmitted nightly from the POS system.
RFIP Map Service	This dynamic map service displays RFIP data for the RFIP Map Application
RMCalc	Restraint moment calculations for precast girder bridges made continuous
Road Access Management Permit System	WSDOT is required to manage all access to state highway system that are not in a centrally incorporated area.
Roadside Feature Inventory Program Map Application	An interactive web-based map application that allows users to view RFIP data on top of a variety of basemaps.
Roadside Features Inventory System	A GPS-based system that will be used to gather select roadside features, post-process those features to improve the GPS accuracy, transfer that data to HQ for processing into a corporate ESRI database for use in the GIS Workbench and other Enterprise applications.
Roadway Data mart	This database is the repository for roadway geometric data found in the TRIPS system. It provides the ability to search for a collection of roadway elements based on the customer request. The Roadway data mart is an integral component of the WSDOT Data Warehouse.
Roadway Occurrence Activity Delivery System	System where highway events are entered and maintained for display on the public web site.
Rumble Strips	This is a desktop application that is used to collect and maintain state route rumble strip information for inclusion in the TARIS database.
RunIRD	A traffic utility program that converts binary data from traffic counter files into ASCII.
Safety Management Accident Review Tracking System	This application helps the NW Safety Management group handle reviews of high accident locations (HALs), high accident corridors (HACs), and pedestrian accident locations (PALs).
SCAN Billing Datamart	Provides access to monthly billing information from DIS concerning our use of the SCAN system.

Scanweb	Poll, record and provide web access to weather station data.
School Bus Stop Inventory	Internal application used by the Traffic Office to track school bus stop zones on roads and highways maintained by WSDOT. Tracking is mandated to WSDOT by RCW.
SDC Cross Reference	A cross reference utility that runs on the IBM Mainframe.
Seattle VMS pages	Public web page where the current message being displayed on Variable Message Signs around the Seattle area can be viewed.
SharePoint Site Request Form	This form is for users to request for a new SharePoint Site.
Short Duration Counts	Document management application for Scan/Store/Retrieval of documents.
Sign Shop Order System	Automated sign ordering system for WSDOT Sign Shop. Used by Traffic, Construction and Maintenance personnel to order highway signs from the sign shop.
Sign Specifications & Cost Estimation	Used to document sign removal, installation, and relocation information for highway construction projects that are included in the set of standard plans.
Signal Maintenance Management System	Helps the Signal Maintenance department manage work and inventory data. SIMMS is used to enter work reports for maintenance jobs, print timesheets, and maintain location records for Signals inventory.
Snow Entry	Internal web page used for entering the current snow depth at Snoqualmie, White and Stevens pass.
Spatial Metadata Management System	
SR 167 Toll Collection System	
SRMP/ARM Calculator	This interactive Windows Forms tool provides a user interface to the ARM calculation module. It allows a user to make single ARM/SRMP calculations or to perform batch operations on a file containing many rows of location data that needs ARM/SRMP calculations. It is also used to update certain datamart tables.
SRview Collection and Processing	A collection of applications and processes used to collect and prepare SRview images for viewing.
State Route Viewer	Internal DOT application for viewing roadway perspective images of Washington State routes.
State Routes - Map Service	This map service displays Washington State Interstate, US Highway and State Routes.
Statewide Asset and Reports System Interface	Interface sending OFM (SARS) asset data.
Statewide Transportation Improvement Program	STIP is the federally mandated project plan tracking tool (Statewide Transportation Improvement Plan) and it is used by agencies, MPOs, and Highways and Local Programs staff to track their 4 and 6 year projects. Local agencies, in order to receive federal funding for transportation projects.
Statewide Treatment Goals - Map Service	This map service displays statewide treatment goals for the winter operations map application.
Statistical Analysis of Materials	Provides analysis of the test results and calculates the quality assurance pay incentive for use by agency staff and contractors in resolving noncompliance issues found during construction inspections.
StormShed	Hydrologic and Hydraulic design software for calculating runoff and conveyance design as well as stormwater treatment facilities.
SuperSQL	Lots of Data.
Survey Monument System	Survey Monuments tracks the location, status and history of survey monuments for Washington State Highways. The Survey Information System database maintains a set of entities and attributes that refer to individual geographic locations.

SWAMP ECM	Workflow and Imaging application for the processing and storage of HR and AFS Documents.
SWR Timesheets	Application for the Chehalis Project Office to fill out and submit electronic timesheets. Pilot in PEO, then to Region. (IT Developed for regions)
System Program Oversight Reporting & Tracking	The SPORT application provides HLP with the ability to monitor WSDOT compliance with State and Federal aid regulations, track financial status, and provide management reporting.
Task Order (130-010)	Task Order Application (DOT form 130-010)
TC Checker	This program is designed to test a file before sending it to the TC Mainframe program. It checks to make sure the data in the file follows the rules for input into TC. The program reports on any errors found so the user can manually fix the file before sending it to the TC mainframe program.
TDMValidation	A traffic utility program that allows a user to validate that a site has data in the traffic data mart.
Terminal Daily Cash	To reconcile Terminal daily Cash for EFS
Tester Qualification	The Tester Qualifications program was created to help track the credentials of laboratory staff in the Washington State Department of Transportation Materials and Regional Labs.
TNB Interface	Cash Receipt documents received from Transcore for processing & posting in TRAINS.
Toll Collection and Accounting System	
Township and Section Lines - Map Service	This map service displays Township/Range and Section lines for Washington State.
Traffic & Weather Mobile application	Web application to display traffic and weather information on small screen devices and smart phones
Traffic & Weather Portal Website	The WSDOT Traffic and Weather project collects and disseminates real-time and predictive statewide road and weather information.
Traffic Accident and Roadway Information System	TARIS is a SQL database that contains traffic, roadway, and collision data downloaded from the TRIPS mainframe database (I-695 funding cuts impacted plans for this system and the current database is basically a "shell" of what is needed).
Traffic Action Tracking System	TRACTS provides a central location to store critical traffic project data (work type, location, assignments, due date). Provides metric data to measure the performance of the Traffic organization.
Traffic Data Mart	This database is the repository for all traffic count data found in the TRIPS system. It provides the ability to search for a collection of traffic count elements based on the customer's request. The Traffic data mart is an integral component of the WSDOT Data Warehouse.
Traffic Planning Trends	This application is an interactive map for the internet that displays Annual Average Daily Traffic (AADT) volumes on the State Highway System.
Traffic Sign Management	Traffic Signs Management System inventories all of the signs installed by the Department of Transportation, Traffic Office, on various state and inter state routes across the state.
Traffic Submittal	Retrieves data from the G: drive that was loaded via the automated counters. Reformats into bin 4 data and creates new file on G: drive.
Training Evaluation Application	After completing training course, students will access the Course Evaluation Application on the WSDOT Intranet.
TRAINS Web Service	Web service providing access to certain functions in WSDOT's TRAINS accounting system:
TransMapper	A set of WSDOT Add-ins for ArcGIS Explorer. ArcGIS Explorer is Google Earth like product that is simpler and easier to use than ArcGIS Desktop. These extensions add features that provide access to WSDOT data and custom tools that integrate with other WSDOT IT infrastructure.

Transmittal System	Creates an electronic transmittal form for the samples of materials that are to be tested by the Materials Laboratory personnel that were sent in from project offices.
Transportation Allotment and allocation Control System	Sub-system of TRAINS
Transportation Asset Reporting and Tracking System	Reports on depreciation of department assets. Contains a module used by Minor Capital and Capital Facilities for computing depreciation. Compiles value and depreciation for reporting to SARS.
Transportation Data Office Scanning & Indexing	The Transportation Data Office, the Office of Information Technology, and the Records Management Section have collaborated to successfully scan and index several document types residing at the TDO:
Transportation Engineer Recruitment	Provides a Web-based application process for TE1 recruiting. Applicants complete an evaluation questionnaire. Qualified applicants are identified and reports are provided to HR and regions.
Transportation Executive Information System	TEIS is a suite of programs designed to facilitate legislative planning and oversight. It provides budget preparation and executive summary information about a variety of activities to transportation agency managers.
Transportation Information Planning and Support System	TRIPS maintains and processes current and historical data about the WSDOT roadway network, traffic volumes and classifications, collisions, and collision severity. System functions include:
Transportation Reporting and Accounting Information System	TRAINS accounts for all WSDOT revenues, expenditures, receipts, disbursements, resources, and obligations. It is a highly customized version of an American Management Systems (AMS) software package. System functions include:
Tribal Lands - Map Service	This map service displays Tribal reservations in Washington state.
TRIPS Collisions	TRIPS is an integrated, automated roadway, traffic, and collision tracking application stewarded by the TDO. The application is designed to provide engineering, maintenance, planning and accounting personnel with up-to-date highway geometric, traffic and collision data. The TRIPS application includes both current and historical information about the State highway system.
TRIPS Roadway	TRIPS is an integrated, automated roadway, traffic, and collision tracking application stewarded by the TDO. The Roadway part of the application is designed to provide engineering, maintenance, planning and accounting personnel with up-to-date highway geometric data. The TRIPS application includes both current and historical information about the State highway system.
TRIPS Traffic	TRIPS is an integrated, automated roadway, traffic, and collision tracking application stewarded by the TDO. The Traffic part of the application is designed to provide engineering, maintenance, planning and accounting personnel with up-to-date traffic data. The TRIPS application includes both current and historical information about the State highway system.
Unstable Slopes Management System	USMS allows the entry and storage of slope information, ratings and cost estimates. Map component of web application updated on 4/8/2011 to run under ArcGIS Server vs. ArcIMS.
Utility Franchise Permits	UFP is a client/server application written in PowerBuilder with a SQL Server database. The Utility/Franchise Permits System (UFP) lets you enter, edit and view utilities, franchise, and permit information in a variety of formats.
Volume Checker	Volume Checker is a traffic program utility that retrieves the mainframe file and loads it to a SQL table. The users can then edit work on the file and/or do data analysis (e.g., build graphs).
VTRIS Help	A traffic utility program that takes data that was loaded to a drive from automated counters and converts the old TMG (Traffic Monitoring Guide) format to a newer TMG format.

Washington Bridge Foundation Libraries	Programmable software components for bridge engineering.
Washington Bridge Inventory System	The Washington State Bridge Inventory System (WSBIS) is an integrated, bridge inventory system designed to be used throughout WSDOT.
Washington Transportation Planning	
Wave2Go Electronic Fare System	Wave2Go is the Electronic Fare Collection for the Washington State Ferries. The Project name was EFS.
Weather Station Reporting	An Internal web application where information from weather stations can be viewed and reported on.
WeatherNet Locations - Map Service	This map service displays Weather Net Locations.
WEB Cameras	Displays Ferry lots, docked vessels, etc. for the public
WEB EOC	
Websense Web Filter	Based on Customer access profile, software filters allowed internet traffic based on predefined categories of webpage type
winBDS	Box girder bridge design system.
winFAD	Footing analysis and design.
winRECOL	Reinforced column analysis and design.
winSEISAB	Seismic analysis of bridges.
Winter Operations	The Winter Operations application is a state-wide web based Mapping/GIS system(Geographic Information System) to track winter vehicles. The system currently display's live truck icons that show current location, travel direction, and the function the truck is performing (I.e., chemical treatments, plowing, etc.) along with the current road condition (icy, compact snow and ice, bare and wet, etc.). The system also allows reporting of the winter vehicles and materials usage.
Work Order Authorization	The WOA - Work Order Authorization is a statewide electronic workflow document management web application used for the authorization of funding expenditures for new work orders, modify existing work orders and to close work orders.
Work Order Grabber	Work Order Grabber transfers work order information from FIRS and CCIS to the LIMS (Laboratory Information Management System).
WSDOT Alerts	web application used for formatting and sending via email messages information regarding traffic and weather alerts.
WSDOT Archives	Document management application for Scan/Store/Retrieval of IT Support Related documents.
WSDOT Base Map - Map Service	This statewide base map presents highway and local road level data for the state of Washington. This base map includes highways (as of 12/31/2011), major roads, minor roads, railways, water features, administrative boundaries, incorporated cities (as of 2/29/2012), and parks overlaid on shaded relief imagery for added context. Coverage is provided down to ~1:4k. The map was developed by WSDOT GIS and Roadway Data Office using WSDOT authored datasets, and local road data purchased from Tom Tom.
WSDOT Region Boundaries - Map Service	This map service displays WSDOT Region Boundaries.
WSDOT Regions (WinterOps) - Map Service	This map service displays WSDOT Region Boundaries for the Winter Operations Map Application.

Software Investment

WSDOT's investment in software ranges from typical office products to specialized engineering tools. The following list of WSDOT's software provides a view of the diversity of the products necessary across the agency but does not include subscription software:

Product	Manufacturer	Licenses
@RISK	PALISADE CORPORATION	2
@Stake	AAMVENT INC	1
1200 Weeds of North America	XID Services	25
1-2-3 File Convert	NOORAN CORPORATION	1
1Prompt	AUDIO VIDEO DESIGN INC	1
3D Magnitude	XIOTECH	1
3-D TopoQuads	DELORME PUBLISHING	3
3D Viewer	TRAFFICWARE	3
4D Inc Control-M	4D INC	1
AAA Map'n'Go	DELORME PUBLISHING	1
AASHTO BRIDG Load-Rating	AASHTO	1
Abendaid	COMPUWARE	1
Able2Extract	INVESTINTECH	4
Account Ability	IDMS INC	3
Ace/Server for Windows NT	BREAKWATER TECHNOLOGIES	1
ACF2	COMPUTER ASSOCIATES (CA)	1
ACI Collection 32	ACI	5
Active@KillDisk Professional Suite	LSoft Technologies, Inc.	2
Adabas	SOFTWARE AG OF NORTH AMERICA	1
Adabase SQL	SOFTWARE AG OF NORTH AMERICA	1
Adapt Felt	ADAPT	1
Ad-aware	TLIC WORLDWIDE INC	1
Ad-aware Pro	LAVASOFT	5650
Administrators Pak	WINTERNALS SOFTWARE LP	200
AdminStudio Pro	FLEXERA SOFTWARE INC	5
Adobe Acrobat Pro	ADOBE SYSTEMS INCORPORATED	1785
Adobe Acrobat Std	ADOBE SYSTEMS INCORPORATED	344
Adobe After Effects Pro	ADOBE SYSTEMS INCORPORATED	1
Adobe Audition	ADOBE SYSTEMS INCORPORATED	5
Adobe Captivate	ADOBE SYSTEMS INCORPORATED	2
Adobe Cold Fusion Ent	ADOBE SYSTEMS INCORPORATED	1
Adobe Cold Fusion Std	ADOBE SYSTEMS INCORPORATED	14
Adobe Cold Fusion Studio	ADOBE SYSTEMS INCORPORATED	3
Adobe Contribute	ADOBE SYSTEMS INCORPORATED	9
Adobe Creative Suite	ADOBE SYSTEMS INCORPORATED	2
Adobe Creative Suite PRM	ADOBE SYSTEMS INCORPORATED	29
Adobe Creative Suite Std	ADOBE SYSTEMS INCORPORATED	39

Adobe CS Master Collection	ADOBE SYSTEMS INCORPORATED	4
Adobe CS Web Prm	ADOBE SYSTEMS INCORPORATED	3
Adobe Design Prm	ADOBE SYSTEMS INCORPORATED	18
Adobe Design Std	ADOBE SYSTEMS INCORPORATED	41
Adobe Director	ADOBE SYSTEMS INCORPORATED	1
Adobe Dreamweaver	ADOBE SYSTEMS INCORPORATED	55
Adobe Dreamweaver MX	ADOBE SYSTEMS INCORPORATED	49
Adobe eLearning Suite	ADOBE SYSTEMS INCORPORATED	8
Adobe Fireworks	ADOBE SYSTEMS INCORPORATED	2
Adobe Flash Player Pro	ADOBE SYSTEMS INCORPORATED	5
Adobe Flash Pro	ADOBE SYSTEMS INCORPORATED	5
Adobe FlexBuilder Pro	ADOBE SYSTEMS INCORPORATED	1
Adobe Font Folio	ADOBE SYSTEMS INCORPORATED	29
Adobe Framemaker	ADOBE SYSTEMS INCORPORATED	5
Adobe Freehand	ADOBE SYSTEMS INCORPORATED	6
Adobe Freehand MX	ADOBE SYSTEMS INCORPORATED	6
Adobe GoLive	ADOBE SYSTEMS INCORPORATED	1
Adobe Graphics Studio	ADOBE SYSTEMS INCORPORATED	1
Adobe Illustrator	ADOBE SYSTEMS INCORPORATED	46
Adobe InCopy	ADOBE SYSTEMS INCORPORATED	4
Adobe InDesign	ADOBE SYSTEMS INCORPORATED	116
Adobe Jrun Servers	ADOBE SYSTEMS INCORPORATED	6
Adobe Lightroom	ADOBE SYSTEMS INCORPORATED	1
Adobe LiveCycle Designer	ADOBE SYSTEMS INCORPORATED	6
Adobe LiveCycle Forms Development Server	ADOBE SYSTEMS INCORPORATED	1
Adobe LiveCycle Forms Production Server	ADOBE SYSTEMS INCORPORATED	1
Adobe PageMaker	ADOBE SYSTEMS INCORPORATED	18
Adobe PDF Pro Plus	ADOBE SYSTEMS INCORPORATED	2
Adobe Photoshop	ADOBE SYSTEMS INCORPORATED	182
Adobe Photoshop Elements	ADOBE SYSTEMS INCORPORATED	423
Adobe Premiere Elements	ADOBE SYSTEMS INCORPORATED	3
Adobe Premiere Pro	ADOBE SYSTEMS INCORPORATED	6
Adobe Production Prm	ADOBE SYSTEMS INCORPORATED	14
Adobe Publisher Collection	ADOBE SYSTEMS INCORPORATED	3
Adobe Type Library Std	ADOBE SYSTEMS INCORPORATED	8
Adobe Video Collection Pro	ADOBE SYSTEMS INCORPORATED	1
Adobe Video Collection Std	ADOBE SYSTEMS INCORPORATED	1
Adobe Web Premium	ADOBE SYSTEMS INCORPORATED	2
Aegis	CISCO SYSTEMS INC	3
AF/OPERATOR	CANDLE CORPORATION	1
AF/REMOTE	CANDLE CORPORATION	1
Afeina AfFiler	AFIENA SOFTWARE	1

AGI Lighting	LIGHTING ANALYSTS INC	1
AirMagnet Surveyor Pro	AIRMAGNET INC	1
Alldata	ALLDATA	1
AlwaysUp	CORE TECHNOLOGIES CONSULTING LC	1
Analog Extension	SHORETEL	12
Ants Profiler Pro	RED GATE SOFTWARE	1
A-PDF	REGNOW/DIGITAL RIVER	2
Aquarius	AQUATIC INFORMATICS INC	5
Arc2Earth Pro	REGSOFT.COM	1
ArcGIS Server	ESRI	3
Archibus/FM	ARCHIBUS INC	15
ArcServe	COMPUTER ASSOCIATES (CA)	123
Arctor File Repository Enterprise	BYTEPLANT GMBH	1
Argus	Argus Software	1
Articulate Engage	ARTICULATE	1
Articulate Storyline	ARTICULATE	1
Articulate Studio Pro	ARTICULATE	13
ASA 5500 Series	CISCO SYSTEMS INC	7
ASP.NET Component Suite	TELERIK INC	1
ATW	IBM	5
Audit Management	ENVIRONMENTAL SUPPORT SOLUTIONS INC (ESS)	1
Aurora Call Box	COMARCO WIRELESS TECH	1
AutoCAD	AUTODESK INC	61
AutoCAD Architecture	AUTODESK INC	11
AutoCAD LT	AUTODESK INC	8
Autodesk 3ds Max Design	AUTODESK INC	4
AutoDesk Algor Simulation	AUTODESK INC	1
Autodesk Architectural Desktop	AUTODESK INC	2
AutoDesk Design Review	AUTODESK INC	1
Autodesk Infrastructure Modeler 2012 Standalone License	AUTODESK INC	1
Autodesk 3ds Max	AUTODESK INC	3
AutoTURN	TRANSOFT SOLUTIONS	25
Avaya	AVAYA	6
Avaya Call Center	AVAYA	5
Avaya Integrated Management	AVAYA	43
Avery DesignPro	AVERY	3
Avigilon Control Center	Avigilon	16
Award Certificate	SUCCESSORIES	1
Axure RP Pro	AXURE SOFTWARE SOLUTIONS	4
Bar Code Font	Dobson Software	1
BarTender	SEAGULL SCIENTIFIC INC	3

BarTender Ent	SEAGULL SCIENTIFIC INC	4
BarTender Pro	SEAGULL SCIENTIFIC INC	9
Best Lock BASD Basis	STANLEY SECURITY SOLUTIONS INC	1
BidTabs Pro	OPTIKA	1
BinderView	MSDS ONLINE	1
BizArt	HEMERA TECHNOLOGIES	1
Blackberry Enterprise Server	RESEARCH IN MOTION	160
Bongo Commercial - Rhino add-on	ROBERT MCNEEL AND ASSOCIATES	1
Brass	WYOMING DEPT OF TRANSPORTATION	1
Brava! Desktop	INFORMATIVE GRAPHICS CORP	21
Bravo! Standard	C3 Softworks	3
BreezeBrowser Pro	BREEZE SYSTEMS LIMITED	2
Business Plan Pro	PaloAlto Software	1
C128 Tools	Azalea Software	1
Calendar Creator	BRODERBUND	1
Campus Suite Agent	SJI CORP	3
Camtasia Studio	TECHSMITH CORP	30
Carlson SurvCE	CARLSON	2
Carlson Survey	CARLSON	9
CaseComplete	SERLIO	20
CDMA Remote	QUALCOMM INC	1
Centurion-CC	DIAMOND TRAFFIC PRODUCTS	2
CETIS Standard	Tidepool Scientific Software	1
Check In-Out	INTELLITRACK	5
Check Point	CHECK POINT SOFTWARE TECHNOLOGIES INC	6
CheckIt	SMITH MICRO SOFTWARE	1
CICS	MACROMEDIA INC	1
CICS Messaging	MACROMEDIA INC	1
Citation	THE WRITE DIRECTION	1
Citrix EdgeSight for Endpoints	CITRIX ONLINE	10
Citrix EdgeSight for Presentation Server	CITRIX ONLINE	10
Citrix MetaFrame Xpe	CITRIX ONLINE	40
Citrix NetScaler	CITRIX	1
Citrix Presentation Service	CITRIX	20
Citrix Xenapp	CITRIX	15
Citrix XenDesktop	CITRIX	100
Client Package For Server-Windows	Falconstor	15
Clipmate	THORNSOFT DEVELOPMENT INC	1
Clockwatch	BEAGLE SOFTWARE	1
Cluster service	XIOTECH	1
CodeSmith Pro	CODESMITH	1
COGNOS	COGNOS CORPORATION	5

ColorControl	SUMMA	1
CommServe StorageManager	COMMVault	1
Compliance Suite	ENVIRONMENTAL SUPPORT SOLUTIONS INC (ESS)	1
ComponentOne Doc To Help	COMPONENTONE LCC	2
ComponentOne Studio	COMPONENTONE LCC	3
Comprehensive Test Package	INSTRON CORPORATION	1
Conbox	LEAP SOFTWARE	3
Concord Comm Report	CONCORD COMMUNICATIONS	1
CONSPAN	LEAP SOFTWARE	2
Consplice	LEAP SOFTWARE	2
Construction Cost Estimator	RS MEANS	1
Continuous Data Protection	FALCONSTOR	21
Continuous Data Replicator	COMMVault	5
Contivo Builder	CONTIVO INC	5
Control System Fleet Management	CONTROL SYSTEM INC	1
Conversant	AVAYA	35000
Core Impact	Core Security Technologies	1
Corel Gallery	COREL	2
CorelDraw	COREL	34
Costworks	RS MEANS	14
CrossView for ArcGIS	A-Prime Software	1
Crystal Reports	BUSINESS OBJECTS	8
Crystal Reports Dev	BUSINESS OBJECTS	3
Crystal Reports Ent	BUSINESS OBJECTS	2
Crystal Reports Pro	BUSINESS OBJECTS	1
Crystal Reports Std	BUSINESS OBJECTS	1
C-Sharpener Pro	SHARE IT	1
CSiBridge Advanced	CSI (COMPUTERS & STRUCTURES INC)	5
DameWare Mini-Remote	DAMEWARE	228
DameWare NT Utilities	DAMEWARE	76
Data Widgets	INFRAGISTICS INC	3
Data Dynamics ActiveReports	DATA DYNAMICS	1
DataPilot	SUSTEEN INC	1
DataPoint	ECOTONE CORPORATION	11
DataScale	XIOTECH	2
DCSKWIN	DC DYNAMIC COMPUTING	8
DeltaGraph	MACMALL	1
Designer	MCL Technologies	1
Determina VPS Suite	DETERMINA	18
Dickey-John DART PC	DICKEY-JOHN	13
DigiPro	SLOPE INDICATOR	3
DIPS	ROCSCIENCE	4

DiscMakers Discus	DISCMAKERS	1
Diskeeper	DISKEEPER	7499
Diskeeper Server	DISKEEPER	3
DiskInternals Unerase	DiskInternals	1
Diskwarrior	ALSOFT INC	1
DiskXtender	EMC2	1
DLPro	ELECTROTECHNICS CORP	3
DocAve	AVEPOINT	3
Documents to Go Prm	DATA VIZ	1
Double-Take Server	SUNBELT SOFTWARE	15
DR2000 Central Control	HIGHWAY INFORMATION SYSTEMS	2
DR2000 Graphical User Interface	HIGHWAY INFORMATION SYSTEMS	2
Dragon Dictate	DRAGON SYSTEMS	2
Dragon NaturallySpeaking	NUANCE	15
Dragon NaturallySpeaking Pro	NUANCE	12
DX2000 Mediastor	LEGATO	1
Dxperience Enterprise	Devexpress	1
Dymameq	INRO CONSULTANTS INC	1
Dynamic Drive Share	EMC2	4
e.Report Designer	ACTUATE CORPORATION	2
Earth Pro	GOOGLE	9
EarthShore	SJ SOFTWARE INC	3
Easy CD & DVD Creator	ROXIO	698
Easy CD Creator	ROXIO	5
Easy Media Creator	ROXIO	13
Easy Read	MIND/MACHINE INTERFACE SYSTEMS	1
Easy Street Draw	TRANCITE LOGIC SYSTEMS	5
Economy Data Services	XIOTECH	3
eGalaxy	GATEWAY TICKETING SYSTEMS	1
eHealth Response	CONCORD COMMUNICATIONS	10
Electrical Cost Works	RS MEANS	1
Embedded Load Balancer	EQUITRAC	1
Emme2	INRO CONSULTANTS INC	4
Endevor/MVS	COMPUTER ASSOCIATES (CA)	2
Engineers toolset	SOLARWINDS	1
Enhanced File Transfer Server	GOOGLE	2
Enterprise Architect Corporate	SPARX SYSTEMS PTY LTD	30
Enterprise Content Mgmt	ORACLE USA INC	2
Enterprise EDP	EARTHISOFT	1
Enterprise EQuIS Information Agents	EARTHISOFT	1
eOffice Pro	DYNOPLEX	1
EQuIS	EARTHISOFT	8

EQuIS 5 Pro	EARTHISOFT	2
EQuIS 5 Schema	EARTHISOFT	1
EQuIS Enterprise EZView	EARTHISOFT	1
EQuIS for ArcGIS server	EARTHISOFT	1
EQuIS Pro	EARTHISOFT	2
Equitrac EO4/EE4 Print Server	EQUITRAC	2
ERD Commander Pro	WINTERNALS SOFTWARE LP	1
Erdas	ERDAS INC	1
ERwin	POWERSOFT CORP	3
eSafe	ESAFE	7001
Esri Aeronautical Solution	ESRI	2
ESRI ArcGIS 3D Analyst	ESRI	29
ESRI ArcGIS ArcInfo	ESRI	11
ESRI ArcGIS Data Interop	ESRI	5
ESRI ArcGIS Editor	ESRI	1
ESRI ArcGIS Network Analyst	ESRI	1
ESRI ArcGIS PLTS	ESRI	5
ESRI ArcGIS Server	ESRI	13
ESRI ArcGIS Spatial Analyst	ESRI	5
ESRI ArcGIS Stereo Analyst	LEICA	1
ESRI ArcGIS TIFF-LZW	ESRI	8
ESRI ArcIMS	ESRI	2
ESRI ArcPad	ESRI	7
ESRI ArcSDE	ESRI	3
ESRI ArcView	ESRI	153
ESRI FME Edition	ESRI	2
Essential XlsIO Binary	SYNCFUSION	7
Essential XlsIO Source	SYNCFUSION	1
ESX Ranger	VIZIONCORE INC	18
EViews	QUANTITATIVE MICRO SOFTWARE	2
Exchange Security Risk Auditor	C2C SYSTEMS INC	1
Excutive Software Diskeeper	EXECUTIVE SOFTWARE	1399
Experience Exchange Report	BOMA PUBLICATIONS	1
Explorer	ORACLE USA INC	5
Express Desktop	ADLIB EDOCUMENT SOLUTIONS	1
Extension & Unified Messaging	SHORETEL	60
Extra	ATTACHMATE	1
Eye Candy	ALIEN SKIN SOFTWARE	1
EZ Schematics	Wade Instruments and Services	1
FalconStor NSS	FALCONSTOR	79
FalconStor Storage License	FALCONSTOR	72
FastLook	KAMEL SOFTWARE INC	12

Fax Server	FAX SR	1
Fiber Inspection	EXFO AMERICA INC	1
Field Forms	RESCO	1
File Scavenger Pro	QUETEK™ CONSULTING CORPORATION	1
Fileaid	COMPUWARE	2
FileMaker	FILEMAKER INC	1
FileMaker Pro	FILEMAKER INC	7003
FileMaker Developer	FILEMAKER INC	2
FileMaker Key	PASSWARE INC	1
FileMaker Mobile	FILEMAKER INC	42
FileMaker Pro	FILEMAKER INC	3
Final Cut	APPLE COMPUTER	2
FLAC	ITASCA CONSULTING GROUP INC	1
Flamingo Commercial - Rhino add-on	ROBERT MCNEEL AND ASSOCIATES	1
FLIR Report Writer	FLIR SYSTEMS INC	1
Fluke View	FLUKE NETWORKS	1
Flykin Suite	LH SYSTEMS	1
FM Nexus #Inspector	FM NEXUS LLC	1
fmDataGuard	WORLDSYNC	1
FMP Pro Migrator	.COM SOLUTIONS INC	1
FMStudio	FM WEB SCHOOL	151
Fontgrapher for Windows	CLEVERBRIDGE	2
FontLab	FONT LAB LIMITED INC	1
Four Winds CMMS	FOUR WINDS GROUP INC	1
FreeTextBox	REFRESH DEVELOPMENT INC	1
G1000 for Cessna NavIII	GARMIN	2
Galaxy Admission Control	GATEWAY TICKETING SYSTEMS	46
Galaxy Comprehensive System Administrator	GATEWAY TICKETING SYSTEMS	17
Galaxy Concentrator	GATEWAY TICKETING SYSTEMS	2
Galaxy Control	GATEWAY TICKETING SYSTEMS	11
Galaxy Management Controller	GATEWAY TICKETING SYSTEMS	9
Galaxy Mobile Admission Control	GATEWAY TICKETING SYSTEMS	29
Galaxy Payment Server BCAM	GATEWAY TICKETING SYSTEMS	2
Galaxy Point of Sale	GATEWAY TICKETING SYSTEMS	102
Galaxy Turnstile Controller	GATEWAY TICKETING SYSTEMS	59
Gantt Chart Template	SPREADSHEET STORE	1
Gartner for IT Leaders	GARTNER INC	4
Gear Pro	DIGITAL RIVER	1
GemBox Spreadsheet Pro	COMPONENTSOURCE	1
Genie Backup Manager	GENIE-SOFT	4
Genifax Server	OMTOOL LTD	22
Geo Express Viewer	LIZARDTECH	2

Geo Office	LEICA	8
GeoComp	GEOCOMP	2
Geocortex Essentials	LATITUDE GEOGRAPHICS GROUP LTD	1
Geographic Imager	AVENZA SYSTEMS	3
GeoSystem Consolidation	VON GUNTEN ENGINEERING SOFTWARE	1
Geotest Acquire	GEOTEST INSTRUMENT CORP	1
GetDataBack	RUNTIME SOFTWARE LLC	2
GFMS Database Synchronization Tool	KEY SYSTEMS INC	1
Ghost	SYMANTEC	1550
gINT for ArcGIS	GINT SOFTWARE	1
gINT Pro	GOOGLE	7
Global Mapper	Global Mapper	2
GO Global	GRAPHON	10
Google	GOOGLE	6
Google Earth	GOOGLE	2
Google Earth Pro	GOOGLE	74
GoTo Meeting	CITRIX ONLINE	13
GPS Analyst	ESRI	1
GPS Pathfinder	TRIMBLE	7
GPSCorrect	TRIMBLE	7
GPSMAP 695/696 PC Trainer	GARMIN	2
Grapher	GOLDEN SOFTWARE, INC	1
Graphics Server	GRAPHICS SERVER TECHNOLOGIES	1
GRLWEAP	Pile Dynamics, Inc.	1
GT Strudl	SC SOLUTIONS INC	9
GuidSign	TRANSOFT SOLUTIONS	1
Handango English Dictionary	HANDANGO	1
Handango Pocket Controller	HANDANGO	3
Handango RD Graphing	HANDANGO	1
HAR (Highway Advisory Radio)	HIGHWAY INFORMATION SYSTEMS	9
Hash Animation Master	HASH	1
HCS (Highway Capacity Software)	MCTRANS CENTER	15
HearTrak	HAWKWA GROUP INC	1
HeavyBid	HEAVY CONSTRUCTION SYSTEMS SPECIALISTS (HCSS)	3
Helix Universal Internet Server	REAL NETWORKS INC	1
Help Desk	BMC Software, Inc.	12
High Performance Serial	CAMBRIDGE COMPUTER CORP	2
Hijaak	IMSI	1
Hotview Pro	Firetide	70
HPV Solo	VIEWER CENTRAL INC	2
HVE	ENGINEERING DYNAMICS	3
Hyena	SYSTEMTOOLS SOFTWARE INC	3

Hypack Lite	HYPACK INC	2
Hypack Max	ROSS LABORATORIES INC	1
HyperTerminal	Higraeve	3
IBM EGO	IBM	1
IBM MVS/DITTO	IBM	1
IBM z/VM	IBM	1
IDAS	CAMBRIDGE SYSTEMATICS/ITT INDUSTRIES	11
IDS VCM	Ford Motor Company	1
Image Management	STELLENT SALES INC	5
Image Tool	IMAGE TOOL	5
Image Tool Pro	IMAGE TOOL	1
ImagePrep Plus	TAMERAN GRAPHICS SYSTEMS INC	2
ImageRecall	MEDIA INNOVATIONS GROUP	1
Imaging & Business Process Manage	STELLENT SALES INC	10
Imaging and Process Management	ORACLE USA INC	16
Imaging Windows	DR*EISTREAM	8
IMPLAN	MINNESOTA IMPLAN GROUP	3
Industrial Hygiene Management	ENVIRONMENTAL SUPPORT SOLUTIONS INC (ESS)	1
Informatica ETL	INFORMATICA CORP	1
InPower Lite Service Tool	CUMMINS NORTHWEST INC	1
Input/Output Facility (IOF)	FISHER-INNIS	1
Insight	COMPUTER ASSOCIATES (CA)	2
Insight Manager	HP	3
Insite Pro	CUMMINS NORTHWEST INC	25
InstallShield	INSTALLSHIELD SOFTWARE CORP	6
InstroTek AggPlus	INSTROTEK INC	1
InSync Backup & Mirroring	Dillobits Software Inc	3
Integrated Lights-Out	HP	5
Intelligence Explorer	HYPERION SOLUTIONS	5
IntelliSynch	INTELLISYNCH CORP	3
IONA Artix	IONA TECHNOLOGIES	4
Iona Artix Data Services	IONA TECHNOLOGIES	1
Iona Artix Design Time	IONA TECHNOLOGIES	2
IONA Artix Security	IONA TECHNOLOGIES	1
IONA Artix Orchestration	IONA TECHNOLOGIES	1
IPvision	COHU ELECTRONICS INC	1
IrfanView	IRFAN SKIJAN	20
Iron Speed Designer	IRON SPEED PRODUCT TEAM	1
ISIS	DAVID DUBBINK & ASSOCIATES	1
IT Service Mgmt Toolkit	SHARE IT	1
ITA Premium	INFO-TECH RESEARCH GROUP INC	1
iWork	APPLE COMPUTER	13

JCLPREP	ALLEN SYSTEMS GROUP (ASG)	1
JetBrains ReSharper	JetBrains - West Coast	1
JetImage	CONTEX	1
Jira	Atlassian	1
Kermit 95	COLUMBIA UNIVERSITY	2
KeyHole	KEYHOLE DIVISION	1
KillDisk Professional	LSoft Technologies, Inc.	1
Kip 5200	KIP AMERICA	1
KIWI Syslog Server	SOLARWINDS	1
Kofax Ascent Capture	KOFAX	27
Kofax PDF Image+Text	KOFAX	13
Kofax Remote Full Station	KOFAX	46
Kofax Remote Site	KOFAX	9
Kofax VirtualReScan	KOFAX	3
Kofax VRS	KOFAX	46
LAND Desktop	AUTODESK INC	3
Larsa 4D	LARSA	2
Leap Software Consplice	LEAP SOFTWARE	1
Lectora Professional Publishing Suite	TRIVANTIS CORPORATION	4
Legend Company ComputerScript	LEGEND COMPANY	1
Leica Cyclone MODEL	LEICA	3
Leica Cyclone REGISTER	LEICA	1
Leica Cyclone SERVER	LEICA	3
Leica Cyclone SURVEY	LEICA	13
Leica MIM	LEICA	1
Leica Mobile Matrix	LEICA	1
Leica NetSpy	LEICA	1
Leica Sets of Angels	LEICA	2
Leica Spider Basic	LEICA	9
Lenel	LENEL SYSTEMS INTERNATIONAL INC	1
LifeAgent AutoSync	MEMEO	1
ListManager	LYRIS TECHNOLOGIES	1
LiteSpeed	QUEST SOFTWARE	5
LiveLink ECM	OPEN TEXT CORPORATION	1001
Loggernet	CAMPBELL SCIENTIFIC INC	6
LogMeIn	LOGMEIN INC	1
LogPlot	ROCKWARE	4
LonMaker Turbo Pro	GENUINITY SYSTEMS INC	1
LPile Plus	ENSOFT INC	3
Lygea Pocket Scientific Calculator	HANDANGO	3
MAC OS	APPLE COMPUTER	13
Macro Express	Insight Software Solutions Inc	2

macromedia	cdwg	1
Magenta	DATA BLOCKS	1
Magenta for Office Suite	DATA BLOCKS	1
Magic ISO	QWERKS	1
Magnetek Impulse	AMERICAN CRANE & EQUIPMENT CORPORATION	1
Malwarebytes	MalwareByte's	20
Managed Server HSM	CAMINOSOFT CORPORATION	4
Map for .NET	DUNDAS SOFTWARE	1
MAPInotify	SILMARIL SOFTWARE	5
MapPoint Std	MICROSOFT	64
MapSource MetroGuide	GARMIN	3
Mathcad	PTC	22
MathMagic Pro	KAGI	1
Mavis Beacon Teaches Typing	BRODERBUND	4
McAfee Anti-Spyware	ZONES INC	5500
McAfee Entercpt	MCAFEE	4
McAfee Integrity Control for ATM/POS	MCAFEE	240
McAfee Total Protection for Servers Suite	MCAFEE	50
McAfee Virus Scan	MCAFEE	6101
Mercator	AAMVENT INC	1
Merlin Dash	UNIVERSITY OF MARYLAND	1
MetadataMagic	NEW MILLENNIUM	1
MicroCharts	SHARE IT	1
Microsoft BizTalk	MICROSOFT	3
Microsoft Configuration Manager Server	MICROSOFT	93
Microsoft Content Management Server	MICROSOFT	11
Microsoft Data Protection Mgmt	MICROSOFT	6
Microsoft Developer Network	MICROSOFT	2
Microsoft Digital Image	MICROSOFT	2
Microsoft Encarta	MICROSOFT	1
Microsoft Enterprise Agreement	MICROSOFT	128
Microsoft Exchange Server	MICROSOFT	13
Microsoft Expedia	MICROSOFT	8
Microsoft Expression Studio	MICROSOFT	4
Microsoft Expression Web	MICROSOFT	4
Microsoft FrontPage	MICROSOFT	46
Microsoft Great Plains Suite	MICROSOFT	2
Microsoft GSA Exchange	MICROSOFT	1
Microsoft ILM Server	MICROSOFT	101
Microsoft InfoPath	MICROSOFT	1
Microsoft ISA Server	MICROSOFT	4
Microsoft MOM Ops Mgmt	MICROSOFT	181

Microsoft Office	MICROSOFT	2
Microsoft Office MAC Pro	MICROSOFT	15
Microsoft Office Pro	MICROSOFT	3
Microsoft Office SharePoint Designer	MICROSOFT	1
Microsoft OneNote	MICROSOFT	27
Microsoft Ops Mgr	MICROSOFT	183
Microsoft Outlook	MICROSOFT	1
Microsoft Project	MICROSOFT	483
Microsoft Project Pro	MICROSOFT	92
Microsoft Project Std	MICROSOFT	192
Microsoft Publisher	MICROSOFT	13
Microsoft SC Dataprotection Mgmt	MICROSOFT	43
Microsoft SharePoint	MICROSOFT	140
Microsoft SharePoint Ent	MICROSOFT	110
Microsoft SharePoint Portal Svr	MICROSOFT	1
Microsoft SharePoint Svr	MICROSOFT	1
Microsoft SQL	MICROSOFT	35
Microsoft SQL Ent	MICROSOFT	15
Microsoft SQL Ent Manager	MICROSOFT	2
Microsoft SQL Std	MICROSOFT	228
Microsoft SQL Svr Developer	MICROSOFT	2
Microsoft SQL Svr Std	MICROSOFT	1
Microsoft Streets and Trips	MICROSOFT	85
Microsoft Sys Ctr Ops Mgr Svr	MICROSOFT	1
Microsoft System Center Operation Mgr	MICROSOFT	11
Microsoft Technet	MICROSOFT	1
Microsoft Virtual PC	MICROSOFT	4
Microsoft Virtual Server	MICROSOFT	2
Microsoft Visio	MICROSOFT	73
Microsoft Visio Pro	MICROSOFT	421
Microsoft Visio Std	MICROSOFT	453
Microsoft Visual Basic.NET Std	MICROSOFT	1
Microsoft Visual C++.NET std	MICROSOFT	1
Microsoft Visual FoxPro	MICROSOFT	2
Microsoft Visual Studio .NET Pro	MICROSOFT	9
Microsoft Visual Studio Pro	MICROSOFT	28
Microsoft Visual Studio Team Suite	MICROSOFT	1
Microsoft Voice Command	MICROSOFT	1
Microsoft VStudio.NET	MICROSOFT	1
Microsoft Windows	MICROSOFT	140
Microsoft Windows 7 Pro	MICROSOFT	145
Microsoft Windows CE	MICROSOFT	1

Microsoft Windows NT	MICROSOFT	7
Microsoft Windows Server Data Ctr	MICROSOFT	64
Microsoft Windows Server Ent	MICROSOFT	120
Microsoft Windows Server Std	MICROSOFT	516
Microsoft Windows Svr ExtnConn	MICROSOFT	6
Microsoft Windows Terminal Svc	MICROSOFT	146
Microsoft Windows XP Media Player	MICROSOFT	1
Microsoft Windows XP Pro	MICROSOFT	16
Microsoft Works	MICROSOFT	1
MindManager Pro	MINDJET	22
MissionKit	ALTOVA INC	15
Modeling & Analysis	NTP SOFTWARE	6
MonoTouch Pro	NOVELL	1
Monster Central Control Software	MONSTER CABLE PRODUCTS INC	1
Morae	TECHSMITH CORP	1
Mo'Slo 4BIZ	REG.NET	5
Motorola Handset Manager	MOTOROLA	1
Motorola Phone Tools	MOTOROLA	18
Movavi Video Converter	MOVAVI	1
MSDS Advantage	MSDS ONLINE	4
MSEW	ADAMA ENGINEERING INC	6
MSI Studio Pro	SCRIPTLOGIC CORPORATION	1
MX Studio	MACROMEDIA INC	1
My MailList & Address Book	AVANQUEST	1
My-T-Soft	INNOVATION MANAGEMENT GROUP INC	3
Natural Connection	SOFTWARE AG OF NORTH AMERICA	2
Natural NAT/VSAM	SOFTWARE AG OF NORTH AMERICA	1
Natural Security	SOFTWARE AG OF NORTH AMERICA	1
Navisphere Analyzer	EMC	1
Navistar Navpak	CASCADIA INTERNATIONAL LLC	1
Nero	NERO INC	174
Nero Ultra	NERO INC	364
NetAdvantage	INFRAGISTICS INC	6
Netasyst	NETWORK ASSOCIATES	19
Netbackup	VERITAS	16
Netlimiter	Netlimiter.com	4
NetMotion Mobility	NETWORK ASSOCIATES	75
NetObjects Fusion	MACROMEDIA INC	1
NetOp School	CROSSTEC CORP	1
NetSetMan	NETSETMAN	2
NetSight Atlas Inventory	ENTERASYS	1
NetSight Atlas Management	ENTERASYS	1

NetSight Atlas Policy Manager	ENTERASYS	1
NetWare	HP	1
NetWork Searcher	EMETRIX	1
Networker	EMC	11
Neverfail for File Server	NEVERFAIL INC	1
Neverfail Heartbeat	NEVERFAIL INC	1
Nik Multimedia Dfine	NIK MULTIMEDIA	1
NIK Sharpener Pro	NIK MULTIMEDIA	1
Nis Network Inspector 1000	FLUKE NETWORKS	1
NLOGIT	ECONOMETRIC SOFTWARE INC	2
Nobeltec Tides & Currents	Nobeltec	2
Norton Internet Security	SYMANTEC	3
Norton Partition Magic	SYMANTEC	2
Norton Systemworks	SYMANTEC	1
Norton Utilities	SYMANTEC	1
NT Utilities	DAMEWARE	63
NTI CD Maker Pro	NEWTECH INFOSYSTEMS (NTI)	1
NWS Central Closed-Loop Database	NORTHWEST SIGNAL SUPPLY INC	2
NWSinstaller	NORTHWEST SIGNAL SUPPLY INC	1
Obdoso Photo Retrieval	REGNOW/DIGITAL RIVER	1
ObjectDock Plus	STARDOCK CORPORATION	1
ObjectiveGrid	ROGUE WAVE SOFTWARE	2
Office	EQUITRAC	1
Office Password Recovery	SAFECART	1
Olympus Master	OLYMPUS	1
OmniFormat	SOFTWARE PD995	1
OmniPage	NUANCE	2
OmniPage Pro	NUANCE	12
OmniPeek	WILDPACKETS INC	4
OmniPeek Ent	WILDPACKETS INC	1
OnCore Performance	THE ULTIMATE SOFTWARE GROUP INC	1
OnGuard	LINEL SYSTEMS INTERNATIONAL INC	3
Operator Call Manager	SHORETEL	2
Optika Acorde	OPTIKA	164
Optimoor	TENSION TECHNOLOGY INTERNATIONAL	1
OptiView	FLUKE NETWORKS	1
OptiView Reporter	FLUKE NETWORKS	1
OptiView Workgroup Analyzer Pro	FLUKE NETWORKS	1
Oracle Designer	ORACLE USA INC	1
Ortho Mosaic	LH SYSTEMS	2
OrthoVista	INPH GMBH	1
OSPIInSight	MAPINFO	5

Outlook AutoPrint	SPERRY SOFTWARE INC	1
Outlook Password Recovery	ELCOMSOFT CO LTD	1
Out'n About	INTELLIGENT CONCEPTS AND SOLUTIONS	4
Package Cleaner	SHARE IT	3
Paint Shop Pro	COREL	47
Palm OS	PALM	1
Panorama Factory	PANORAMA BUSINESS VIEWS INC	1
Panorama Maker	ArcSoft, Inc	2
Paper Tiger	MONTICELLO CORP	11
PaperPort	NUANCE	2
Parallels Desktop	DIGITAL RIVER	2
Passware Kit Enterprise	PASSWARE INC	1
Pathfinder Office	TRIMBLE NAVIGATION	2
Pathloss	Contract Telecommunication Engineering Ltd. (CTE)	1
Pathview	APPARENT NETWORKS	3
PBViews	PERFORMANCESOFT INC	1
PC Connect CE	CAMPBELL SCIENTIFIC INC	1
pcaColumn	PCASTRUCTURE POINT	4
PCConnect Palm Datalogger	CAMPBELL SCIENTIFIC INC	1
PDF Converter	NUANCE	6
PDF Transformer	ABBYY USA	1
Pdf995	SOFTWARE PD995	1
PDSA ASP.NET	PDSA INC	1
Penguin Commercial - Rhino add-on	ROBERT MCNEEL AND ASSOCIATES	1
Performance Suite	ORACLE USA INC	2
Personal Call Manager	SHORETEL	60
PetraPro	JAMAR TECHNOLOGIES INC	11
PGP eCommerce Desktop	PGP ECOMMERCE	2
Phase 2	ROCSCIENCE	1
Photo Album	COREL	1
Photo Manager	ACDSEE	2
PhotoImpact	ULEAD	2
PhotoStudio	ArcSoft, Inc	2
Photosuite	MGI	6
Ping Tester Professional	SWREG	1
Pinnacle Studio	PINNACLE SYSTEMS	15
Pocket Controller	HANDANGO	1
PoINT Jukebox Manage	EUROSON AMERICA INC	1
Polycom Connect	POLYCOM	10
Polyworks Inspector	3D INFOTECH	1
Polyworks Modeler/Inspector	INNOVMETRIC SOFTWARE INC	2
Pontis Bridge Management	AASHTO	1

PopUp Stopper	PANICWARE INC	1
PosterShop	ONYX GRAPHICS	3
Power Path ENT Windows	DELL	5
Power Point Add-In	SOCIABLE MEDIA	1
PowerBuilder	SYBASE INC	3
PowerCenter	INFORMATICA CORP	1
PowerConnect	INFORMATICA CORP	1
PowerTools	NAMESCAPE	2
Precision Mapping	UNDERTOW SOFTWARE INC	4
Predict	SOFTWARE AG OF NORTH AMERICA	1
PrimalScript	SCRIPTING OUTPOST INC	3
Primavera Contract Management	ORACLE USA INC	135
Primavera Cost Manager	ORACLE USA INC	6
Primavera Earned Reporting Database	ORACLE USA INC	1
Primavera P3E/C	ORACLE USA INC	29
Primavera P6	ORACLE USA INC	28
Primavera Pertmaster Risk Expert	ORACLE USA INC	1
Primavera Progress Reporter	ORACLE USA INC	80
Primavera Project Control Manager	ORACLE USA INC	8
Print Master	BRODERBUND	1
Print Shop	BRODERBUND	1
PRISM Project Manager	ARES CORPORATION	19
PRO Wide	CONTEX	1
PRO6000	LH SYSTEMS	1
ProComm Plus	SYMANTEC	22
Project Communicator	SCITOR CORP	1
ProjectWise	BENTLEY SYSTEMS	2
Prolog Project Manager	PCI GROUP	40
ProTraffic Graphics	PRO TRAFFIC GRAPHICS	2
PTV Vision	PTV AMERICA	8
Pulse Reflex	BRUEL & KJÆR	1
Pulse Time	BRUEL & KJÆR	1
QFS	NTP SOFTWARE	8
QI	LIFESTAR	3
QOS Policy Manager	CISCO SYSTEMS INC	1
Queue Explorer	SHARE IT	8
Quick Ping Monitor	DIGITAL RIVER	2
Quick Start Template	LPB ENERGY MANAGEMENT	1
QuickBooks	INTUIT INC	3
Quicken	INTUIT INC	6
QuickTime	APPLE COMPUTER	7
Quintig Application Suite	QUINTIQ INC	51

RAD Controls	COMPONENTSOURCE	4
RADB Maintainer	MERIT NETWORK INC	1
RadioSoft ComStudy	RADIOSOFT	1
Rail Module	USRAIL.DESKTOP	1
Rapid E-Learning Studio	ARTICULATE	3
Raptivity Essentials	HARBINGER KNOWLEDGE PRODUCTS INC	2
RealPlayer	REAL NETWORKS INC	6101
RealProducer Plus	REAL NETWORKS INC	1
Recover My Files	GOOGLE	2
Redgate SQL Comparison Bundle	Redgate Software	1
REDI Storage Manager	XIOTECH	1
Reference Manager	THOMSON REUTERS	2
Reflection X	WRQ INC	38
Registry Booster	UNIBLUE	1
Remark Office OMR	GRAVIC	1
Remedy Action Request System	BMC SOFTWARE INC	10
Remedy Asset Management	BMC SOFTWARE INC	7
Remote Installer	REGNOW/DIGITAL RIVER	1
RepliWeb	REPLIWEB INC	18
Research in Motion Blackberry	RESEARCH IN MOTION	80
ReSSA	ADAMA ENGINEERING INC	1
Restorer	BITMART INC	1
Rhino	ROBERT MCNEEL AND ASSOCIATES	4
Rhino 3-D Modeling	ROBERT MCNEEL AND ASSOCIATES	2
Ripper	XILISOFT INC	1
RISA-3D	RISA TECHNOLOGIES	2
RiverCAD	BOSS INTERNATIONAL	2
Road Sentinal	SURFACE SYSTEMS INC	8
Robohelp Office Pro	MACROMEDIA INC	1
RocPlane	ROCSCIENCE	1
Room Alert	AVTECH SOFTWARE	1
RSA SecurId	EMC	1600
SAFE	CSI (COMPUTERS & STRUCTURES INC)	1
SAFESTAR	STAR SOLUTIONS	1
Safety Management	ENVIRONMENTAL SUPPORT SOLUTIONS INC (ESS)	1
SafeWord Remote Access	SECURECOMPUTING	800
SAID	HP	1
SAN-OS	CISCO SYSTEMS INC	3
SAP	CSI (COMPUTERS & STRUCTURES INC)	23
SAP2000	CSI (COMPUTERS & STRUCTURES INC)	4
SAS OS Base	SAS INSTITUTE	1
SATA Data Services	XIOTECH	1

SaveMyFiles	ESS	1
ScanOS PaperPort Pro	TRANSOFT SOLUTIONS	1
Schedule Recurring	SPERRY SOFTWARE INC	1
Scientific BarTender	SEAGULL SCIENTIFIC INC	1
ScreenPrint	SOFTWARE LABS INC	11
Seagull CBT Administrator	SEAGULL SCIENTIFIC INC	22
Search Maker Pro	REGNOW/DIGITAL RIVER	1
Second Copy	CENTERED SYSTEMS	9
Secure Access Control Server	CISCO SYSTEMS INC	1
Secure Application Manager	STRUCTURED COMM SYSTEMS	1
Secure CRT	VanDyke Software	2
Secure Disk	GOSECURE INC	1
Secure Site Pro	VERISIGN	14
SecureTransport Client	TUMBLEWEED COMMUNICATIONS	1
Security Explorer	SCRIPTLOGIC CORPORATION	20
Security Manager	NETIQ	1
Seismage 2d Refraction Analysis	GEOMETRICS	1
Seismo Signal	Seismosoft Ltd.	2
Serial/IP COM Port Redirector	TACTICAL SOFTWARE LLC	1
Service Point Manager	US WEST	1
ServiceMax	CASCADIA INTERNATIONAL LLC (TACOMA)	2
Servletexec	NEW ATLANTA COMMUNICATIONS	2
Shadow Protect Server	STORAGECRAFT TECHNOLOGY CORPORATION	1
Shear Test	VON GUNTEN ENGINEERING SOFTWARE	1
Sidra Intersection	AKCELIK & ASSOCIATES PTY	2
SimpleTester	SIMPLESOFT	1
Sirovision	TERRASOURCE SOFTWARE	1
Sirovision License Manager	TERRASOURCE SOFTWARE	1
Site Engineering	LARCH	1
SketchUp	GOOGLE	17
SLIDE	ROCSCIENCE	8
Slope/W	GEO-SLOPE INTERNATIONAL LTD	1
Smart Bridge Culvert	Smart Bridge Tech, Inc	1
SmartBackUp	JAM SOFTWARE	10
SmartDraw	SMARTDRAW.COM	1
SmartNav	PHAROS SCIENCE & APPLICATIONS INC	4
SmartRoads	VISUAL STATEMENT	1
SmartSensor Manager	ADVANCED TRAFFIC PRODUCTS INC	1
SmartSockets RT	TIBCO	25
SMMS	INTERGRAPH CORP	1
SMTPit Pro	COMMUNITY NETWORKING SYSTEMS	1
SnagIt	TECHSMITH CORP	114

SnagIt/Camtasia	TECHSMITH CORP	7
SNAPS	SENSYS NETWORKS, INC.	1
Snapshot	STUNT SOFTWARE	1
Sniffer Pro LAN	NETWORK ASSOCIATES	1
Socet Set	BAE SYSTEMS NSS	41
Softech Systems Check-In Check-Out	SOFTECH SYSTEMS	1
SolarWinds	SOLARWINDS	9
SONY Sound Forge Audio Studio	SONY	1
SP Manager	NSE INC	9
Spec Wizard	SOUTHWALL TECHNOLOGIES	1
Spectrum Expert	COGNIO INC	1
Spellchecker Plus	AXIOM INTERNATIONAL	1
SPF/SE	COMMAND TECHNOLOGY CORPORATION	11
SpinRite	GRC (GIBSON RESEARCH CORP)	1
Spread for .NET	FARPOINT TECHNOLOGIES	2
Spread for Web Forms	COMPONENTSOURCE	1
Spread for Windows Forms	FARPOINT TECHNOLOGIES	1
SPSS	SPSS INC	1
SpyCop	REGNOW/DIGITAL RIVER	5
Square Foot Cost Estimator	RS MEANS	1
SSRPM-Self Service Reset Password Management	Advanced Toolware, LLC.	500
Star*Net Pro	STARPLUS SOFTWARE INC	2
Statistica	STATSOFT	7
STEAM	UNIVERSITY OF FLORIDA	1
Stellar Phoenix	STELLAR INFORMATION SYSTEM	2
Stereo Socet	LH SYSTEMS	1
Storage Investigator	NTP SOFTWARE	1000
StorageManager	NETAPP	8
Stratusphere Assessment Annual License	Liquidware Labs, Inc	1
Streamtrac	FTS Forest Tecchnology Systems Ltd.	6
Street Atlas	DELORME PUBLISHING	164
StreetWise	NAZTEC INC	1
Structural Engineer Library	ENERCALC	1
Studio	MACROMEDIA INC	5
Studio Enterprise	COMPONENTONE LCC	1
Stuffit Deluxe	SMITH MICRO SOFTWARE	1
Super Session	CANDLE CORPORATION	1
Super Shimon	NORITSU	1
SuperContainer	360WORKS	1
SuperScout Web Filter	VERISIGN	5000
Sure Connect IR	INTERACTIVE NORTHWEST INC	1
SureThing CD Labeler	SURETHING	2

SurfControl Web Filter	SURFCNTROL	1
Surfer	GOLDEN SOFTWARE, INC	2
SurvCE Routes and Roads	CARLSON	6
Surveyor	VERDIEM	7824
SuSE Linux	IBM	2
Swedge	ROCSCIENCE	1
SwiftView Website	SWIFTVIEW INC	1
Symantec Backup Exec	SYMANTEC	6
Symantec pcAnywhere	SYMANTEC	1
Symbol Pocket PC Client	MCL Technologies	11
SyncBackSE	2BRIGHTSPARKS PTE LTD	1
Synchro	TRAFFICWARE	67
Synchro plus SimTraffic	TRAFFICWARE	15
Syncsort Sort Utility	SYNCSORT INC	1
SynthEyes	ANDERSON TECHNOLOGIES LLC	1
SysTools PST Merge	SysTools Software	1
Tape Management System (TMS)	COMPUTER ASSOCIATES (CA)	1
Terrain Navigator	MAPTECH	7
Terrain Navigator Pro	MAPTECH	7
TerraSync Pro	TRIMBLE	22
TextBridge Pro	SCANSOFT INC	5
TextPad	HELIOS SOFTWARE SOLUTIONS	2
Thumbnailer	SMALLER ANIMALS SOFTWARE INC	6
ThumbsPlus	CERIOUS SOFTWARE	1
Tiger3	TREDIS (Transportation Economic Development Impact System)	1
Timberline Office System	SAGE	1
Timbuktu Pro	NETOPIA	21
TimeData Repository	TIMESPRING SOFTWARE CORPORATION	1
TimeData SQL Server	TIMESPRING SOFTWARE CORP	1
Titanium Pro	ROXIO	1
ToolCrib Assistant	Saltbox Systems Group, Inc.	1
Topo	DELORME PUBLISHING	9
TOPO US 24K West	GARMIN	2
TopoFlight	NEW TECH SERVICES INC	1
Touchdown	NitroDesk Inc.	2
TrafficCAD Sign Cutting	TRAFFICAD	3
TRAINS	AMERICAN MANAGEMENT SYSTEMS	1
TransCAD	CALIPER CORPORATION	4
TransModeler	CALIPER CORPORATION	3
TranSyt-7F	MCTRANS CENTER	1
TreeSize Pro	JAM SOFTWARE	26
Trimble Business Center Survey	GeoLine	1

Trimble Pathfinder	TRIMBLE	1
Trip Generation	MICROTRANS INC	1
True DBGrid Pro	COMPONENTONE LCC	1
TSIS (Traffic Software Integrated System)	MCTRANS CENTER	12
TSM Backup	PACIFIC SOFTWARE ASSOCIATES	4
TSO	MORINO ASSOCIATES	1
TurboCADD	CAD & GRAPHICS INC	1
UltraEdit	IDM COMPUTER SOLUTIONS	7
Undelete Server	EXECUTIVE SOFTWARE	2
Update Service	INSTALLSHIELD SOFTWARE CORP	1
Upstream	INNOVATION DATA PROCESSING	4000
USGS 7.5 Minute Quad Maps	DELORME PUBLISHING	3
USGS Topo Washington Maps	NATIONAL GEOGRAPHIC	2
Utilities	MCAFFEE	1
Vanguard v4 Professional	DAKTRONICS	3
Vanguard v4 Standard	DAKTRONICS	3
VbsEdit	DIGIBUY	1
VDR	OPENTECH SYSTEMS INC	1
Veritas Backup Exec	SYMANTEC	1
Veritas NetBackup	SYMANTEC	2
Via Voice	IBM	2
Video Conference	US WEST	2
Video Converter	XILISOFT INC	1
VideoStudio	COREL	1
ViewPro	DR DWG AKA (CALIFORNIA SOFTWARE)	1
Vigilos base site	RELIANCE TECHNOLOGIES INC	1
Vision Builder	INFORMATICS	1
Vision Results	DYLAKOR SOFTWARE	1
VISSIM	PTV AMERICA	2
VISUM	PTV AMERICA	3
VMWare	VMWARE INC	76
VMware ESX Virtual Infrastructure	VMWARE INC	9
VMware Infrastructure	VMWARE INC	4
VMware P2V Assistant	VMWARE INC	1
VMWare vCenter Server	VMWARE INC	1
VMWare View	VMWARE INC	3
VMware Virtual Infrastructure	VMWARE INC	9
VMWare VirtualCenter	VMWARE INC	17
VMware VirtualCenter Management	VMWARE INC	4
VMWare vSphere	VMWARE INC	9
VMWare vSphere Advanced Acceleration Kit	VMWARE INC	6
VMWare Workstation	VMWARE INC	22

Voice Dialer	VITO TECHNOLOGY	1
Voyage	NORTHWEST SIGNAL SUPPLY INC	3
VPSPrint	LEVI, RAY & SHOUP INC (LRS)	1
Vue xStream	E-ON SOFTWARE	1
WANSyn	XOSOFT	2
WebView	STELLENT SALES INC	25
WetForm Regional Access	ECOTONE CORPORATION	23
wFrame	MANHAN ENGINEERING	1
WhatsUp Gold	IPSWITCH INC	2
WhiteSmoke	WHITESMOKE INC	1
Win Extractor	WINZIP COMPUTING INC	1
WinDVD Creator	INTERVIDEO INC	1
WinEst	WINESTIMATOR INC	2
WinEst eTeam	WINESTIMATOR INC	3
WinFax Pro	SYMANTEC	5
WinHex	X-WAYS SOFTWARE TECHNOLOGY AG	1
Winzip	WINZIP COMPUTING INC	7191
Wipe Drive	ACCESS DATA	1
Wireless Control System	CISCO SYSTEMS INC	1
Wireless Data Server	ORACLE USA INC	1
Wiselimage	CONSISTENT SOFTWARE INTL	1
WQHydro	WQHYDRO CONSULTING	1
Xceed Ultimate Suite	XCEED SOFTWARE INC	1
Xcelsius Engage	SAP AMERICA INC	1
Xerox Printer Forms Generator	XEROX CORP	1
Xiotech Intelligent Storage Element	XIOTECH	8
Xixia 1x Chariot	XIXIA	1
XMap 5.0 GIS Editor	DELORME PUBLISHING	1
XMF Alerter	GEOXMF LLC	1
XOsoft	COMPUTER ASSOCIATES (CA)	6
Xpediter CICS	COMPUWARE	1
XPediter TSO	CENTURA SOFTWARE	1
Xpress Studio	AVID TECHNOLOGY INC	1
Xtools Pro	DATAEAST	8
XTRACT Network	IMBSEN & ASSOCIATES INC	2
ZOC Terminal Emulator	EmTec Innovative Software	1
Zone Alarm Pro	ZONE ALARM	3
Zoom Text Magnifier/Reader	Ai Squared	1

H. Database Information

Database/Data mart by Database Management System – WSDOT's databases utilize different database management systems. Of these database management systems, only the SQL server platform is being used for our datamarts, although there are Informatica processes which export data from the mainframe to the SQL environment for additional datamart integration. For a complete list of databases and additional maintenance information such as the description of the database, number of users, application interfaces or data stewardship, please refer to the data catalog.

Critical Datasets

Database Management System Platform	Number of Databases/Datasets	Mission Critical Databases	Vital Databases	Essential Databases	Important Databases
SQL Server	835	30	161	311	333
Adabas/VSAM	148	6	75	47	26
FileMaker	32	4	5	12	11
PostgreSQL	3	1	2	0	0
Binary	1	1	0	0	0
Oracle	2	2	0	0	0
GIS Datasets	68	7	41	6	14

- *Mission Critical databases have an impact on ability to share critical information, impact on mobility (moving people & goods), impact maintenance of public health & safety or have mandates or legal requirements.*
- *Vital databases include payments to employees, payments to vendors or contractors or contain receipts from any source.*
- *Essential databases have impact on program delivery, impact on public image, have other cash flow impacts or have regulatory impacts other than mandated or legal.*
- *Important databases have individual impact, unit level operational impact or workgroup impact.*

WSDOT identifies, stores and updates Database criticality information in the WSDOT Data Catalog system. For specific information about geodatasets, contact the WSDOT GIS Data Administrator. WSDOT makes GIS data it generates accessible for others to use through the GeoData Distribution Catalog found at <http://www.wsdot.wa.gov/mapsdata/geodatacatalog/default.htm#main>.

Critical Databases

WSDOT has the following databases currently listed in the Database/Data mart Portfolio. There are 39 which are considered mission critical by the COOP. Information on the mission critical databases is available through IT's Data Management Services.

Database Name	COOP Functional Business Area(s)	Environment
Acorde	Provide Records Management Services	SQL Server
ADABAS DBs	Manage Information Technology Infrastructure	ADABAS/VSAM
Agreement Tasks FM Pro DB	Ensure Bridges are Safe	FileMaker Pro
AOSS DB	Operate & Maintain State Ferries Systems	SQL Server
Automated Fuel System DB	Provide Fuel	Oracle
CAFM	Manage Facilities Owned by WSDOT	SQL Server
CCIS	Operate & Maintain Region Transportation System & Provide Highway Construction Oversight	SQL Server/ADABAS
Chart of Accounts	Ensure Bridges are Safe & Maintain Fiscal Operations	ADABAS/VSAM
Common Accounting	Maintain Fiscal Operations	SQL Server
CONSUMABLE_INVENTORY_ORDERS	Provide Administrative Services	ADABAS/VSAM
Contract Tracking DB	Ensure Bridges are Safe	SQL Server
Employee Master File	Manage Information Technology Infrastructure	ADABAS/VSAM
Enterprise Location Class	Manage Information Technology Infrastructure	SQL Server/ArcSDE
Excise Tax DB	Maintain Fiscal Operations	ADABAS/VSAM
Facilities Work Order DB	Manage Facilities Owned by WSDOT	FileMaker Pro
FIRS System	Manage Facilities Owned by WSDOT & Provide Administrative Services	SQL Server
Fleet Production DB	Provide Vehicles & Equipment	Oracle
Force Account 2	Operate & Maintain Region Transportation System and Provide Highway Construction Oversight	SQL Server
Force Account 2	Provide Highway Construction Oversight	SQL Server
GIS Workbench	Manage WSDOT Operations, Provide Highway Maintenance Oversight, Manage Information Technology Infrastructure & Manage Information Technology Infrastructure	SQL Server/ArcSDE
ITContracts	Provide Administrative Services	SQL Server
Kofax	Provide Records Management Services	SQL Server
Load Rating Data	Ensure Bridges are Safe	SQL Server
McAfee DBs	Manage Information Technology Infrastructure	SQL Server
Mobile Bridge	Ensure Bridges are Safe	SQL Server
MPET DB	Operate & Maintain State Ferries Systems	SQL Server
Record Services	Provide Records Management Services	SQL Server
Remedy DB	Manage Information Technology Infrastructure	SQL Server

Road Access Management	Provide Statewide Project Development Services	SQL Server
ROADS	Manage WSDOT Operations	SQL Server
Road Weather Info	Provide the Public with Timely Information	SQL Server
Services.fp7	Ensure Continuity of WSDOT Operations	FileMaker Pro
Sign Inventory	Ensure Bridges are Safe	SQL Server
SMS DBs	Manage Information Technology Infrastructure	SQL Server
SR View	Operate & Maintain Region Transportation System	SQL Server
SRTS	Provide Records Management Services	FileMaker Pro
TRAINS	Ensure Bridges are Safe	ADABAS/VSAM
WSBIS	Ensure Bridges are Safe	SQL Server
WSF AOSS DB	Operate & Maintain State Ferries Systems	SQL Server
WSF EPI Suite DB	Operate & Maintain State Ferries Systems	SQL Server
WSF EPI Suite DB & Vigilos DB	Operate & Maintain State Ferries Systems	SQL Server/Postgres
WSF MPET DB	Operate & Maintain State Ferries Systems	SQL Server

Data Mart Portfolio

WSDOT has the following 12 business subjects in the WSDOT Data Warehouse.

Data Mart Name	Environment	Server
Accounting data mart	SQL Server	DOTDBOLYDS01
Asset data mart	SQL Server	DOTDBOLYDS01
Collision data mart	SQL Server	DOTDBOLYDS02
Construction data mart	SQL Server	DOTDBOLYDS01
Consumable Inventory data mart	SQL Server	DOTDBOLYDS01
Data Warehouse Data Usage dm	SQL Server	DOTDBOLYDS01
Facilities data mart	SQL Server	DOTDBOLYDS01
Ferries Fares data mart	SQL Server	DOTDBOLYDS01
Labor data mart	SQL Server	DOTDBOLYDS01
Program Management data mart	SQL Server	DOTDBOLYDS01
Roadway data mart	SQL Server	DOTDBOLYDS02
TDO Traffic data mart	SQL Server	DOTDBOLYDS02

Details on each of these data marts are available from IT's Data Management Services.

I. Computer Aided Engineering (CAE)

Computer Aided Engineering (CAE) software is critical to efficient, effective delivery of highway projects. InRoads, CAiCE, ProjectWise & MicroStation are the primary agency-wide applications within this category. These applications support field survey data operations, project design, quantity calculations, plan preparation, and construction administration. It's important to note that there are many specialty applications that support other engineering processes that are not included here.

Staff

	Number of CAE Staff (FTEs)	Indicate here if included in Total Agency IT FTEs
Central Support (IT)	.25	Yes
Central Support (HQ Design Office)	6.0	No
Program Area Support (Regions)	4.2	3.2 are not included, 1 (NWR) is included

CAE Software

Vendor Name	Carlson Software	AutoDesk	Bentley Systems Inc.
Product Name	SurvCE	CAiCE	InRoads
Number of Licenses	100	20	Subscription
Number of Installed Workstations	41 installations of the emulator software that runs on the workstations, not on the CE device	Statewide: 286	Statewide: 2382 Total 749 (V8.11 - V8i), 1353 (V8.9 - XM), 280 (V8.5 - 2004)
Primary Users	Survey crew data collection. Software operates instruments and manages data. Software runs on Windows CE devices	Survey Data Processing, Roadway Design, Surfacing & Earthwork Quantities. CAiCE is being phased out and has substantially been replaced by InRoads. CAiCE does not work in the Windows 7 environment, because the Rainbow Drivers for the hardware lock are out-of-date.	Survey Data Processing, Roadway Design, Surfacing & Earthwork Quantities. InRoads uses MicroStation as the CAD platform; therefore, InRoads also uses an MicroStation license. WSDOT has an Enterprise subscription license for all Bentley applications.

Vendor Name	Bentley Systems Inc.	Bentley Systems Inc.	Transoft Systems
Product Name	MicroStation	ProjectWise	AutoTurn
Number of Licenses	Subscription	Subscription	15 statewide 2 CRC
Number of Installed Workstations	Statewide: 2441 total 756 (V8.11 - V8i), 1474 (V8.9 - XM), 211 (V8.5 - 2004)	Statewide PW Explorer: 716 total 123 (V8i SS3), 358 (V8i SS1), 100 (XM), 135 (v2004)	Statewide: 1737 total 1669 (current v7), 68 (legacy v5.x)
Primary Users	Drafting Contract Plans, Visualization, Photogrammetry, Cartography. WSDOT has an Enterprise subscription license for all Bentley applications.	Engineering document management between offices and organization. WSDOT has an Enterprise subscription license for all Bentley applications.	AutoTurn is a 3 rd -party add-in for MicroStation that is used for vehicle turning analysis. AutoTurn uses MicroStation as the CAD platform.

CAE Hardware

Make/Model	Intel based/Windows XP or Windows 7 configured for WSDOT Level Playing Field software. Survey equipment includes Trimble, Leica, and Topcon total station and GPS. Allegro data collectors.
Number	No count available on total stations, GPS, or data collectors
Is this included in Total PCs?	N/A
Is this included in Total Servers?	N/A

Major CAE Applications

CAE doesn't encompass applications as traditionally defined for IT. Engineers use engineering software and technology tools to facilitate surveying, engineering and drafting for design and construction.

Name	Description
Roadway Design Software	Roadway design software is used for processing survey data, solving coordinate geometry calculations, calculating earthwork, surfacing and other volumes, analyzing water flows, calculating contract pay quantities, and visualizing projects. ProjectWise encompasses both InRoads and MicroStation providing content management between the applications as well as standard documents.
Computer Aided Drafting Software	CAD software is used to generate R/W and PS&E contract plans as well as other plans and displays. It acts as a major format for multiagency/ customer/ partner data communications. MicroStation has been the WSDOT standard since the early 80's. The Bridge Division uses MicroGDS for drafting bridge plans because of functionality that supports the bridge design process. MicroStation is a very stable CAD platform and we have a large base of trained CAD Operators. MicroStation is also the standard for 49 other State DOT's..
Survey Technology	Survey technology comprises the total stations, data collectors, GPS receivers, and software for processing data for design and construction survey work. WSDOT has no standards for survey instruments, there are a variety of different instruments and GPS receivers in use. We do use a standard data collector, the Allegro running Carlson SurvCE software that connects to all the instruments. InRoads and CAiCE survey modules are used to process survey data and to move data between the PC and data collector.
Engineering Document Management	ProjectWise is used to manage engineering files by internal WSDOT staff and external consultants.

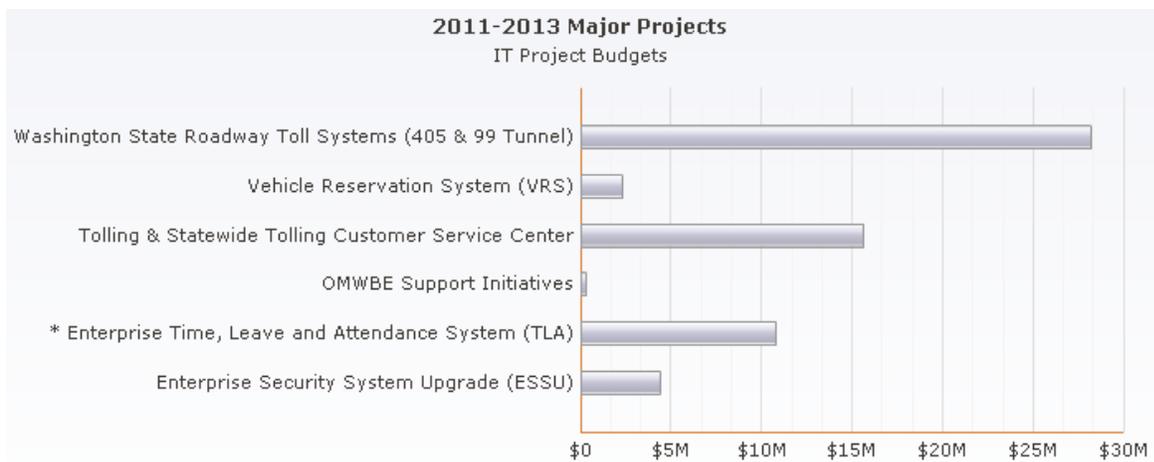
4 – Technology Investment/Current Project Summaries

“Of all the things I’ve done, the most vital is coordinating the talents of those who work for us and pointing them towards a certain goal.” --- Walt Disney

Section 4 - Technology Investment/Project Summaries is based on documentation that is routinely required for effective project management. The information included is a summary of key information extracted from project documentation, including but not limited to project feasibility study reports, and project quality assurance plans.

Project managers are responsible for the project itself and for related documentation. The portfolio model assumes that projects, investments, acquisitions and assets have current documentation available and accessible for use by agency executives, IT personnel, QA professionals and those acting on behalf of the OCIO and TSB. This section also provides the opportunity to document formal project acceptance by key stakeholders.

The Technology Investment/Project Summaries section is comprised of a summary analyses of each current project and technology investment, including when applicable, information about web-based transactional applications, as required by the IT Security Policy and Standards at <http://www.ofm.wa.gov/ocio/policies/manual.asp#security>.



* DES has the lead on the TLA Project
Note: These Investments can span multiple Bienniums.

Updated: 6/29/2012

The following investments/projects are summarized in this section:

Investment/Project	Oversight Level	Status
Enterprise Security System Upgrade (ESSU)	Level 2 Oversight	Active
Enterprise Time, Leave and Attendance System (TLA)	Level 2 Oversight	Active
OMWBE Support Initiatives	Level 2 Oversight	Active
Tolling & Statewide Tolling Customer Service Center	Level 2 Oversight	Active
Vehicle Reservation System (VRS)	Level 3 Oversight	Active
Washington State Roadway Toll Systems (405 & 99 Tunnel)	Level 2 Oversight	Active

Detailed project information from 2nd Quarter 2012 is provided in the chart on the following pages.

Project Name	Enterprise Security Upgrade (ESSU)
Project Manager:	Mike Mellin
Agency Sponsor:	Executive Sponsor(s) David Moseley, Assistant Secretary for WSF, and Grant Rodeheaver, Director of WSDOT IT. Project Sponsor: Helmut Steel, Company Security Officer
Primary WA Goal:	Building a Safe & Efficient Transportation System
Primary State IT Goal:	Invest in Common Systems
Agency Oversight Consultant:	Tom Parma
Executive Summary:	This project will replace the current Vigilos software security system currently in use for WSF at terminal and vessel sites with funding provided by a DHS FEMA Grant due to the fact the Vigilos went out of business in 2009 and is no longer to support the current system. The security system is a key requirement for the operations of the WSF system.
Description:	Description and scope for this project includes replacement of the current Vigilos Enterprise Security Software at Ferries Division headquarters and 43 sites with a proven Commercial Off-the-Shelf (COTS) Enterprise Security System (ESS). The ESS shall include integration with the current access control, alarms, and cameras, GFMS Key Control, along with a new and integrated ID Credential Management System. The scope also includes integration with TWIC credentials and automated support for Homeland Security and US Coast Guard MARSEC threat levels.
Attachments:	
Approval:	Approved
Project Status:	Active
Start Date	7/1/2011 - Contractor Start - July 2012
Finish Date	11/1/2013
Schedule Commentary	44 Sites (Buildings, terminals and vessels will be updated with the proposed solution to upgrade and replace the Vigilos System
Governance	
Initial Funding Year:	FY2010 - DHS FEMA funded grant PSGP Project Number 2010-PU-TO-K033
Impact on Existing Investments	None
Scope	Upgrade the existing Vigilos Security System with a COTS enterprise solution
Business Driver	Required for WSF Operations by DHS and USCG directives
Performance Measure	A complete project schedule with milestones and completion dates was developed by the selected vendor, G4S Technologies, LLC, and is currently being managed and updated at formal Bi-weekly Status Review meetings, monthly project executive steering committee meetings, and quarterly at WSDOT Executive Quarterly Project Review (QPR) meetings.
Oversight	
Proposed Oversight Level	Level 2
Assigned Oversight Level	Level 2
Oversight Override Commentary	None
Severity Level	
Impact on Clients	High
Visibility	High

Impact on State Operations	Medium
Failure or Nil Consequences	Low
Risk Level	Medium
Functional Impact on Business Processes	Medium
Development Effort & Resources	High
Technology	High
Capability & Management	Low
Post Implementation Review	
PIR Attachment	

Project Name:	Time, Leave and Attendance Implementation
Project Manager:	Jeremiah Whitehall
Agency Sponsor:	Grant Rodeheaver/Bob Covington
Primary WA Goal:	One Washington
Primary State IT Goal:	Invest in Common Systems
Agency Oversight Consultant:	Tom Parma
Executive Summary:	<p>The Washington State Department of Transportation (WSDOT) has chosen to partner with the Department of Enterprise Systems (DES) and the Office of Financial Management (OFM) in order to become the pilot implementation of the statewide enterprise Commercial-Off-The-Shelf (COTS), Time, Leave and Attendance (TLA) software system. This Statewide shared service program is being led by the Department of Enterprise Systems (DES) and the Office of Financial Management (OFM).</p> <p>By using a hosted version of a leading, commercial solution, the agency will benefit from external subject matter experts and a proven software solution. In addition to providing time, attendance, and leave tracking, the system will support the myriad of complex business rules and advanced scheduling activities currently being managed by the agency.</p>
Description:	WSDOT, as part of the Enterprise TLA program led by DES/OFM will implement a time leave and attendance system for all employees of the agency.
Attachments:	
Approval:	Approved
Project Status:	Active
Start Date	1/2/2012
Finish Date	6/31/2015
Schedule Commentary	
Governance	
Initial Funding Year:	2013
Impact on Existing Investments	Decommissioning of the Labor Distribution System (LDS), Marine Labor System (MLS), WSF Scheduling and Dispatch Systems (AOSS & WINDS)
Scope	Implementation of a time, leave and scheduling/dispatch system for all WSDOT employees. This implementation will displace the current timekeeping, leave and schedule/dispatch processes and system currently in use by WSDOT.
Business Driver	Legislative direction and audit findings
Performance Measure	The project will implement and adhere to the processes set forth by the state and agency to manage the project lifecycle including, External QA , OCIO Oversight and PMO Oversight. In addition a formal change management process will be implemented to ensure any changes to scope, schedule or budget baselines will be formally approved by the project's sponsors and steering committee. Also, scope, schedule, and budget will be reviewed on a regular basis to ensure successful project execution.
Oversight	
Proposed Oversight Level	Level 2
Assigned Oversight Level	
Oversight Override	

Commentary	
Failure or Nil Consequences	High
Risk Level	10
Functional Impact on Business Processes	High
Development Effort & Resources	High
Technology	Medium
Capability & Management	Medium
Post Implementation Review	
PIR Attachment	

Project Name:	OMWBE Support Initiatives
Project Manager:	Bruce Cebell & Rishi Churi
Agency Sponsor:	Steve Reinmuth / Grant Rodeheaver
Primary WA Goal:	One Washington
Primary State IT Goal:	Promote Common IT Practices
Agency Oversight Consultant:	Jim Hammond
Executive Summary:	<p>DBEC: The Project will achieve the following objectives:</p> <ol style="list-style-type: none"> 1. Provide for rapid routing of applications in a timely manner. 2. Keep track of application status. 3. Make application approval process more efficient. 4. Provide an efficient method for responding to and receiving certification packages from other states. 5. Reduce paper load by providing the means to scan the certification applications, all supporting documents and correspondence <p>Migrate to WSDOT's IT Environment: This effort will result in moving OMWBE's IT Environment into the WSDOT environment. This involves server migration, assuming email administration, workstation support, and most other aspects relating to the IT environment. This will also involve the replacement OMWBE's current workstations, which were determined to not meet current WSDOT standards; and the acquisition 2 scanners, needed to support the DBEC application being developed by WSDOT. In the future, servers, workstations and related software will, through an SLA between WSDOT and OMWBE, be supported and maintained by WSDOT.</p>
Description:	<p>There are 2 efforts in progress:</p> <ol style="list-style-type: none"> 1) Creation of a system that wil support reducing the review/approval processing time for DBE certification, and 2) Moving OMWBE's IT environment into the WSDOT environment
Attachments:	
Approval:	Approved
Project Status:	Active
Start Date	January, 2012
Finish Date	March, 2013
Schedule Commentary	
Governance	
Initial Funding Year:	2012
Impact on Existing Investments	Increased support from OIT Infrastructure to manage OMWBE IT environment.
Scope	<p>There are 2 efforts in progress:</p> <ol style="list-style-type: none"> 1) Creation of a system that wil support reducing the review/approval processing time for DBE certification, and 2) Moving OMWBE's IT environment into the WSDOT environment
Business Driver	Governor's priority for OMWBE to meet the state's needs and goals.
Performance Measure	A complete project Work Breakdown Structure with milestones and completion dates was developed and is currently being managed and updated at formal Bi-weekly Status Review meetings, monthly project executive steering committee meetings, and quarterly at WSDOT Executive Quarterly Project Review (QPR) meetings.

Oversight	
Proposed Oversight Level	Level 2
Assigned Oversight Level	
Oversight Override Commentary	None
Severity Level	
Impact on Clients	low
Visibility	Medium
Impact on State Operations	Low
Failure or Nil Consequences	Low
Risk Level	
Functional Impact on Business Processes	Low
Development Effort & Resources	Low
Technology	Low
Capability & Management	Low
Post Implementation Review	
PIR Attachment	

Project Name:	Tolling & Statewide Tolling Customer Service Center
Project Manager:	Broussard, Lucinda
Agency Sponsor:	Dye, David
Primary WA Goal:	Building a Safe & Efficient Transportation System
Primary State IT Goal:	Provide an Integrated End-User Experience
Agency Oversight Consultant:	Tom Parma
Executive Summary:	Begin tolling on SR 520 to help offset the cost of the 520 bridge as provided in ESHB 2211. In addition, establish a statewide tolling customer service center for all tolling operations.
Description:	WSDOT is authorized to implement early tolling on the SR 520 corridor to help finance the construction of the replacement SR 520 floating bridge and necessary landings. To do this, WSDOT needs to install electronic and photo tolling technology on the roadway to capture up to 115,000 new toll transactions daily. The current Tacoma Narrows Bridge (TNB) customer service center and back office system cannot accommodate the additional transactions and photo tolling. The TNB customer service center will be migrated to the new CSC.
Attachments:	SR520_CSC_IARapproval15jun09.pdf
Approval:	Approved
Project Status:	Active
Start Date	6/8/2009
Finish Date	9/30/2012
Schedule Commentary	
Governance	
Initial Funding Year:	2009
Impact on Existing Investments	Tolling as a separate program has been established in WSDOT. The consolidation of all tolling under one program will impact on all tolling IT investments.
Scope	To establish tolling on SR 520 and to implement a single tolling Customer Service Center (CSC).
Business Driver	As cost of highway and bridge maintenance and replacement increase WSDOT continues to seek innovative ways to assist in funding these projects. Tolling for key bridges and variable tolling to reduce congestion are the way of the future in gaining addition funds for requirements.
Performance Measure	A complete project Work Breakdown Structure with milestones and completion dates was developed and is currently being managed and updated at formal Bi-weekly Status Review meetings, monthly project executive steering committee meetings, and quarterly at WSDOT Executive Quarterly Project Review (QPR) meetings.
Oversight	
Proposed Oversight Level	Level 2
Assigned Oversight Level	Level 2
Oversight Override Commentary	
Failure or Nil Consequences	High
Risk Level	Risk Level 8
Functional Impact	Medium

on Business Processes	
Development Effort & Resources	High
Technology	Low
Capability & Management	Low
Post Implementation Review	
PIR Attachment	

Project Name:	Washington State Roadway Toll Systems
Project Manager:	Jennifer Charlebois
Agency Sponsor:	Craig Stone
Primary WA Goal:	Building a Safe & Efficient Transportation System
Primary State IT Goal:	Provide an Integrated End-User Experience
Agency Oversight Consultant:	Tom Parma
Executive Summary:	Procure a vendor to identify and classify vehicles to support tolling
Description:	Procure a vendor to design, install, integrate, test, operate and maintain systems to identify and classify passing vehicles to support toll revenue collection. The project will include electronic equipment for transponder and photo tolling systems on the I-405 Express Toll Lanes, SR 99 Tunnel and the SR 520 new bridge.
Attachments:	None
Approval:	Approved
Project Status:	Active
Start Date	7/1/2012
Finish Date	10/1/2015
Schedule Commentary	Schedule includes from contract execution to toll commencement on the last of two projects. Schedule does not include maintenance and operations period.
Governance	
Initial Funding Year:	2012
Impact on Existing Investments	This project will leverage available capacity and resources in the WSDOT ITS network for data transport.
Scope	The scope is to design, install, integrate, test, operate and maintain systems to identify and classify passing vehicles to support toll revenue collection. The project will include electronic equipment for transponder and photo tolling systems on the I-405 Express Toll Lanes and SR 99 Tunnel.
Business Driver	The Washington State Legislature has identified the I-405 corridor as a toll eligible facility. Additionally, the Legislature has identified the intent to collect tolls on the proposed SR 99 bored tunnel. To commence toll operations on these two facilities, WSDOT needs to install electronic equipment to identify and classify passing vehicles to support toll revenue collection.
Performance Measure	The vendor will be required to develop the system and achieve a series of payment milestones. The vendor will incur liquidated damages for late delivery of project deliverables. Progress during this initial phase will be measured against the project schedule with weekly status meetings and monthly progress reports. The vendor will incur liquidated damages for delay in reaching toll commencement. During the operations and maintenance phase, the vendor will be required to perform services in accordance with a series of performance measures. Performance will be measured and reported monthly throughout the lift of the project. The vendor will incur liquidated damages on a monthly basis for each area that it is deficient.
Oversight	
Proposed Oversight Level	Level 2
Assigned Oversight Level	Level 2
Oversight Override Commentary	None
Failure or Nil	High

Consequences	
Risk Level	
Functional Impact on Business Processes	Low
Development Effort & Resources	High
Technology	Low
Capability & Management	Low
Post Implementation Review	
PIR Attachment	

Project Name:	Ferries Vehicle Reservation System (VRS)
Project Manager:	Mike Mellin
Agency Sponsor:	Executive Sponsor(s) David Moseley, Assistant Secretary for WSF, and Grant Rodeheaver, Director of WSDOT IT.
Primary WA Goal:	Building a Safe & Efficient Transportation System
Primary State IT Goal:	Invest in Common Systems
Agency Oversight Consultant:	Tom Parma
Executive Summary:	The WSF Vehicle Reservation System (VRS) IT Project is designed to optimize space demand around spread peak vehicle traffic, which will improve asset utilization, reduce wait times, and minimize the need for costly terminal and vessel expansion projects. The project will include three phases and consist of a public internet site that will have deposits for reservations and support for multiple account types and a Customer Service intranet site that will provide support and reporting capabilities to support the business and operations. Redemption of reservations will be integrated into our toll booth operations and Electronic Fare System using bar code scanner technologies already in use.
Description:	The IT Project VRS will be designed to manage demand, spread peak vehicle traffic to off peak hours, thus improving asset utilization, reduce wait times, and minimize the need for costly terminal and vessel expansion projects. VRS will also provide enhanced customer service and increased travel predictability. It will provide reservations to all customers with all types of vehicles on all but four WSF routes. On the remaining routes, reservations will be offered for Executive/Commercial traffic. The system has been designed to be an adaptive system, complete with data gathering and analysis functions that will provide WSF with information to ensure that the system is continually monitored and adjusted as necessary to dynamically meet the needs of customers and communities, within the WSF domain. The system will be flexible to take into account different vessels with different deck space capacities, reassignments of vessels to different routes do to scheduled and un-scheduled maintenance, the ability to identify available space, and when necessary, offer re-assignment to reservation holders, ability to adjust reserved vessel space as appropriate ranging from 30% to 90% by route system wide. The system will allow customers to self-schedule, cancel, or change a reservation up to 2 hours in advance of a sailing. Customers will be able to manage reservations and accounts on-line or by phone to a WSF Customer Service Info Agent. Additionally, customers will be able to receive information about their reservations via email and/or text message. The system will provides the capability to have deposits associated with vehicle reservations and redeem these deposits at the terminal toll booths as applicable. The system also provides for the capability for guests to make reservations without an account and for multiple account types including guest upgrading from a Universal Account to a Premier Account for those customers that have purchased a WSF Multi-Ride 'Revalue Card'. The sites will accept multi types of credit cards for deposits and integration into our Great Plains accounting system for Executive/Commercial Customers for direct billing.

Attachments:	
Approval:	Approved
Project Status:	Active
Start Date	7/1/2010
Finish Date Phases 1-3	12/31/2017
Schedule Commentary	Aggressive
Governance	
Initial Funding Year:	FY2010 - Legislative Approval for a 3 Phase Program
Impact on Existing Investments	None
Scope	Phase 1 (2010-2012) – Will replace three existing reservation systems with a single, automated VRS for Executive/Commercial traffic in the San Juan Islands, for general traffic on the international route to and from Sidney, BC to and from the San Juan Islands, and Port Townsend - Coupeville for all account types. Phase 2 (2013-2014) - Will include all applicable routes for Executive/Commercial Customers, and all routes within the San Juan Islands for all account types. Phase 3 (2015-2017) - Will include the Central Sound Routes Edmonds – Kingston, Bainbridge – Seattle, Bremerton – Seattle, for all account types.
Business Driver	The Washington State Department of Transportation (WSDOT) Ferries Division is the largest ferry operator in the United States. Operating as Washington State Ferries (WSF), the department is responsible for auto/passenger ferries serving ten ferry routes in the Puget Sound region, including one international route from Anacortes, Washington to Sidney, British Columbia. Space on WSF's vehicle deck during peak times is a scarce commodity; often there are more vehicles wanting to board a given sailing than can be accommodated. This has led to congestion in and around terminals, an inability to plan travel times reliably leading to growing wait times for customers, and an overall level of service that has been deteriorating over time. At many terminals during periods of high demand, the capacity of the terminal vehicle holding is reached and traffic begins to overflow into the community. When the holding areas overflow, the traffic and congestion impacts are frequently severe on streets and highways surrounding the terminals. Effects are felt by the neighborhoods and businesses in the terminal area, whose business traffic is impeded. In most cities and towns served by WSF, local and county governments see this traffic impact as untenable. While most understand ferry traffic is an overall benefit to the community, when waiting ferry traffic clogs the streets, increases air pollution, and reduces commerce, it is no longer seen as beneficial and is largely deemed as detrimental. There are a number of secondary impacts that also result from this situation, WSF system can incur higher operating costs for traffic control and other costs associated with the acquisition, construction, and ITS sign elements to accommodate these peak conditions.
Performance Measure	A complete resource and cost loaded project schedule with milestones and completion dates was developed by the project manager and is currently being managed and updated at formal Bi-weekly Status Review meetings, monthly project executive steering committee meetings, and quarterly at WSDOT Executive Quarterly Project Review (QPR) meetings.
Oversight	
Proposed Oversight Level	Level 3
Assigned Oversight Level	Level 3

Oversight Override Commentary	None
Severity Level	
Impact on Clients	High
Visibility	High
Impact on State Operations	Medium
Failure or Nil Consequences	Low
Risk Level	Medium
Functional Impact on Business Processes	Medium
Development Effort & Resources	High
Technology	High
Capability & Management	Low
Post Implementation Review	
PIR Attachment	

5 – Planned Investments/Projects

“He who every morning plans the transaction of the day and follows out that plan, carries a thread that will guide him through the maze of most busy life. But where no plan is laid, where the disposal of time is surrendered merely to the chance of incidence, chaos will soon reign.” --- Victor Hugo

Section 5 – Planned Investments/Projects provides an opportunity for agency executives to view IT investment alternatives in context, rather than as isolated projects. The contents of the portfolio are drawn from documents that have already been created by each agency in conjunction with its regular management processes.

Each investment in IT must be viewed in relation to:

- Its impact on the business of the agency - as represented by the Agency Strategic Business Plan section of the portfolio;
- Its impact on the agency’s technical environment - the Agency Technical Infrastructure;
- Its priority as measured against current investments and other proposed investments - Sections 4 and 5 of the portfolio; and
- The impact, if any, on the statewide IT infrastructure.

The Planned Projects/Investments section is comprised of a summary analyses of each project and proposed technology investment, including when applicable, information about web-based transactional applications, as required by the OCIO at <http://www.ofm.wa.gov/ocio/policies/manual.asp#itinvestments>.

There are decision packages which WSDOT will be submitting for the 2013 supplement budget consideration:

Decision Package Request Description	Funding Request Amount
Software License Cost Increases	\$ 1,381,000
Infrastructure / Web Availability	\$ 650,000
Enterprise Time, Leave and Attendance System (TLA) Project Funding move to 2013-2015 budget	\$ 10,200,000

11-13 Biennium Projects

Title	Description/Purpose	Cost Estimate	FTEs	Schedule	Scope	Business Driver/ Strategy Supported	Executive Sponsor	Project Manager
Software License and maintenance agreements	Funding requested is comprised of over 121 individual software license and maintenance agreement used by the department. Estimates are based on two categories: 1) Current contract terms; and 2) Software contracts that will be renegotiated before November 1, 2012. For the purpose of this package, the department based its estimate for software contracts that will be renegotiated by November 1, 2012 on estimates from vendors and industry trends. The department will provide the updated contract costs by December 2012.	\$ 1,381,000	0	N/A	Funding is provided for the increasing costs of maintaining the current level of software licenses and maintenance agreements that support all Washington State Department of Transportation (WSDOT) project delivery, program activities, and business operations. These licenses and agreements are critical to WSDOT's operations as they are necessary to support the department's mission "to keep people and business moving by operating and improving the state's transportation systems vital to our taxpayers and communities."	Allows the department to maintain its current level of (IT) Information Technology software support.	Grant Rodeheaver, IT Director	Dave Koch, IT Planning & Administrative Operations
Infrastructure / Web Availability	Increase capacity of the agency website for emergency and winter operations	\$ 650,000	0	N/A	Replace aged and inadequate equipment with new, higher capacity equipment	WSDOT Strategic Plan 2011-2017 Objective 1.8 Continuity of Operations and Emergency Management and Response: Increase WSDOT's ability to respond to, recover from, and deliver vital services during emergencies and disasters.	Grant Rodeheaver, IT Director	Tim Crabb, Infrastructure Services Manager

SGN Re-Connect	Protect the investments by connecting WSDOT to the State Government Network (SGN) by providing the on-going funding needed to support the deployed infrastructure and establish the WSDOT Office of Information Technology Security Program in compliance with the Information Services Board (ISB) Security Standards. WSDOT currently has only a HRMS connection.	'09-'11 \$1,691,604 Funding was not approved. '11-'13 \$3,383,208 Funding was not approved	'09-'11 (3) '11-'15 (3)	Ongoing system maintenance	Ongoing system maintenance	Preservation	Tim Crabb, Infrastructure Services Manager	Randy Baker, Network Services Manager
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Not Funded Projects (due to budget restrictions)

Title	Description/Purpose	Cost Estimate	FTEs	Schedule	Scope	Business Driver/ Strategy Supported	Executive Sponsor	Project Manager
WSDOT Critical Applications Replacement Phase 3 – TRIPS Replacement (3)	Requesting funding to focus on the three most critical systems that need replacement: Labor Collection and Distribution System/Payroll (Labor Payroll), Transportation Information Planning and Support System (TRIPS), and Priority Array Tracking System (PATS)	'09-'11: \$5 million (Not funded) '11-'13: TBD	'09-'11: 14.0 (not funded) '11-'13: TBD	Start – '09 Completion: '13	Complete replacement of the first system (TRIPS).	The future WSDOT faces will place increasing demands on the existing core systems that simply cannot be met. Future needs will require an integrated set of applications and data with capabilities of agility, flexibility and responsiveness.	Bill Ford, Assistant Secretary Administration	Kristine Hubble
Traffic Operations Performance Monitoring & Management System (2)	Purpose of the project is to purchase a Traffic Operations Performance Monitoring and Management system that will allow the department to enhance system management and quickly report on the performance and condition of critical components of the "Moving Washington" initiative, such as Integrated Corridor Management and Active Traffic Management, which are integral to the agency's strategic plan. The existing system was developed in 1997 and efforts are under way with the University of Washington to develop a system which will better prepare WSDOT for this when funding becomes available.	'09-'11: \$1,617,000 '11-'13: \$980,000	'09-'11: 1.25 '11-'13: 1.25	Start : '09 Completion: '11 Maintenance: '11-'13	To provide WSDOT with a decision support systems needed to adequately monitor and report on the use and performance of the state roadway system.	Mobility	State Traffic Engineer TBD	Daniela Bremmer

6 – Annual Technology Investment and Project Reviews

“My strong point, if I have a strong point, is performance. I always do more than I say. I always produce more than I promise.”

--- Richard Nixon

Section 6 – Annual Technology Investment and Project Reviews consists of three sections; a review and update of each ongoing level 2 and 3 IT investment or project, a post-implementation review of any level 2 or 3 IT investment or project completed since the previous annual update, and a copy of the Annual Compliance Letter.

The project review of each ongoing level 2 and 3 investment or Major project is performed as part of the annual update of the IT portfolio. This review is to compare expectations for the investment or project as documented in the original investment analysis and project plan against the current project status. WSDOT does not have any new projects which meet the “Major Project” criteria. For reporting purposes, WSDOT continues to reference the projects using the former labels of “Level 2” and “Level 3” as Major Projects.

There are no projects completed since the last annual IT Portfolio. Updates to Clarity have been made throughout the year to include post-implementation reviews were applicable. These reviews assess the causes and impacts of any significant reductions in benefits, increases in one-time or continuing costs, problems with project management, or increases in project risk during the course of the project. It documents practices and procedures that lead to project successes with recommendations for applying them to similar future projects, and recommendations for improving the planning, management, and quality control of future, similar investments or projects.

The following project reports reflect projects which have been identified as either Level 2 or Level 3 projects. Each of the project’s quarterly report or briefing to the WSDOT Executive Management team are provided in the following pages.

Enterprise Security System Upgrade (ESSU) Project Briefing

Project Name: Enterprise Security System Upgrade (ESSU)	Date Submitted: June 26, 2012
<p><u>Status:</u></p> <ul style="list-style-type: none">➤ Contract – G4S Contract (K611) has been signed and executed by all parties, and we have started coordination of work with G4S. Next event will be a planning meeting either this week or after the 4th of July with the project team and G4S.➤ Project Documents - A project charter is being drafted and which will include the budget, organization, and formation of an Executive Steering Committee.➤ Project SharePoint sites – the current site will be archived for the RFP phase of the project and a new site will be set up for the actual project phase.➤ Contract – Tim Carroll has request that the contract be uploaded into TRAINS.➤ Pending Documents - Amy Walstrom, G4S Contract Manager, is coordinating the insurance, Contract Bond and software escrow.➤ External QA – SOW completed and with Tim Carroll for publication. We expect to have someone on board before the end of July.➤ Public Disclosure - Johnson Controls request for public disclosure is still on the table. Note that the contract just signed is marked Sensitive Security Information (SSI) and will require Helmut Steele's and USCG approvals for any release of the ESSU SSI information and the official position by AG and the Records office.	
Issues / Risks – None open at this time	
Submitted By: Mike Mellin, Project Manager	

Time Leave and Attendance Project Overview

PROJECT: TIME LEAVE AND ATTENDANCE IMPLEMENTATION (WSDOT TLA)					
OVERSIGHT LEVEL >		<input type="checkbox"/> Level 3	<input checked="" type="checkbox"/> Level 2	<input type="checkbox"/> Level 1	
Executive Sponsor Steve Reinmuth, Chief of Staff			IT Project Manager Jeremiah Whitehall (Consultant)		
Business Sponsors Bob Covington, <i>Director – Accounting & Financial Services</i> Grant Rodeheaver, <i>Director – Office of Information Technology</i>			Consultant/Contracting Firm		
PROJECT DESCRIPTION					
TYPE OF PROJECT >		<input type="checkbox"/> System Development	<input checked="" type="checkbox"/> RFP	<input type="checkbox"/> Feasibility Study	<input type="checkbox"/> Other
Project Start Date:		1/2/12	Current Baseline Scheduled Completion Date:		TBD
<i>Note: Projects which have a DIS Investment Plan, the Start and End dates should equate to dates specified in the Investment Plan.</i>					
The Washington State Department of Transportation (WSDOT) has elected to implement a configurable off the shelf time, leave and attendance (TLA) software system as part of the statewide enterprise TLA implementation led by the Department of Enterprise Systems (DES) and the Office of Financial Management (OFM). WSDOT will partner with DES and OFM to be the pilot agency for the enterprise effort. By using a leading hosted 3rd party solution, the agency will benefit from external subject matter experts and a proven software solution. In addition to providing time, attendance, and leave tracking, the system can support the myriad of complex business rules currently being managed by the agency.					
Business Need					
BUSINESS DRIVERS >		<input checked="" type="checkbox"/> Legislative	<input checked="" type="checkbox"/> Audit Finding	<input type="checkbox"/> Business Opportunity	<input type="checkbox"/> Other

WSDOT currently faces a number of challenges surrounding the current timekeeping processes and systems. The business processes and systems used to track and report leave, approve leave requests, and process complex collective bargaining agreement rules are inefficient and error prone, requiring manual processes and duplicate data entry. Many of these challenges have been documented by previous audits and in the Time Leave and Labor Distribution Feasibility Study conducted in 2009. These challenges include:

- Existing labor tracking systems have become outdated, requiring various workarounds and duplicate data entry to accommodate agency requirements. Many of the primary support personnel for these in-house developed applications are no longer with the agency.
- Current processes are manual and do not meet mandatory federal and state FMLA leave accrual and liquidation requirements.
- Certain timekeeping and reconciliation processes are exception based, which do not meet the requirements for the Federal Fair Labor Standards Act.
- Current time tracking and leave approval processes use multiple independent systems and require manual data entry, validation and reconciliation. Some examples are:
 - Provisions of the agency’s numerous collective bargaining agreements are validated and approved manually. This increases the risk of inaccurate timesheet processing and potential grievance filings.
 - The potential for payroll and leave errors is unnecessarily high due to the number of data entry, manual validation and approval points, and the lack of automated validation throughout the payroll process.
 - The 2007 WSDOT Administrative and Overhead Performance Audit cited that the agency needed to restrict access to charge codes, implement system-based workflow for approvals, and provide an audit trail.
 - Timesheet processing is labor intensive and requires manual interaction throughout the process. Timesheets are manually scanned into the system, manually verified and keyed into the appropriate system. Reconciliation is also performed manually.

PROJECT BUDGET			
Funding Source(s)		Funding Source Specifics	
<input type="checkbox"/>	Program Funds	<i>Subprogram(s):</i>	\$
<input checked="" type="checkbox"/>	Legislative Funding	<i>Source ID:</i> Pending OFM decisions	\$ 10,800,000
<input type="checkbox"/>	Federal / Grant Funds	<i>Source ID:</i>	\$
<input checked="" type="checkbox"/>	Other Funding	<i>Specify:</i> DES Inter-agency agreement	Pending DES interagency agreement
Total Project Funding:			\$ 10,800,000 +
Current Status <small>(compared to Current Baseline)</small> <small>"=": no change, "-": ↓, "+": ↑</small>	SCOPE	SCHEDULE	BUDGET
	= Green	= Green	= Green
Status Summary	<p>This quarter focused on identifying, structuring, and resourcing the WSDOT project effort. Project governance has been developed and approved by the project sponsors and project kickoffs were conducted with the Executive management team. The WSDOT project team organization has been approved and high-level stakeholders identified. Focus remains on continued alignment with the DES/OFM TLA program structure.</p> <p>Project funding and budgets have not been solidified. Decisions are still pending regarding the use of Certificates of Participation (COP) or alternate funding sources.</p> <p>The project management plan is being drafted with specific attention on project scope and the relationship of WSDOT TLA deliverables and the DES/OFM TLA program deliverables.</p> <p>Project schedule is under development, with focused project team activity</p>		

planning to begin the first week of May. The planning and analysis of WSDOT legacy systems has commenced and specific milestones will be added to the WSDOT TLA activity list/schedule.

Project communication is already underway with an all-staff communication from Paula being planned for May. In addition, vendor demonstrations have been scheduled for early May with the intent of providing project stakeholders with a high-level understanding of system capabilities.

SCOPE

This Reporting Period's Progress

Project Governance

- Project Charter in development and under review.
- Project organization identified and approved by WSDOT project sponsors.
- Executive and Ferry Division management kickoffs complete.
- Stakeholder analysis and communication planning underway.
- Continuing alignment with DES/OFM program structure.
- Project management plan being drafted.
 - Preliminary scope statement being defined.
- Created and maintaining SharePoint site for project documentation, calendar and action item tracking. <http://sharedot/it/tla>
- Project Steering Committee kickoff meeting scheduled for early May.
- TLLD requirements reviewed and refreshed by DES Business Analyst's and key agency stakeholders.
- Identified dependent projects; continuing to identify constraints and align project milestones.

Planning and Analysis

- TLA requirements gathering workshops underway. WSDOT TLA extended project team members participating.
- Activity planning session/kickoff scheduled for May 3rd.
- Commenced initial risk planning (high-level).
- WSDOT TLA project IT resources assigned to system analysis work and legacy system remediation plan started

Communication

- All staff communication from Paula in progress
- WSDOT union communication planning discussions with WSDOT/OFM LRO ongoing.
- Communication to project team resources complete.
- Communication to project stakeholders ongoing.

This Reporting Period's Issues / Risks and Mitigation Strategies

If critical project resources are not available for the durations required.	Probability – High Impact - High	Mitigation: Clearly communicate activity plan and resource requirements in the early stages of the project. Obtain pertinent management approval. Contingency: Supplement with backup resources or extend project timeline.
If key enterprise policy decisions are delayed	Probability – Medium Impact – High	Mitigation: Communicate expectations for decisions on key policies to program governance. Continue active WSDOT representation on program steering committee. Contingency: Execute non-dependent tasks until extending the schedule is unavoidable.
If relevant legacy system	Probability – High	Mitigation: Conduct thorough analysis of

documentation and/or expertise is unavailable	Impact - Medium	system requirements, output and inputs. Integrate accordingly.
If decision on funding source for project is not finalized	Probability – Low Impact – High	Mitigation: Continue to drive decisions through the program governance for timely decision. Document agreement.

Change Control Decisions

None during this period.

Objectives for next Reporting Period

Project Governance

- Complete WSDOT project charter with appropriate approvals.
- Complete project management plan
 - Baseline scope, schedule and budget.
 - Complete communications, risk, cost, schedule, and requirements plans.
- Implement integrated change control process.
- Conduct formal project team kickoff.
- Establish final alignment with DES/OFM program structure with DES/OFM approval.
- Maintain/update project management documents as necessary.
- Maintain TLA project SharePoint site.

Planning and Analysis

- Complete TLA requirements gathering in preparation for RFP submission.
- Continue WSDOT legacy systems identification and remediation planning.
- Document proposed labor distribution process for design.
- Continue risk identification and management.
- Interface with DES/OFM program resources for requirements/RFP creation.

SCHEDULE

PROJECT LIFECYCLE >	<input checked="" type="checkbox"/> Initiation	<input checked="" type="checkbox"/> Planning	<input type="checkbox"/> Execution	<input type="checkbox"/> Implementation	<input type="checkbox"/> Closure
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◆ Major Milestones Current Baseline	Schedule			Milestone Outlook
	Original Baseline	Current Baseline	Attained	
Project Start Date	1/2012	1/2012	1/2012	
Project Completion Date	TBD	TBD		

BUDGET

Project Budget Breakdown Item Description	Original Baseline Budget Plan	[A] Current Baseline Budget Plan	[B] Actual Expenditures To Date	[C] Projected Amount to Complete	Variance Variance = [A] - [B] - [C]
Implementation (COP)	\$10,800,000	\$10,800,000	\$0	\$10,800,000	\$0
Readiness Activities	\$TBD	\$TBD	\$56,704*	\$TBD	\$56,704*
Totals >	\$10,800,000	\$10,800,000	\$56,704	\$10,856,704	\$0

*Project funding and budgets have not been solidified. Decisions are still pending regarding the use of Certificates of Participation (COP) or alternate funding sources. Readiness Activities being funded by interagency agreement between WSDOT and DES.

OMWBE Support Initiatives Project Overview

Disadvantaged Business Enterprise Certification (DBEC) Formerly OMWBE Certification	Date Submitted: 06/25/2012
Brief Status <ul style="list-style-type: none"> • Phase 1 (imaging and initial workflow) is been tested by Becky. It will be ready for production release by end of July, if the infrastructure is in place. • Phase 2 development is on schedule. • OMWBE and OEO have reviewed all screens and provided their feedback. • Database is getting finalized. • Requirements gathering and design of reports will begin from next week. • Conducted meeting with Accounting and Financial Services (AFS) to discuss WSDOT reporting requirements • OMWBE's new director Chris Liu attended the weekly project meeting. He talked about long term goals and vision for the project. 	
Issues / Risks <ul style="list-style-type: none"> • Lack of time commitment to the project from OMWBE 	
Submitted By: Rishi Churi	

OMWBE Migration	Date Submitted: 06/27/2012
Brief Status <ul style="list-style-type: none"> • The Team has conducted a number of meetings with OMWBE staff, CTS staff and the contractor supporting some of OMWBEs IT environment. • The Team has made a number of on-site visits to determine OMWBE IT environment needs. • The Team has identified a number of obsolete workstations and laptops, and is recommending replacing them. Other potential costs include licensing and scanner purchase costs for the Certification Workflow Application. Estimated cost for all this is \$90,000. OCIO has offered \$30,000 to help with the costs • Team is still having difficulty obtaining the administrative credentials needed to fully discover OMWBE's environment. OMWBE's sole IT person is scheduled to be back in the office at the end of June. 	
Issues / Risks <ul style="list-style-type: none"> • No formal budget for the project has been established. • OMWBE is currently going through a change of Directors. The old one left May 31st, and the new one started June 16th. • The only IT person at OMWBE has been on extended leave for some time. She is not currently scheduled to be back in the office until June 29th. This has been slowing our ability to investigate the OMWBE IT environment, although marginal progress is still being made. 	
Submitted By: Bruce Cebell	

Tolling Statewide Customer Service Center Project Overview

PROJECT: Tolling Project - Statewide Customer Service Center

OVERSIGHT LEVEL >	<input type="checkbox"/> Level 3	<input checked="" type="checkbox"/> Level 2	<input type="checkbox"/> Level 1
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Executive Sponsor David Dye, Chief Operating Officer, Deputy Secretary Craig Stone, Director Toll Division	Project Manager Patty Rubstello, CSC Project Manager Toll Division OFM Oversight Tom Parma, Office of the Chief Information Officer, OFM
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Business Area Manager Patty Rubstello, Director Toll Systems Development & Engineering Pete Briglia, Director Toll Operations	Contracting/Consulting Firms Electronic Transaction Consultants Corp (ETCC) Jacobs Engineering Group Inc. (Jacobs) Atkins Global (Atkins) IBI Group (IBI) Dye Management
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PROJECT DESCRIPTION

TYPE OF PROJECT >	<input type="checkbox"/> System Development	<input type="checkbox"/> RFP	<input type="checkbox"/> Feasibility Study	<input checked="" type="checkbox"/> Other
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Project Start Date:	01/11/2010	Current Baseline Scheduled Completion Date:	09/30/2012
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Note: Projects which have a DIS Investment Plan, the Start and End dates should equate to dates specified in the Investment Plan.

Procure a service provider (vendor) to establish and operate a customer service center / back office for statewide toll collection. Vendor will be responsible for providing *Good To Go!* customer and account services including: customer service storefronts; website; transponder and photo toll processing; customer account management; payment processing; violation processing; adjudication support, associated accounting and financial systems support; and reporting.

Business Need

BUSINESS DRIVERS >	<input checked="" type="checkbox"/> Legislative	<input type="checkbox"/> Audit Finding	<input checked="" type="checkbox"/> Business Opportunity	<input type="checkbox"/> Other
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Engrossed Substitute House Bill 2211 authorizes WSDOT to implement early tolling on the SR 520 corridor to help finance the construction of the replacement SR 520 floating bridge and necessary landings. Current customer service center/back office is not sized to accommodate the large increase in accounts anticipated with tolling SR 520.

PROJECT BUDGET

Funding Source(s)	Funding Source Specifics	
<input type="checkbox"/> Program Funds	Subprogram(s):	\$
<input type="checkbox"/> Legislative Funding	Source ID:	\$
<input checked="" type="checkbox"/> Federal / Grant Funds	Source ID: TCSP(88%)/ITS(7%)/VPPP(5%)	\$15,488,986
<input checked="" type="checkbox"/> Other Funding	Specify: TPA	\$150,000
Total Project Funding:		\$15,638,986

Current Status <small>(compared to Current Baseline) "=": no change, "-": ↓, "+": ↑</small>	SCOPE =Yellow	SCHEDULE = Yellow	BUDGET = Green
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Status Summary
 During this period, the vendor continued to address operational issues working closely with WSDOT operations staff at the University CSC. Also, during this period, the vendor implemented the adjudication module to support the process after Notice of Civil Penalties are issued. Efforts continue to develop the remaining functionality per the scope of work.

SCOPE

This Reporting Period's Progress

The following significant achievements were realized during this reporting period:

- Execution of change order #6
- Implementation of adjudication module
- Ongoing remediation of defects as appropriate
- Developed work plan for remaining scope

This Reporting Period's Issues / Risks and Mitigation Strategies

Prioritization of remaining scope to be delivered to ensure key dates are met such as the start of adjudication. Worked with stakeholders to gain an understanding of the risks associated with delaying various functionalities. Updated work plan accordingly. Continued QA efforts to ensure that Notice of Civil Penalties (NOCP's) that are queued for mailing are accurate and pose no issue from previous toll bill mailings. System issues have been identified around toll bills and fixes are being implemented to address them. Also during this quarter, WSDOT and ETC met to discuss both parties disputes over schedule delay and scope elements. A tentative agreement has been reached.

Change Control Decisions

Six change orders have been executed on this contract. One settlement agreement is pending:

- Change order #1 added scope for vendor to deploy an adjudication module in support of scheduling adjudication hearings. Executed November 2010.
- Change order # 2 clarified vendor's authority to enter into a retail marketing agreement with a local grocery chain (Safeway). Executed February 2011.
- Change order #3 revised program schedule and identified damages owed to WSDOT by vendor due to delays. Executed May 2011.
- Change order #4 revises the program schedule and provides for the start of partial operational payments. Executed October, 2011.
- Change order #5 adds scope for vendor to provide and build out a space at the University District CSC location for adjudication hearings and to provide system and personnel support of hearings. Executed December, 2011.
- Change order #6 supplements the vendors staffing to support the increase workload needed for SR 520 tolling start-up phase. Execution January, 2012.
- Settlement Agreement #1 addresses disputed items by both parties from the start of the contract through April 1, 2012. This settlement is a clear all on those issues. Anticipated execution May, 2012.

Objectives for next Reporting Period

During the next reporting period, the following activities are expected to be achieved:

- Issuance of first Notice of Civil Penalty (NOCP)
- Execute Settlement Agreement #1
- Implement critical financial reports

SCHEDULE

PROJECT LIFECYCLE >	<input type="checkbox"/> Initiation	<input type="checkbox"/> Planning	<input type="checkbox"/> Execution	<input checked="" type="checkbox"/> Implementation	<input type="checkbox"/> Closure
◆ Major Milestones Current Baseline	Schedule			Milestone Outlook	
	Original Baseline	Current Baseline	Attained		
Program Planning Complete	03/12/2010	03/12/2010	4/19/2010	Complete	
TCS Interface Control Document	07/01/10	12/13/10	12/13/10	Complete	
Financial and Accounting Preparation Complete	12/19/2010	6/30/12		Delayed	

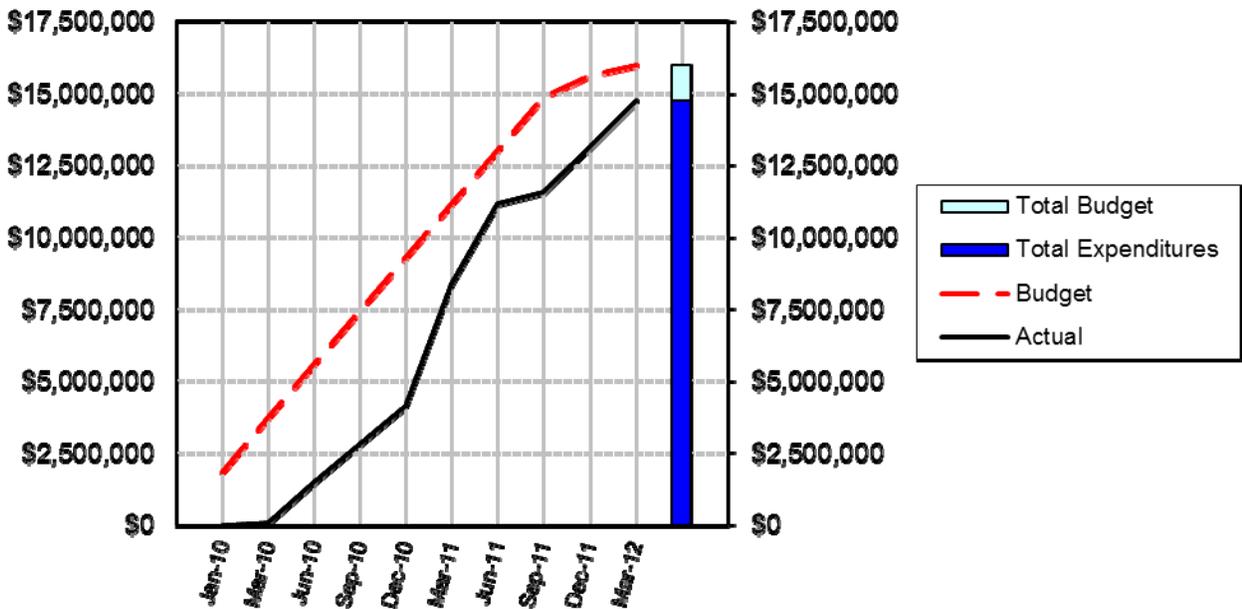
SCOPE

Operations Preparation Complete	12/19/2010	6/30/12		Delayed
System Preparation Complete	12/19/2010	06/10/11	10/3/11	Complete
TNB Data Migration Complete	01/18/2011	01/18/2011	2/12/11	Complete
Facilities Established	02/17/2011	01/18/2011	2/12/11	Complete
Start-up Complete	01/18/2011	6/30/12		Delayed
Partial CSC Operations Commencement	01/18/2011	02/14/11	2/14/11	Complete
TNB Photo Tolling Start	01/18/11	06/13/11	NA	Deleted in change order #4
Tolling Commencement	03/19/2011	12/2011	12/29/11	Complete
Acceptance Issued	07/21/2011	07/31/12		

BUDGET

<i>Project Budget Breakdown Item Description</i>	Original Baseline Budget Plan	[A] Current Baseline Budget Plan	[B] Actual Expenditures To Date	[C] Projected Amount to Complete	Variance Variance = [A] - [B] - [C]
<i>ETC Contract (Implementation/Start-up only)</i>	\$2,824,628	\$3,077,101	\$2,803,005	\$274,096	0
<i>WSDOT</i>	\$1,150,000	\$650,000	\$469,729	\$180,271	0
<i>Consultant Services</i>	\$5,135,245	\$7,489,341	\$6,811,528	\$677,813	0
<i>TransCore Amend #2</i>	\$750,000	\$550,000	\$533,941	\$16,059	0
<i>Marketing/Outreach/Research</i>	\$5,000,000	\$4,216,599	\$4,129,599	\$87,000	0
<i>Other Agreements</i>					
<i>Future Agreements</i>					
Totals >	\$14,859,873	\$15,983,041	\$14,747,801	\$1,235,239	0

Budget Plan vs. Actual Expenditures



Vehicle Reservation System Project Overview

PROJECT: Washington State Ferries Vehicle Reservation System (VRS) - Phase 1				
OVERSIGHT LEVEL >	<input checked="" type="checkbox"/> Level 3	<input type="checkbox"/> Level 2	<input type="checkbox"/> Level 1	
Executive Sponsor David Moseley, Assistant Secretary Ferries Division		IT Project Manager Mike Mellin Bonnie Remmick		
Business Area Manager Jean Baker, Deputy Chief Administration and Finance, Ferries Division		Consultant/Contracting Firm Barry Otterholt, External Quality Assurance, Stouffer, Co.		
Program Director George Capacci, Deputy Chief Construction and Operations, Ferries Division				
PROJECT DESCRIPTION				
TYPE OF PROJECT >	<input checked="" type="checkbox"/> System Development	<input type="checkbox"/> RFP	<input type="checkbox"/> Feasibility Study	<input type="checkbox"/> Other
Project Start Date:	April 2010	Current Baseline Scheduled Completion Date:	December 2012	
Business Need				
BUSINESS DRIVERS >	<input checked="" type="checkbox"/> Legislative	<input type="checkbox"/> Audit Finding	<input checked="" type="checkbox"/> Business Opportunity	<input type="checkbox"/> Other
<p>Space on WSF's vehicle deck during peak times is a scarce commodity. Often times there are more vehicles wanting to board a given sailing than can be accommodated given the available capacity. This has led to congestion in and around terminals, growing wait times for customers, and an overall level of service that is deteriorating over time.</p> <p>As populations in ferry communities grow over time, resulting in increased demand for ferry services, the situation is expected to grow worse. Expanding the fleet to add vessel capacity is an extremely costly proposition, and one that needs to be considered in the context of other transportation infrastructure needs across the State.</p> <p>WSF's ability to accommodate forecasted growth levels is significantly affected by the available vessel capacity during the "peak commute periods" and the capacity of terminal facilities to process traffic during these periods.</p> <p>Without any additional capacity expected (at least over the 22-year long range planning horizon), WSF has been directed by the Legislature to <u>take steps to manage its demand</u>. ESHB 2358, passed in 2007, requires WSF to both accommodate ridership growth and to "level peak period demand." Effectively, this means WSF needs to enact strategies that will move discretionary trips currently happening during peak times to other times during the day where there is capacity. The projected ridership growth is relatively easy to accommodate if it occurs primarily on off-peak sailings.</p> <p>Phase 1 will replace the current vehicle reservation systems in use on Anacortes to Sydney, Coupeville (Keystone) to Port Townsend and Commercial traffic in the San Juan Islands. During this phase, we will deliver enhanced reservation functions to support making reservations from the web, allowing users to self-serve for changes and cancellations. This phase will also deliver a deposit associated with a reservation and forfeit of this deposit for no-shows during the date for the reservation as well as enhanced customer account functionality to allow travel preferences and additional information to be maintained for all account types.</p> <p>Phase 2 will provide additional capabilities including Commercial traffic on all VRS routes and vehicle reservations for all customer account types in the San Juan Islands.</p> <p>Phase 3 will provide additional capabilities including central sound routes for Edmonds-Kingston, Seattle –Bainbridge, and Seattle – Bremerton.</p>				

Funding Source(s)		Funding Source Specifics	
<input type="checkbox"/>	Program Funds	Subprogram(s):	
<input checked="" type="checkbox"/>	Legislative Funding	Source ID: ESSB-6381 Sec. 306	\$2,296,654
<input type="checkbox"/>	Federal / Grant Funds	Source ID:	
<input type="checkbox"/>	Other Funding	Specify:	
Total Project Funding (Phase 1):			\$2,296,654

Current Status <small>(compared to Current Baseline)</small> <small>"=": no change, "-": ↓, "+": ↑</small>	SCOPE	SCHEDULE	BUDGET
	= Green	= Yellow	= Green

<p>Status Summary</p>	<p>During the first quarter of 2012, the VRS project completed staffing 15 critical positions using IT and contracted personnel in order to complete the VRS Public Web site and start work on the administration and Customer Service functions. Staffing included 3 new IT FTE's, 6 C#.NET programmers, 3 test engineers and an additional project manager to help support the critical project timeline.</p> <p>Of the ten (10) major VRS functions under development this quarter; three (3) pertained to the public internet site, one (1) was for toll booth reservation redemption using the EFS bar code reader, and six (6) pertained to Customer Service/Administration functions. Based on the approved Stakeholder Requirements (August 2011), use cases, wire frames, Photoshop-based user interfaces (UI), and HTML code development were completed for all ten major functions by our Business Analyst and WSDOT Communications team. In addition, detailed requirements, design reviews, and preparation for Usability Testing were also completed for the ten major functions.</p> <p>Solid development methodology was put in place by IT resources, which included automated builds and deployment to the various environments including development, QA/Test, Demo and Staging. An issue tracking system (JIRA) was also put in place this period, which allows project personnel to complete daily triages of issues/bugs in support of the daily build and push to applicable sites.</p> <p>A change request to contract Gateway Ticketing to provide us with the ability to use their bar code reader in the current toll booths for reservation redemptions using an integrated API with VRS and EFS thus eliminating the need for two bar code readers,</p> <p>Project Management artifacts continued to be updated during the quarter and External QA monthly continued to be more favorable moving most categories to the green status level.</p>
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DETAILED STATUS AND ACCOMPLISHMENTS

This Reporting Period's Progress

- Project Management and Governance
 - Project Steering Committee (PSC) meetings scheduled on a recurring monthly basis before the Executive Steering Committee (ESC) meetings
 - Continued support for the PSC and ESC meetings
 - Continued updates to project schedule, resource loading and baseline variance
 - Maintained and updated project reports, budgets/costs, risks, issues and change control

- Completed staffing the development team to full capacity
- Helped facilitate discussions with Gateway for modification of deposit credit against a ticket purchase (for account types guest and general)
- Updated and maintained the project SharePoint site- <http://sharedot/it/wsfvrpii/default.aspx>
- Development
 - Completed the following prioritized functions including creative UI, design, code, test for:
 - Create all account types (General, Up to Premier) – Public Site
 - Make, change and cancel a reservation for guests and all account types (including Commercial) for all Phase 1 routes (by account type)
 - Reservation redemption integrated with Gateway EFS application and using one bar code reader
 - Started Customer service creative UI, design, authentication, code for:
 - Misuse Management
 - Handle changed and cancelled sailings
 - Customer Service Reports
 - Updated changes to VRS database which also uses WSF Foundation database
 - Completed deployment diagrams for all development sites and automated builds
- Human Resources Staffing
 - Project Team now fully staffed at 18 including support from WSDOT Communications
- QA Findings – The following were closed during this quarter:
 - F016 – Refine and Finalize the Project Plan
 - F017 – Complete the Project Charter
 - F018 – Establish recurring meetings for the Project Steering Committee
 - F019 – Augment the Project Staffing Pool
 - F020 – Utilize Tracking Logs

This Reporting Period's Issues / Risks and Mitigation Strategies

Two new risks were identified and closed during this period:

- **Closed - 2012-001 – Risk Medium** – Integration with Gateway EFS to credit a deposit against a ticket purchase thus eliminating the need for a second bar code reader in the tollbooth. Status – initial code received and contract to Gateway should be completed in April/
- **Closed - 2012-002 – Risk High** - Resources – Hiring was completed this quarter, in a very quick and highly effective manner. The team has come up to speed quickly and our risk is now minimal.

Change Control Decisions

One Change Request was Received CR004 Space Allocation for some San Juan Routes – Approved as part of priority 8, Space Management – no project impact.

Objectives for Next Reporting Period – April – June 2012

- Project Management and Governance
 - Update Project Management artifacts and documents as required
 - Manage open risks to resolution
 - Continue updated project reports, budgets/costs, risks, issues and change control
 - Maintain and update project SharePoint site <http://sharedot/it/wsfvrpii/default.aspx>
 - Support meetings and public demonstrations associated with the project and project schedule and milestones – April 25 – Port Townsend
 - Close all open QA Findings
 - Manage live operations for Customer Service – May 17th – priority is Commercial reservations for the summer schedule
 - Manage team to 'go live' June 01. Make a Reservation – Public Web Site deployment –

- all account types plus guest
- Manage team to 'go live' Redeem a Reservation - June 17, at applicable tollbooths
- Manage Completion of all needed prioritized Customer Service/Admin Functions to support live operations dates
- Development
 - Complete design, code, test and deployment of Customer Service Functionality based on business/program priorities
 - Complete system test of all functionality and map to Requirements Traceability Matrix
 - Complete User Acceptance Testing (UAT) – Per Program Test Plan (Approved)
 - Stage all sites to staging and production - Level 3 Approval – Change Management
 - Continue updates as dictated by the business, usability, testing and priorities (JIRA)
- Human Resources Staffing
 - Manage current staff – release IT FTE resources
 - Plan staffing for future releases

SCHEDULE PHASE 1

PROJECT LIFECYCLE >	<input type="checkbox"/> Initiation	<input checked="" type="checkbox"/> Planning	<input checked="" type="checkbox"/> Execution	<input checked="" type="checkbox"/> Implementation	<input type="checkbox"/> Closure
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◆ Major Milestones Current Baseline	Schedule			Milestone Outlook
	Original Baseline	Current Proposed Baseline	Attained	
Project Start Date	4/15/2010	4/15/2010	4/15/2010	Completed
Funding Release	7/8/2010	7/8/2010	7/8/2010	Completed
Market Review	11/30/2010	11/30/2010	12/04/2010	Completed
Project Management Planning & Documentation	8/15/2011	8/15/2011	8/15/2011	Completed
Reservation Phase 1 Business Requirements Complete	8/15/2011	8/15/2011	8/15/2011	Completed
Project Charter (Draft Update)	8/16/2011	12/2011		Update in Progress
Project Management Plan (Draft Update)	10/14/2011	10/17/2011	10/17/2011	Completed
Project Schedule (Resource Loaded)	10/14/2011	10/14/2011	10/20/2011	Completed
Budget	10/21/2011	10/21/2011	10/21/2011	Completed
Risk Management Plan	8/16/2011	8/16/2011	8/16/2011	Completed
Change Management	8/16/2011	8/16/2011	8/16/2011	Completed
Project Reporting	On Going	On Going	On Going	
Stakeholder Business Requirements	8/15/2011	8/15/2011	8/15/2011	Completed
Storyboards (UI Frames)	2/15/2012	3/30/12	3/30/12	Completed
Use Cases for Major functions	3/1/2012	3/1/2012	3/30/12	Completed
Major Functional Releases	10/2011 – 3/2012	10/2011 – 6/17/12		On schedule
Status and Demos for Public Involvement	10/2011 – 3/2012	10/2011 – 3/2012	1/25/12 4/25/12	Completed
ARGO transformation to VRS	3/1/2012	6/01/2012		On Schedule
Credit Card Transaction and Management	3/15/2012	3/15/2012		Completed
PCI Compliance	3/15/2012	8/31/12		Planned

Usability and Compliance	On Going	April 2012		Completed
QA and System Testing	4/1/2012	5/31/2012		Completed for public site – on going for Customer Service
Acceptance Test Procedures	4/1/2012	6/17/2012		UAT Planned for May – June 2012
Live Operation – Starts:				
Coupeville to Port Townsend/Return	4/30/2012	06/01/2012		On Schedule
Anacortes to Sydney/Return	4/30/2012	06/01/2012		On Schedule - New dates per Program decision
Commercial for San Juan Islands	4/30/2012	06/01/2012		On Schedule
Redeem Reservations	6/17/12	6/17/12		On Schedule
Phase One - Release 2	8/30/2012	8/30/2012		As Needed
Phase One - Release 3	11/30/2012	11/30/2012		As Needed

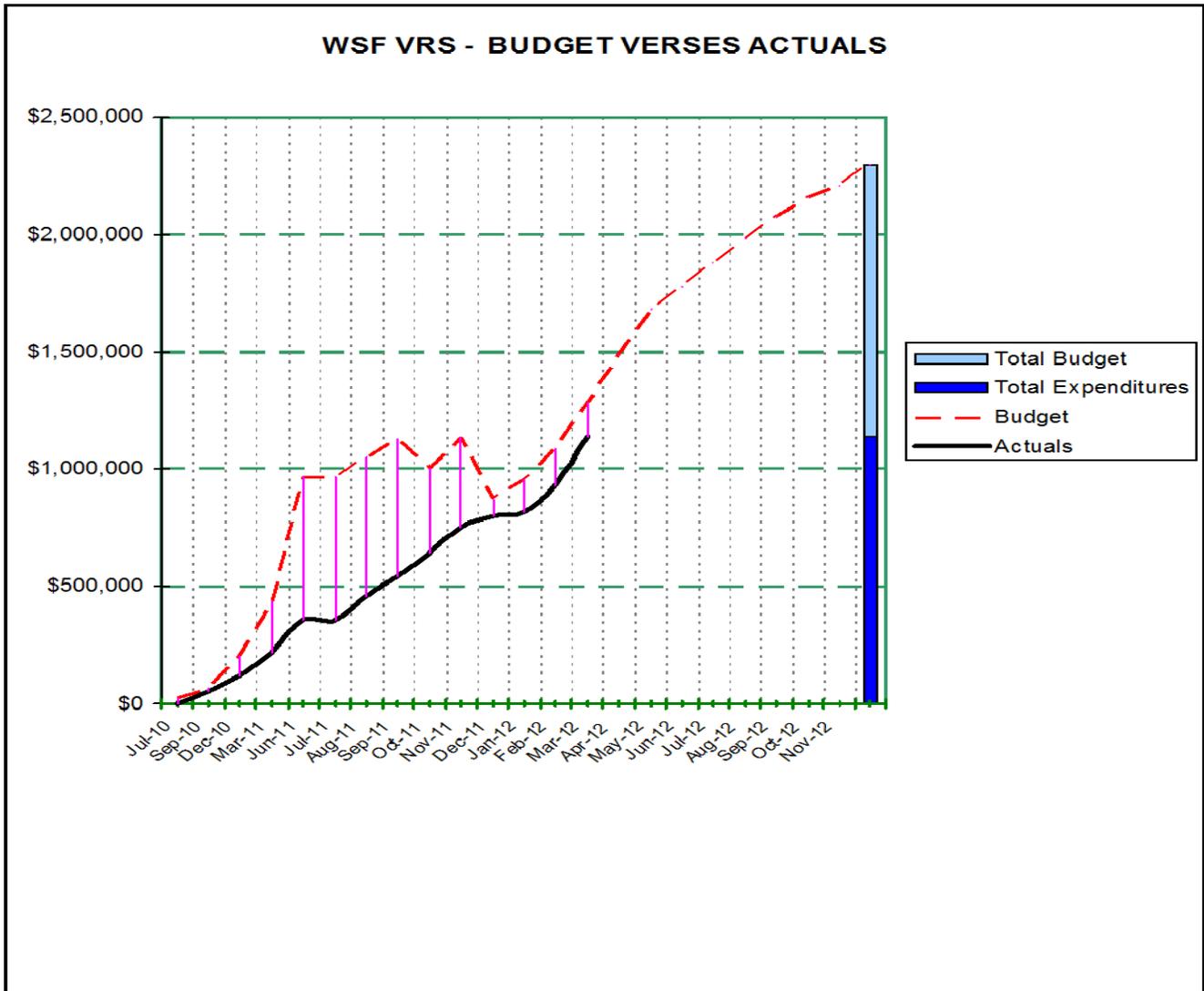
BUDGET

Project Cost Description	Original Baseline Budget (FY10-11) ISB	Current Baseline Nov 2011	Actuals to Date -March 2012)	Projected Amount to Complete (ECT)	Variance from Current Baseline
Task Descriptions					
Architecture - Enterprise Compliance (PCI etc...)	0	42,240	0	42,240	\$0
Creative - UI - Story Board (page maps)	0	166,874	74,247	92,628	\$0
Design and Development- Software - Multi-Tier (FTE's), .NET C# (C), Testers (C)	550,284	706,892	446,515	260,377	\$0
External Services				0	\$0
Berk (Consulting TBD)	15,000	11,239	11,239	0	\$0
Gateway (Change Orders)	0	50,000	0	50,000	\$0
Other		390	1,460		(\$1,070)
Customizations (Buy)	800,000	0	0	0	\$0
Hardware Purchases or Upgrades	80,000	20,000	1,157	18,843	\$0
Legal - Contract Acquisitions (Documents)	26,000	0	0	0	\$0
Maintenance	0	44,800	0	44,800	\$0
Project Management	352,800	447,375	364,353	83,022	\$0
Quality Assurance Oversight – External	61,152	112,762	96,772	15,990	\$0
Requirements (BA) - Consultants	0	140,128	140,128	0	\$0
Reserve Contingency (15% - 11-01-11)	362,285	418,878	0	418,878	\$0
Software License Purchases	500,000	12,316	4,965	7,351	\$0
System Integration (Gateway/Heartland)	0	32,000	0	32,000	\$0
System Test and Acceptance	0	25,600	0	25,600	\$0
Test & Compliance (Usability, Conformance, etc...)	0	21,760	0	21,760	\$0
Training (Includes Documentation)	20,000	38,400	0	38,400	\$0

Travel	25,000	5,000	119	4,881	\$0
Totals	2,792,521	2,296,654	1,140,955	1,155,699	(\$1,070)

*Notes:

1. Actuals do not include accruals or late billings
2. Budget was adjusted in March 2012 – will use reserve for additional FTE's and consultants
3. Phase 1, Release 1 in May – June 2012
4. Added JV transfer amounts from IT (\$125,130)
5. Updated on 4/10/2012 to include March 2012 actuals



A. 2012 IT Portfolio Certification



**Washington State
Department of Transportation**
Paula J. Hammond, P.E.
Secretary of Transportation

Transportation Building
310 Maple Park Avenue SE
Olympia, WA 98504-7300
360-705-7000
TTY: 1-800-833-6388
www.wsdot.wa.gov

August 31, 2012

Bharat Shyam
Office of the Chief Information Officer
Washington State Chief Information Officer
PO Box 43113
210 11th Avenue SW, Suite 300
Olympia, WA 98504-3113

Dear Mr. Shyam,

Bharat
This letter is to certify that the Washington State Department of Transportation (WSDOT) is in compliance with the Office of the Chief Information Officer's (OCIO) information technology (IT) policies and standards for IT Portfolio Management. This includes the following areas;

- WSDOT has reviewed and updated our IT Portfolio, including plans and information for fiscal year 2013. Attached is a copy of the 2012 IT Portfolio for your review. The WSDOT OIT support for two boards (Board of Pilotage Commissioners and Freight Mobility Strategic Investment Board) is included in the 2011 IT Portfolio. Appropriate entries in accordance with the ISB IT Portfolio Standard have been made to the Information Technology Portfolio Management System (ITPMS).
- Appropriate entries in accordance with the IT Portfolio Standard will be made to the Information Technology Portfolio Management System (ITPMS).
- WSDOT's IT Security Program has been reviewed and updated. WSDOT continues to work for full compliance in meeting the new IT security standards by July 2012 as required. There will be changes over the next year as a result of the continued work to meet the standards outlined in Policy 141 and the implementation for compliance with Purchase Card Industry (PCI) standards. The last IT Security Audit was conducted in 2009 and WSDOT was fully compliant with the audit requirements. The next audit is due in July 2013.
- WSDOT's IT Disaster Recovery/Business Resumption Plan has been updated and tested in compliance with the IT Disaster Recovery/ Business Resumption Policy 151. The disaster recovery test was conducted in June 2012. Results of the test are filed in WSDOT Office of Information Technology and included in the appendix of the IT Portfolio.
- WSDOT has updated our agency's GIS information.
- The 2012 IT Certification Checklist is attached.

If you have any questions, please do not hesitate to call Thelma Smith, IT Portfolio Administrator (360-705-7764) or Dave Koch, IT Planning and Administrative Operations Manager (360-705-7764).

Sincerely,

Paula Hammond, P.E.
Secretary of Transportation

tk
Enclosure: Portfolio

*cc: Marty Loesch
Marty Brown*

Agencies and Universities 2012 IT Portfolio Reporting Form

2012 IT Portfolio Form for **Washington State Department of Transportation**
(Agency / University Name)

My agency has entered its agency-level actual IT-related expenditures information for Fiscal Year 2012 into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered its agency-level budgeted and planned IT-related expenditures for Fiscal Year 2013 into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered its agency-level budgeted IT-related expenditures for Fiscal Years 2014 and 2015 into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered all required data for active and proposed major projects into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered its major projects' actual IT-expenditures for Fiscal Year 2012 into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered its major projects' budgeted and planned IT-related expenditures for Fiscal Year 2013 into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered its major projects' budgeted IT-expenditures through the end of the projects (e.g. FY14, FY15, FY16 etc.) including one full year of maintenance into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes

Thelma Smith, WSDOT IT Portfolio Manager

360.705.7728

Name of Person Submitting

Contact Phone #

**Please submit a completed IT
Portfolio Reporting Form to:**

OCIOSubmitPortfolio@ofm.wa.gov

Agencies and Universities 2012 IT Portfolio Reporting Form

2012 IT Portfolio Form for **Board of Pilotage Commissioners**
(Agency / University Name)

My agency has entered its agency-level actual IT-related expenditures information for Fiscal Year 2012 into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered its agency-level budgeted and planned IT-related expenditures for Fiscal Year 2013 into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered its agency-level budgeted IT-related expenditures for Fiscal Years 2014 and 2015 into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered all required data for active and proposed major projects into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered its major projects' actual IT-expenditures for Fiscal Year 2012 into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered its major projects' budgeted and planned IT-related expenditures for Fiscal Year 2013 into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes
My agency has entered its major projects' budgeted IT-expenditures through the end of the projects (e.g. FY14, FY15, FY16 etc.) including one full year of maintenance into the IT Portfolio Management System.	<input checked="" type="checkbox"/>	Yes

Thelma Smith, WSDOT IT Portfolio Manager

360.705.7728

Name of Person Submitting

Contact Phone #

**Please submit a completed IT
Portfolio Reporting Form to:**

OCIOSubmitPortfolio@ofm.wa.gov

Agencies and Universities 2012 IT Portfolio Reporting Form

2012 IT Portfolio Form for **Freight Mobility Strategic Investment Board**

(Agency / University Name)

My agency has entered its agency-level actual IT-related expenditures information for Fiscal Year 2012 into the IT Portfolio Management System. Yes

My agency has entered its agency-level budgeted and planned IT-related expenditures for Fiscal Year 2013 into the IT Portfolio Management System. Yes

My agency has entered its agency-level budgeted IT-related expenditures for Fiscal Years 2014 and 2015 into the IT Portfolio Management System. Yes

My agency has entered all required data for active and proposed major projects into the IT Portfolio Management System. Yes

My agency has entered its major projects' actual IT-expenditures for Fiscal Year 2012 into the IT Portfolio Management System. Yes

My agency has entered its major projects' budgeted and planned IT-related expenditures for Fiscal Year 2013 into the IT Portfolio Management System. Yes

My agency has entered its major projects' budgeted IT-expenditures through the end of the projects (e.g. FY14, FY15, FY16 etc.) including one full year of maintenance into the IT Portfolio Management System. Yes

Thelma Smith, WSDOT IT Portfolio Manager

360.705.7728

Name of Person Submitting

Contact Phone #

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OCIOSubmitPortfolio@ofm.wa.gov

B. Security Compliance Certification Letter

CHRISTINE O. GREGOIRE
Governor



STATE OF WASHINGTON

OFFICE OF THE CHIEF INFORMATION OFFICER

P.O. Box 43113 • Olympia, Washington 98504-3113 • (360) 902-0407

February 6, 2012

Ms. Paula Hammond, Secretary
Washington State Department of Transportation
PO Box 47300
Olympia, WA 98504-7300

Dear Ms. Hammond:

Thank you for your letter certifying your agency's compliance for 2011 with the Information Services Board's (ISB) Information Technology Policies and Standards. The ISB policies and standards have been adopted by the Office of the Chief Information Officer (OCIO).

OCIO staff have conducted a thorough review of your agency's certification letter and supporting documentation and confirmed you are in compliance. Our records show the next IT Security Policy and Standards Compliance audit for your agency is due August 2013.

Please contact Tom Parma at (360) 902-3552, tom.parma@ofm.wa.gov, if you or your staff have questions. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "R St. John".

Rob St. John
Deputy Chief Information Officer

cc: Grant Rodeheaver, WSDOT
Tom Parma, OCIO

C. Disaster Recovery Test Results

Disaster Recovery Services Post-Rehearsal Report

Created by
Washington State Department of Transportation
In response to rehearsal held
June 4th through June 8th, 2012

Data Management
Disaster Recovery Services
3225 Jordan Boulevard
Malabar, FL 32950

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WSDOT Post-Rehearsal Report

Introduction

This report details a joint-summary of Washington State Department of Transportation's recent Disaster Recovery rehearsal. It includes established objectives and results, issues raised during the rehearsal and/or post-rehearsal review, and other focus items and recommendations. If you have any questions or comments concerning this report, please contact Cal Smith.

History

Washington State Department of Transportation signed a Disaster Recovery Services contract with Data Management in March 2010. The plan is to rehearse semi-annually. The June rehearsal was the third test conducted at the Data Management Disaster Recovery site in Malabar, Florida. This rehearsal included testing several of WSDOT's critical mainframe applications (TRAINS, CPMS, TRIPS, and Labor).

Rehearsal Period

REHEARSAL HELD JUNE 4 th - JUNE 8 th 2012	
Hours allotted annually for rehearsal:	48 Hours
Hours accrued from previous rehearsal:	0 Hours
Time consumed during this rehearsal:	40 Hours
Year-to-date time consumed:	40 Hours
Remaining available time for this year:	8 Hours
Overtime testing hours:	0 Hours

Staff Participation

Data Management
Mike Everette, Technical Support Manager
Tracy Beckett, Technical Support
Jeff Harner, Technical Support
Ana Garcia, Systems Programmer
Washington State Department of Transportation
Cal Smith, Mainframe Technical Support Manager
Arne Hansen, Mainframe Technical Support: (Operating System)
Greg Killian, Mainframe Technical Support: (Subsystem Support)
Billie Rosen, Mainframe Technical Support: (Database Support)
Shane Cagle, Mainframe Technical Support: (Network Support)
Lorri Johnstone, Computer Operations (Operator, Day Shift)
Gary Anderson, Computer Operations (Operator, Graveyard Shift)
Barb Robles, Computer Operations (Production Control)
David Brown, Network Support
Pat Weldon, Mainframe Applications Support (TRIPS)
Hung Pham, Mainframe Applications Support (CAPS)
Diane Frederickson, Mainframe Applications Help Desk (TRAINS)
Tim Harris, Mainframe Applications Support (TRAINS)
Connie Baker, Mainframe Applications Support (Labor)
Marcus Dabney, Mainframe Applications Support (WSF & Labor)
Peter Schultz, Mainframe Applications Support (CCIS, Prequal, ATMS, MinorCap, Endeavor)
Tod Haskell, Customer (CPMS)

WSDOT Post-Rehearsal Report

Rehearsal Objectives

The following systems were tested:

OBJECTIVE	RESULT
▪ Restore production operating environment from month-end backups in May.	Successful
▪ Use "HOTTAPE" to restore WORKxx, JES2 ckpt, Spool, etc. volumes.	Successful
▪ Establish connectivity between WSDOT and DR-site using AnyConnect VPN.	Successful
▪ Use non-WSDOT resources for all communications.	Successful
▪ Use non-WSDOT, isolated, location for all communications.	Successful
▪ Have non-expert user select and ship DR tapes to recovery location.	Successful
▪ Have non-expert user establish DR computer communications.	Successful
▪ Have non-expert user restore ADABAS.	Successful
▪ Have non-expert user apply software licenses.	Successful
▪ IPL Production z/OS Operating System.	Successful
▪ Restore production environments.	Successful
▪ Test SYSPLEX and COUPLE dataset recovery plan.	Successful
▪ Restore WLM dataset from flat file backup.	Successful
▪ Re-define TAPE esoteric to point to 3590's instead of the VTL.	Successful
▪ Test TSO and console pooling.	Successful
▪ Verify functional recovery of HSM volumes.	Successful
▪ Transfer data from DR site to personal computer.	Successful
▪ Transfer recovery tape reports from Iron Mountain to personal computer.	Successful
▪ View ITOC monitors remotely.	Successful
▪ Perform Application Testing.	Successful
▪ Test AFRS data transfer and application access via Enterprise Extender connection at CTS.	Successful
▪ Obtain all DR procedures from non-WSDOT location.	Successful
▪ Establish Communications to CTS using Enterprise Extender.	Successful
▪ Establish connectivity using simulated "home" computer (no Attachmate or VPN client).	Successful
▪ Establish connectivity using Citrix connection from non-WSDOT location.	Successful
▪ Establish connectivity using AnyConnect VPN client from non-WSDOT location.	Successful
▪ Establish connectivity between WSDOT and DR-site using IPSEC VPN.	*Unsuccessful
▪ Print mainframe information.	*Unsuccessful

** Note: Unsuccessful items are being addressed through the network with a design and configuration change to allow VPN connection to print from Florida VPN connection.*

Issues:

- WSDOT lost terminal and console connections over the AnyConnect Virtual Private Network (VPN) several times a day during this Disaster Recovery (DR) exercise.
 - We were unable to establish IPSEC VPN connectivity due to various network and firewall issues.
 - Console pooling did not always work properly due to a limited number of defined console devices.
 - AFRS testing was interrupted by a previously scheduled CTS outage.
 - Iron Mountain dataset naming standard prevented the use of meaningful names.
 - Iron Mountain DR document storage did not allow for the use of folders. Consequently, the data was in a lengthy list that frustrated finding documents.
 - We needed to call to get the OSA CHPID's 00 and 02 configured.
 - We needed to call to get tape drives 0BC0-0BC3 configured.
 - No data mart processes were recovered.
 - Network backbone was not recovered.
 - The DR machine could not originate an FTP process.
 - There was no printing available from the DR machine.
 - Standardized DR document naming at Iron Mountain were too long to show useful information at the end of the names which were truncated from view.
 - While establishing connection between home and DR site, it was difficult to see what was on another's computer to assist connection difficulties. Screen snapshots and email were used successfully.
 - Remotely-viewed ECM Monitor showed non-existent problems.
-

Contingency Plan Status

Washington State Department of Transportation will provide Data Management Disaster Recovery Services with a documented contingency plan.

WSDOT Post-Rehearsal Report

Recommendations / Future Objectives

- Continue to restore all files and data on the mainframe and test VDR files for accessibility by running a TRAINS nightly cycle and other applications which use these tape files (e.g. CPMS, Labor).
 - Continue to establish connectivity between DR site and CTS using Enterprise Extender.
 - Establish connectivity between DR site and CTS's DR site using Enterprise Extender.
 - Establish connectivity between DR site and WSDOT using IPSEC VPN.
 - Establish connectivity between DR site and non-WSDOT locations using IPSEC VPN.
 - Have non-WSDOT HQ staff perform the recovery.
 - Test mainframe printing from the DR site to both home and non-HQ locations.
 - Test bi-directional FTP from the DR site.
 - Establish business objectives for the DR test.
 - Improve our RPO time by changing backup processes.
 - View another person's pc session remotely to assist with settings.
 - Continue to establish remote connectivity with ITOC monitors.
-

Additional Comments

The following comments were noted at the disaster recovery post-rehearsal meeting:

- Determine the cause of terminal and console sessions dropping. This was irritating and caused critical messages to be missed.
 - WSDOT and Data Management will explore an in-house system or a second Logical Partition (LPAR) for a rescue system and a z/VM system that WSDOT can access.
 - WSDOT would like to have a remote Hardware Maintenance Console (HMC), although Data Management was very responsive to all of our IPL requests.
 - Identify all application datasets that require synchronization with ADABAS backups. These datasets will be allocated on special volumes that are backed up daily along with the ADABAS files.
 - Verify all required volumes are on the weekly stacked backup tapes to facilitate quicker system recovery.
 - Store scratch tapes on-site at Data Management.
 - Establish a secure web site for the storage of DR procedures, programs, and notes. This web site needs to be able to use folders to organize information.
-

Recovery Time Achieved

RPO: The Recovery Point Objective was seven days and 19 hours. This is the maximum RPO. The average RPO is two and one-half days.

RTO The Recovery Time Objective was 48 hours. In a real event the system could be recovered in about 36 hours or less.

Next Anticipated Rehearsal

Rehearsal Date: Exact date of this rehearsal has yet to be determined but must be performed by July 31, 2013.

Rehearsal Type: Restore mainframe operating system, applications, and enterprise data and verify functionality.

Requirements at Time of Disaster

Personnel: A minimum of three people are needed in a disaster recovery situation. One person from Data Management at the DR site and two people from WSDOT at any location.

Hours: 24x7

Critical Applications: See Disaster Recovery Contingency Plan

Telecommunications See Disaster Recovery Contingency Plan
