October 2012

# Washington State Department of Transportation

2005-2012: Legacy and future direction















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It has been my pleasure serving as Secretary of Transportation in the cabinet of Gov. Chris Gregoire. Her leadership and interest in a 21st century transportation system that supports our economy, communities and environment have been vital to our progress over the past eight years.

WSDOT became a cabinet agency in 2005, having reported previously to the Washington State Transportation Commission. We are a better transportation agency than we were eight years ago because of the Governor. We have worked hard to meet her expectations, and the public's, for accountability, transparency, performance management and focus. We have built public trust in the fact that we use their gas taxes to deliver real projects with tangible benefits in safety, mobility and transportation options.

With the Governor's leadership, our decision-making has been better integrated with the goals of the state – on issues such as commerce, the environment, major business, and ports, among others.

Over the past eight years, we have had our challenges in transportation – from continuing to deliver the largest transportation-infrastructure program in the history of the state to declining gas tax revenues during the worst recession in 80 years and future transportation revenues that are severely limited.

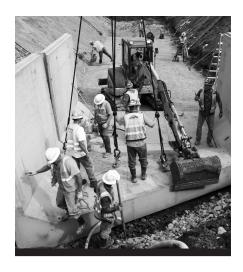
We have celebrated successes such as tearing down the southern half of the vulnerable Alaskan Way Viaduct and moving forward with a 1.7-mile-long tunnel to replace it. The 2001 Nisqually earthquake was a wake-up call in terms of the vulnerability of the aging viaduct, and the Governor, in 2009, brought politicians and stakeholders together and said simply, "It's time to get the job done." She made the tough decision that, for generations to come, will change the face of the Seattle waterfront and help move regional traffic efficiently for the next 100 years.

The Governor provided similar leadership and support to replace the vulnerable SR 520 floating bridge across Lake Washington when she said it was time to make a decision and move forward. We are now in the midst of building a new floating bridge – the longest in the world.

There have been other difficult decisions to make, such as pulling four deteriorating Steel Electric-class ferries from service on a vital



The Governor's leadership over the past eight years has given us a single point of accountability and management – and a person who has provided support and ownership of our state's transportation future.



We've demonstrated time and time again, that we deliver projects on time and on budget. And, we managed to deliver our state's largest transportation construction program ever – \$16.3 billion worth of statewide transportation improvements – at a time when jobs were needed most.

marine highway on the Olympic Peninsula in 2007. The Governor then helped us with the daunting tasks ahead: determining how to serve the impacted routes in the short term and supported our endeaver to build safe, 21st century ferries.

We have had the Governor's full and engaged support as she created and chaired the Connecting Washington Task Force to develop a 10-year sustainable investment strategy that ties system needs and priorities to new revenue.

We've demonstrated time and time again that we deliver projects on time and on budget. And, we managed to deliver our state's largest transportation construction program ever – \$16.3 billion worth of statewide transportation improvements – at a time when jobs were needed most.

And, as I write this, we are in the midst of significantly reducing the size of WSDOT workforces, as necessary by reduced workload. This action must be made, but the Governor and I know it affects real people's lives and livelihoods and we don't take it lightly.

While we currently deal with insufficient revenues to maintain, preserve and operate our existing multimodal transportation system, we're hopeful that Washington citizens and legislators see the need to keep our existing system strong and functioning and to strategically expand our system of highways, bridges, ferries and rail to meet the growing demands that are sure to come.

We are positioning WSDOT to be ready to quickly deliver new projects when the opportunity comes. In addition to shrinking the size of our workforce and cutting administrative costs by \$56 million, with more to come, we have taken a fresh look at nearly everything we do, including consolidating offices, eliminating functions, scaling projects differently, sharing resources and pressing for innovations and efficiencies.

And, we continue to rely heavily on our Moving Washington strategy. Under this three-pronged approach, we first focus in on operating the existing system as efficiently as possible. Second, we think about how to better manage the demand. Finally, and only after operating efficiently and managing demand, do we then consider strategically adding capacity.

There is much yet to finish in our state's transportation system – from completing the mega-projects, to making it truly multimodal, to maintaining and preserving the existing system. Hopefully, what has been accomplished in the past eight years will serve well those who now pick up the mantel of the future.

Paula J. Hammond, PE

WSDOT Secretary of Transportation

#### Chapter 1

# Transportation touches everyone, everyday

#### Transportation is the backbone of our state's economy

It's hard to think of anything in our daily lives that isn't somehow touched by transportation – from the furniture in our homes, to the food we eat, or to the way we get around, whether by car, bus, rail, ferry, bicycle or walking. We all depend on a functioning transportation infrastructure.

At the Washington State Department of Transportation, our core mission is to keep people and business moving by operating and improving the state's transportation systems. Transportation is the foundation that moves goods to market, people to jobs, and families to activities. Maintaining, preserving and improving Washington's statewide, multimodal transportation system is essential.

We've enjoyed a robust transportation construction program in recent years. As a result of those projects, we have the lowest traffic fatality rate in our state's history, improved mobility in key commuter and freight corridors, and increased the efficiency of our existing system. Additionally, transportation investments create living-wage jobs, spur economic recovery, promote vibrant communities, and position businesses for the global economy.

WSDOT has proven over and over that we can deliver on time and on budget. As we enter the 2013-2015 biennium, our major transportation improvement projects will be nearing completion or completed. Future gas tax revenue collections will repay the bonds that were used to fund construction of these projects for the next 30 years.



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We face a perfect storm of challenges and opportunities as demands on our transportation system increase, while revenues decrease. Our challenge will be maintaining and preserving the system that we've built, and our opportunity will be to expand on successful innovations and efficiencies in our programs. We are positioning WSDOT to be ready to strategically use new transportation revenue when the time comes.



We're putting information at citizen's fingertips when and where it's convenient for them to access.

#### WSDOT continues to evolve

As Gov. Chris Gregoire started her first term in 2005, WSDOT celebrated its 100th year as a state agency. That year, the department also became a cabinet agency, changing WSDOT's decades-long reporting relationship to the Washington State Transportation Commission, a governor-appointed, citizen commission.

During this transition, then Secretary of Transportation Doug MacDonald was reappointed by the Governor and continued serving as the agency's executive director until he resigned in 2007. Following a nationwide search, Gov. Gregoire appointed WSDOT's own Paula Hammond as Secretary of Transportation, making her the first female in the agency's history to serve in this important leadership role.

At the same time, WSDOT began delivering the largest construction program in its history - \$16.3 billion in transportation investments funded by 2003 and 2005 gas tax increases.

#### Working to meet citizen's expectations

As the state struggles with the effects of a national recession, WSDOT remains flexible. We have transformed our business practices as we improve transparency, accountability, project delivery, business partnerships and communications. Our goal is to work better, faster, cheaper.

Although we are positioning our agency for a future decline in revenue, public expectations for the programs and services we provide remain high. Ferry users depend on Washington State Ferries to provide key transportation links to communities across the Puget Sound; drivers expect highways and bridges to remain passable and safe in all weather conditions; urban commuters want accurate, real-time travel information at all hours to help them reach their destinations; and, local governments expect state support for transportation facilities and public transportation services in their communities.

Washington's taxpayers also expect accountable, accessible and understandable information about how their tax dollars are spent and the benefits they receive for their transportation investments. We've responded with new and creative ways to reach out and involve the public.

For example, WSDOT brought attention to what was being predicted to be a traffic nightmare, labeled "Viadoom," during a week-long closure to demolish the south end of the Alaskan Way Viaduct. We held a "One Last Shot" contest that would allow the winner 30 minutes to use the closed structure. This was part of a pre-demolition event that opened the viaduct to the public for one last look before we began taking it down. The contest and event were a great success, bringing widespread attention to the project while raising awareness of the traffic impacts and need to plan ahead during the closure.

We're putting information at citizen's fingertips when and where it's convenient for them. We're using new technology to engage people through our website, social media and mobile applications. As of September 2012, WSDOT has more than 26,000 followers on Twitter, more than 4,700 Facebook likes, more than 200,000 mobile apps downloads and Flickr views in excess of 18 million.

# Chapter 2 WSDOT Delivers

#### Rolling up our sleeves

The combined revenue packages from the 2003 "Nickel" gas tax and the 2005 Transportation Partnership Act (TPA) gave us the largest construction program in the agency's history: 421 projects, representing a \$16.3 billion investment. These projects were bonded, allowing us to build them and realize the benefits now, while paying for them over time.

With the funding in place, it was time to roll up our sleeves and begin the real work of project delivery. We recognized that delivering a program of this size, on time and on budget, would require innovation, collaboration and efficiency. As a result, we applied value engineering, implemented best practices from other states, worked with the construction industry to identify efficiencies, worked with regulatory and resource agencies to streamline permitting processes and used design-build contracting methods on some of our largest projects. Additionally, we contracted with the private sector to deliver more than 50 percent of the design effort for the Nickel and TPA.



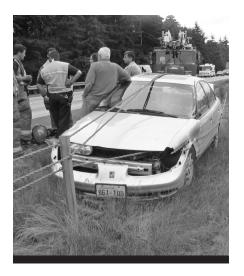
Investing in transportation creates living-wage jobs, builds the infrastructure to support long-term economic growth and supports the flow of commerce that keeps businesses, large and small, operating.

Our efforts have been successful. By the end of 2012, 88 percent (372) of the 421 projects will be either completed or under construction. As of August 2012, 81 percent of these projects have been delivered both on time and on budget.

#### Transportation investments provide real benefits

Investing in transportation creates living-wage jobs, builds the infrastructure to support long-term economic growth and supports the flow of commerce that keeps businesses, large and small, operating.

We're making strategic corridor investments for increased mobility on some of the state's most congested highways. For example, a new auxiliary lane on northbound I-405, NE 195th to SR 527 in Bothell,



Reducing the factors that contribute to severe or fatal collisions on Washington's highways is a top priority for WSDOT and other state agencies. reduced the duration of congestion by 73 percent (from 3 hours, 40 min. to one hour) and increased throughput by 10 percent – from 5,000 vehicles per hour to 5,500.

The SR 167 HOT lanes are demonstrating that we can reduce congestion by managing demand. The HOT lanes allow solo drivers to pay a toll to use the high-occupancy-vehicle lane. The fourth anniversary of the SR 167 HOT lanes pilot project was marked by fewer delays, faster trips and, for the first time, toll revenues that exceeded expenditures. HOT-lane drivers save an average of nine minutes northbound and six minutes southbound during peak hours. Since the project launched in 2008, peak-hour volumes for the general-purpose lanes have decreased by an average of approximately 5 percent, while speeds have increased by 4 percent. Peak-hour HOT-lane volumes have increased by 15 percent, while speeds have remained consistently at 60 mph.

#### Our highways are safer

Washington is turning back the clock on traffic fatalities, lowering numbers to levels not seen in six decades. In 2011, the fatality rate continued to decline, giving us the lowest number (458) recorded since 1954. Reducing the factors that contribute to severe or fatal collisions on Washington's highways is a top priority for WSDOT and other state agencies. Our use of low-cost strategies contributes to the Governor's "Target Zero" safety plan. Target Zero's goal is to reduce statewide fatalities and serious injuries to zero by 2030. Low-cost improvements such as cable median barriers and centerline and shoulder rumble strips, together, have reduced serious and fatality collisions by up to 56 percent.

#### Washington captures federal transportation dollars

At a time when state budgets are shrinking, WSDOT is using every opportunity to stretch state dollars further. We've been successful in applying for and capturing federal transportation grant dollars, including American Recovery and Reinvestment Act, Transportation Investment Generating Economic Recovery, and high-speed rail.

Washington received \$555 million for 219 ARRA projects that are now complete (213 projects) or under construction. These projects provided workers with nearly 5.4 million labor hours and more than \$218 million in payroll. TIGER grants are being used to build the US 395 North Spokane Corridor (a total of \$45 million in two separate grant awards) and to improve traffic flow on I-5 near Joint Base Lewis-McChord (\$15 million). Another \$4.2 million was awarded to Washington State Ferries for four projects to make ferry vessel repairs, upgrade terminal communication systems, replace safety equipment, and preserve the Lopez dock.

We've also been successful capturing high-speed-rail funds, including turn-back funds from other states, totaling \$791 million for improvements to the Cascade rail corridor between Vancouver, Wash., and the Canadian border.

#### **Washington Jobs Now initiative**

These projects have provided Washington's citizens benefits that include increased safety, reduced travel times, congestion relief and freight mobility. Some preserve and extend the useful life of the facility or, in the case of ferries, replace old and obsolete vessels.

#### Mega projects:

- Tacoma Narrows Bridge
- Hood Canal Bridge
- I-405 expansion
- Alaskan Way Viaduct
- SR 520 Bridge replacement and HOV project (Aberdeen graving dock)
- I-90 Snoqualmie Pass
- US 395, North Spokane Corridor
- Columbia River Crossing

#### Other significant projects:

- Pierce county HOV
- Manette bridge
- I-5 Everett HOV
- I-5/SR 161/SR18 Triangle improvements
- Nalley Valley viaduct
- SR 167 Tacoma to Puyallup extension
- SR 509 SeaTac to I-5 extension
- SR 522 Kenmore to Monroe
- US 12 Wallula to Walla Walla
- I-5 corridor JBI M

#### Ferries:

- Kwa-di Tabil, three 64-car ferries
- Keller ferry replacement
- 144-car ferries under construction



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# Chapter 3 Our challenges and opportunities

# We have a transportation funding crisis

Like many states across the nation, funding for Washington's transportation system is insufficient over the long term. Projected increases in population and freight movement, coupled with flat or declining transportation revenues, are placing a tremendous strain on the state's ability to maintain and preserve its transportation system.

With current funds committed, projected future revenues are insufficient to cover basic maintenance and preservation of highways, ferries and bridges, and there are no new projects in the pipeline. We go into our budget preparation knowing we are about \$300 million per year short in 2013-15 of the revenues needed just to maintain, operate and preserve our highway, ferry and rail systems at current levels of service.

Fuel-efficient vehicles, people driving less and a weaker economy mean fuel consumption is flat. With the recent congressional passage of MAP-21, federal transportation dollars look to hold at current levels for the next two years, but the long-term health of the Highway Trust Fund suggests a future decline in federal dollars. The problem is compounded by increasing building costs due to higher fuel and materials prices, regulatory changes, and increasing labor costs.

In 2011, Gov. Gregoire formed the Connecting Washington Task Force to review statewide transportation needs and recommend the most promising investment options and revenue sources. The Connecting Washington report identified \$50 billion in statewide system needs and recommended a 10-year investment strategy of \$21 billion. With this new focus and recommended investment strategy, the agency was hopeful of a revenue proposal that would be put before the voters in November 2012.

Unfortunately, the Governor did not move her \$3.68 billion transportation funding proposal forward. Education funding needs and public opposition to new taxes during a recession weighed heavily in this decision. Current projected transportation revenues are insufficient to achieve the performance objectives recommended by the Connecting Washington Task Force.

In the meantime, the state's ferry system remains critically underfunded. Operating costs for fuel and labor continue to outpace fare-box collections. Funds dedicated for ferry and terminal preservation and other ferry needs are only sufficient to cover debt repayment for projects



With current funds committed, projected future revenues are insufficient to cover basic maintenance and preservation of highways, ferries and bridges, and there are no new projects in the pipeline.



The transportation system is not a two-year plan; it requires a consistent vision, steady leadership, a strategic approach, legislative support and a sustainable funding source.

built in the 1990's. In recent years, the ferry system has had to rely on transfers and funding from other state transportation accounts to maintain, operate and preserve the existing system, as well as to build new ferry vessels. Those funds are not keeping up with the demands of the transportation system.

The challenges facing WSDOT require strategic choices to ensure the department is well-positioned to meet its core mission. Over the past four years, WSDOT has reduced overhead and administration by \$56 million. We continue to look for operational efficiencies by combining offices and functions, sharing resources and specialty expertise among our regions and applying Lean practices to business functions such as sign replacement and highway-data collection.

### Here today, gone tomorrow: The effects of initiatives and referendums

Washington's transportation system funding has historically traveled a bumpy road as a result of initiatives and referendums. To illustrate, in the late 1990's voters passed Referendum 49, which allowed transfers from the Motor Vehicle Excise Tax fund to pay for transportation projects. The following year, voters eliminated the MVET as a funding source for transportation projects through Initiative 695. In 2002, voters rejected a proposed gas tax increase (Ref. 51) and then in 2003 and 2005 approved a combined 14.5-cent gas tax increase.

The point of all of this is that the start-stop-start again nature of transportation funding makes it difficult for long-term, strategic planning in terms of both program development and workforce needs. The transportation system is not a two-year plan; it requires a consistent vision, steady leadership, a strategic approach, legislative support and a sustainable funding source.

#### Scrutiny of every dollar spent, every action

At a time when many people are tightening their belts, it's no surprise they expect government agencies to do the same. Every tax dollar spent, every program and every service is being examined in great detail to look for efficiencies, performance and waste. WSDOT is no exception.

Over the past 10 years, WSDOT has been the subject of nearly 50 external performance audits examining many aspects of the agency, such as ferries, maintenance operations, construction contracting, administration and overhead, congestion and stormwater. We are committed to performance accountability and strongly support the use of audits as an important tool to improve our operations. WSDOT takes audit suggestions for improvement seriously and prepares detailed action plans to address any findings.

In this age of new technology where anyone can shoot video, report on incidents, and post directly to the Web, we've been challenged to monitor social media and jump into the conversation, when necessary, to set the facts straight. In just one of many examples is one person's Tweet of seeing a WSDOT worker in a state vehicle "chatting up a bikini barista during work hours" and wasting tax dollars. After some quick research, we were able to report back that the employee was informing the coffee-stand employees that their advertising sign was illegally placed in the highway right-of-way and needed to be moved. By responding, we turned a story of an inappropriate use of state resources into one of a worker doing his job.

#### Into the eye of the storm

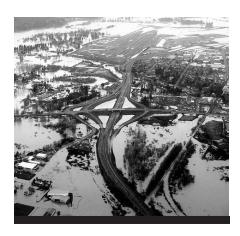
Washington's widely ranging climate and geology hands us some of our biggest challenges, as well as greatest opportunities for improvement. Transportation is a 24/7 operation and we've been tested by the some of the worst and most unpredictable conditions: winter snow and ice storms; torrential rains, washouts and flooding; and landslides and rock falls. Through it all, we've kept our focus on safety for both travelers and our workers and used these challenges to better prepare for future events.

Winter 2006-2007 produced a series of events that tested our abilities and resources. It began in early November with a "Pineapple express" that dumped up to 9 inches of rain in the Puget Sound region, causing 30 road closures on state highways. Then, the "Monday Night Football Storm" hit Puget Sound just as the evening commute was getting under way. As temperatures dropped rapidly, wet roadways quickly became sheets of ice, buses jackknifed, traffic came to a standstill and our maintenance equipment was rendered useless, stuck in traffic. After the game, another 50,000 vehicles overwhelmed the highway system and many drivers spent a cold night in their cars. More snow fell during the Thanksgiving holiday weekend and as a result, an unprecedented 12 million page views crashed WSDOT's website. Then in December, the strongest winds since the 1993 Inaugural Day storm hit the coast with gusting winds of 90 mph, 70 mph inland and record-breaking 113 mph gusts at Chinook Pass. Trees and power lines closed portions of state routes in 90 locations.

WSDOT has made several changes as a result of the lessons learned from these extreme situations. We consult with multiple weather-reporting services to get the most accurate weather predictions and use them to guide decisions on maintenance staffing. We've modified snow and ice plans to include multiple material-stockpile locations and use smaller vehicles that can move in and around traffic jams to treat roadways. We've increased our Web server capacity and redesigned the way pages load to avoid slowdowns of Web traffic, allowing us to handle a greater amount of page views during emergencies. We've instituted emergency operations centers in our headquarters and each of six regions across the state to better coordinate resources and information during widespread emergencies.

After the Chehalis River flooded in December 2007, closing I-5 for four days, WSDOT developed a new Commercial Vehicle Pass system. This system authorizes delivery of emergency, essential, and other goods that support the state's economy during disruptions of major truck routes. Washington is the only state to pre-determine priority load categories for disruptions of key freight corridors so shippers and carriers can plan ahead. Plans are in place for all of Washington's key freight corridors.

Natural disasters give WSDOT an opportunity to shine and show Washington's citizens what we do best. On Oct. 11, 2009, a massive landslide uplifted and destroyed a quarter mile of State Route 410 in Yakima County and changed the landscape and river dynamics of the Nile Valley forever. WSDOT coordinated with as many as 15 other agencies to establish an emergency route around the landslide. In addition, Gov. Gregoire tasked WSDOT and crews with building a temporary detour route, which crews completed in November 2009. A new, permanent route along the toe of the landslide opened to traffic in August 2012. WSDOT has been widely recognized for its emergency-response efforts, project coordination and management, and environmental restoration, including a Senate Resolution (8690) and a state Extra Mile Award.



After the Chehalis River flooded in 2007, closing I-5 for several days, WSDOT developed a new Commercial Vehicle Pass system. This system authorizes delivery of emergency, essential, and other goods that support the state's economy during disruptions of major truck routes.



Gov. Gregoire was instrumental in bringing all parties together in a collaborative process that resulted in an agreement between the state, King County and city of Seattle to build a deep-bored tunnel.

#### Long-range plans and changing conditions

Some of Washington's largest construction projects spend many years in the planning stage before the first shovel of dirt is ever turned. A significant amount of time is required to examine the potential impacts of possible routes, configurations, features and costs. We must then obtain community consensus for the preferred solution, create a plan to pay for it, develop the detailed project design, purchase right of way, obtain necessary permits and, finally, contract with a builder. In any step along the way, changing conditions can bring progress to a screeching halt.

The Alaskan Way Viaduct, damaged by the 2001 Nisqually earthquake, highlights some the hurdles we may face in getting projects to the construction phase. At the center of this debate was whether to replace the viaduct with another elevated highway or build a tunnel. Competing interests with differing agendas, a changing political landscape and an advisory election, which resulted in Seattle's voters rejecting both options, created an impasse over what to build and how to pay for it. Gov. Gregoire was instrumental in bringing all parties together in a collaborative process that resulted in an agreement between the state, King County and city of Seattle to build a deep-bored tunnel. Tunnel boring will begin in 2013.

The SR 520 Bridge Replacement and HOV Project is another example of how competing interests can impact transportation projects. The SR 520 bridge serves Lake Washington's communities and is a critical link in the regional transportation network. Everyone agreed the vulnerable bridge needed to be replaced and in 1997 the Trans-Lake Washington Study set out identify a set of solutions to improve mobility. At issue were philosophical differences between regional transportation advocates who wanted to build eight lanes to accommodate future growth and the environmental community who advocated for four lanes to encourage greater use of public transportation. After years of controversy, studies and debate, Gov. Gregoire stepped forward in November 2007 and identified a six-lane replacement as the state's preferred alternative. Through her leadership, a collaborative process was put in place and set WSDOT on the course for doing what we do best – delivering a six lane bridge, four general purpose lanes and two HOV lanes, that will improve regional traffic for future generations.

#### Avoiding injury while using "cutting edge" technology

WSDOT has a long history of using technology to help manage traffic and operate efficiently statewide. Examples include traffic loop detectors, traffic cameras, and highway advisory radios, along with road and weather information systems. In major urban areas, ramp metering is an effective strategy for controlling the flow of traffic onto freeways. In addition, we're using GPS technology to calculate the estimated arrival time of ferries for our Web-based VesselWatch, which provides trip reliability information to customers.

Electronic tolling uses some of the most advanced information technology available to keep traffic moving with no toll booths, no stopping, and no slowing down. Washington is also one of the first states to use an Active Traffic Management system and variable speed limits to increase roadway efficiency and help drivers travel safer and smarter.

Being the first has its challenges, especially if the change affects driver habits and stretches the expertise of vendors. Other states have tolled roads, but these are newly-built facilities. No other state has ever tolled an existing facility. After more than 30 years of a free ride, WSDOT started tolling drivers crossing the State Route 520 bridge in December 2011. Ensuring drivers were ready for this big change required intensive market research, planning and educational outreach.

The start of SR 520 tolling also marked the end of a challenging year of delays launching a complex toll system. WSDOT introduced an accounting system that will provide a higher level of transparency and accountability than any other toll system in the nation. The system will be able to track every transaction by each toll facility and any future facilities. This new accounting process sets up WSDOT for the next decade and sets a new standard for the industry.

Investing taxpayer dollars on new technology comes with its own set of challenges. For example, with ATM and other real-time information, the value of "turning on a sign" may not be as obvious to people as opening a new lane. It may take several years of data to demonstrate the safety benefits of ATM because "collisions avoided" are benefits that are harder to calculate or estimate. In addition, new technology may not always operate as we expected and the "bugs" are fine-tuned in public eye. While we know these adjustments are normal, drivers may perceive them as an indication of a faulty system.

#### The take away: Lessons of accountability

One of our best tools for demonstrating that taxpayer dollars are being used for projects that provide real benefits is "The Gray Notebook." Now in its tenth year, the quarterly performance report is still going strong and continues to improve under the direction of Secretary Paula Hammond. "Governing the States and Localities" magazine blog hailed the Gray Notebook as providing "gold standard data in a way that tells a story and is accessible to the average reader."

Performance-based management is essential for transparent and accountable spending of taxpayer dollars. WSDOT's performance-management process has been recognized as a national best-practice model. In a 2011 Pew Center and Rockefeller Foundation study, Washington ranked as being among the top 13 states for using performance measures. Annually, WSDOT uses more than 100 specific performance measures in its reporting that encompass all key agency mandates, functions and transportation modes.

By taking performance management seriously and integrating it into day-to-day work, we have been able to deliver on our promises and build public confidence and trust for the agency. It means our decision-making is based on data and statistics. Our performance assessments, using "before and after" studies, allow us to verify that the intended results were achieved. This assessment is used for low-cost highway and corridor safety improvements, congestion-relief measures, transportation system efficiency, environmental mitigation and many other functions.



Washington is also one of the first states to use Active Traffic Management system and variable speed limits to increase roadway efficiency and help drivers travel safer and smarter.



We have an established practice to lead with the Web. This means prior to sending news to media sources, we post to our website the new release and link to related, detailed project information.

#### We are the first and best source of information

Transparency in reporting is critical to maintaining credibility with taxpayers, the media and government and elected officials. By following a "no surprises" philosophy of early and timely reporting of our news – good or bad – we can explain what happened, what action we took and what we plan to do in the future. This allows us to tell our side of the story first, instead of trying to correct and recover from someone else's version of what happened.

We have an established practice to lead with the Web. This means prior to sending news to media sources, we post to our website the new release and link to related, detailed project information. In this way, reporters and other interested persons can drill down into maps, photos, graphics, reports and other materials that help explain our project, our decision-making process, budget information and future plans.

#### Chapter 4

New approaches and hard decisions

#### A new approach for creating an integrated, 21st century transportation system

With declining revenues and growing demands, WSDOT saw the need for a budgeting and investment strategy. In 2007, we put in place Moving Washington as a way to prioritize transportation needs and find solutions that provide the best bang for the buck.

The core principle of Moving Washington is to maintain and keep safe our existing transportation system. Its three strategies that guide our transportation investments are operate efficiently, manage demand and add capacity strategically.

So what does this really mean? Let's use a hypothetical example. Let's say Interstate X has a particularly bad chokepoint where congestion occurs many hours a day. One approach, in years past, might have been to add a lane in each direction and/or rebuild an interchange.

With Moving Washington in place, we think differently. We begin by looking at a problem not just from a localized view, but on a corridor basis. This applies to both a highway or rail corridor, as well as corridors that extend onto ferry routes.

In this hypothetical example, we might ask ourselves whether the use of ramp meters, cameras and Active Traffic Management technology should be a first step to make the corridor operate more efficiently. Also, we would talk about how to manage the demand in this corridor and whether variable-rate tolling, improved traveler information or public-transportation alternatives could provide some relief. Only then would we think about strategically adding capacity – and, even then, we might not rush to the "Cadillac" version but, instead, a strategic investment that is the right choice, the right solution at the right time. For example, using the highway shoulder as a travel lane (called hard-shoulder running) during peak commute periods could provide needed, short-term relief.





Paula Hammond was on the job one week as Secretary of Transportation in November 2007 when she made a decision to pull the four, 1927-built, Steel Electric-class ferries from service amid growing concerns about cracks and corrosion found in the ferries' hulls.

#### Safety before all else

Balancing safety with mobility needs means we must sometimes make unpopular decisions to ensure the safety of our state's citizens. Paula Hammond was on the job one week as Secretary of Transportation in November 2007 when she made a decision to pull the four, 1927-built, Steel Electric-class ferries from service amid growing concerns about cracks and corrosion found in the ferries' hulls. This left the Port Townsend-Keystone run without a car ferry right before the Thanksgiving holiday rush. Sen. Mary Margaret Haugen was quoted in the news saying, "The timing couldn't be worse with Thanksgiving only a day away and 1,000 cars and 350 walk-ons using the route each day during the holiday weekend."

Although this halt in service came with little advance warning, Hammond couldn't in good conscience allow the ferries to run without more extensive examination of the hulls. WSDOT's Ferries Division took immediate action to reduce impact to ferry customers. WSF increased service on the Edmonds-Kingston route, began passenger-only service between Port Townsend-Keystone and worked with transit agencies and employers to ensure transportation connections on both ends of the route. Later, a deal was struck to lease a vehicle ferry from Pierce County. It continued on the route until the first of the Kwa-di Tabil ferries was delivered in 2010.

Transportation infrastructure failures in other parts of the nation often have impacts here at home. When Minnesota's I-35 bridge collapsed, local media focused on Washington's bridges. With 3,600 bridges, WSDOT has a bridge-inspection program to ensure the safety of Washington's bridges. Most bridges are inspected every two years. Some bridges with structural issues, as well as older bridges, are inspected more frequently.

The Alaskan Way Viaduct in Seattle, for example, is inspected thoroughly every six months. While no one likes the inconvenience of a bridge closure, we use these inspection closures to coordinate multiple maintenance activities and repairs that would otherwise cause traffic disruptions. The closures can be helpful in reaching out to the public, with scheduled walking tours to explain the work being done and what's next. It's extra work, but the results are worth it.

Another important safety focus for WSDOT is protecting our most valuable asset – our employees. WSDOT continues to be an active participant in the national "Give 'em a Brake" and "Go Orange" campaigns to draw attention to roadway-worker safety and the need for drivers to pay attention when traveling through work zones.

Unfortunately, far too often our workers are injured or killed on the job. In 2010, we established the WSDOT Memorial Foundation to provide assistance to employees and their families in their time of need. The foundation is supported entirely by donations and, since its inception, has provided \$16,000 in financial assistance. In 2012, the foundation established a scholarship program for a deceased, sick or injured WSDOT employee's immediate family member.

This year, Secretary Hammond created a Safety and Health Champions leadership team to renew emphasis on workplace safety and every employee's responsibility to do their job in a safe manner so that everyone goes home at the end of the day. WSDOT restructured its safety organization to focus on reducing the department's recordable-incident rate and implemented root-cause analysis to identify and reduce or eliminate safety hazards.

#### Chapter 5

#### What lies ahead: ongoing and into the future

#### Staying ahead of the funding crisis

As our construction program reached a peak, we recognized that future transportation revenue would not support our current staffing level. In 2008, we made a decision to freeze new engineering hires, reduce management layers and consolidate offices and positions. In late 2010, Secretary Hammond brought together a team of senior agency leaders to identify recommendations that would allow the agency to implement a business model that retains core competencies for delivery and a workforce sized at a sustainable level.

With this early recognition that our 2003 and 2005 gas-tax-funded construction program will be largely complete by 2015, we have been actively downsizing and are on track to reduce by 800 employees in our engineering and technical workforce over the next two biennia. While we continue to transform our organization, we are also focusing on identifying the skills our workforce will need in the future.

#### Preparing for future workforce needs

More than half of WSDOT's workforce is age 50 or older. As we continue to consolidate and downsize, management positions will be eliminated and employees who held management positions may be reallocated to positions they held earlier in their careers. In other words, we need to focus on the proverbial "teaching old dogs new tricks."

We are actively working to determine our future business needs, assessing individual employee's skill sets and developing individual training plans to bridge the gaps. As more of our workforce reaches retirement age, we'll also need to develop trained, experienced workers to step into leadership roles. Our strategy is to utilize a variety of training tools to meet an individual's needs, such as classroom, online, on-the-job, and just-in-time training, along with coaching and mentoring.

#### Building a sustainable transportation system

At WSDOT, sustainability means using management and operational policies and strategies to meet society's present needs without compromising the ability of future generations to meet their own needs. This means our daily decision-making and actions consider a broader range of benefits for our transportation system that supports our economy, environment and communities.



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Sustainable transportation includes designing highways that work best for communities, integrating transit, bicycling and walking into projects and employing techniques that reduce stormwater pollutants. Our maintenance crews use precision snow- and ice-removal techniques that keep drivers safe while using the minimum amount of salt necessary. We're using fewer building materials by recycling and extending the lifespan of roads, bridges and other structures.

Sustainable transportation includes designing highways that work best for communities, integrating transit, bicycling and walking into projects and employing techniques that reduce storm-water pollutants.

We are taking steps to conserve fuel and energy, reduce carbon emissions, and protect our natural environment while keeping people and goods moving. We are using new technology and innovative methods in our efforts to provide a more reliable, responsible and sustainable transportation system. We're helping citizens and businesses reduce their carbon footprint in new ways, from expanding transit services and ridesharing opportunities to partnering to build support infrastructure along I-5 for electric and other alternative-fuel vehicles.

### Continuing to look for ways to become efficient, effective and innovative

In response to the Governor's directive to cabinet agencies to use Lean, WSDOT is applying Lean methods and tools to two projects. Our first effort in the Traffic Data Office involves improving processes for collision-data collection and reporting. A multi-agency team identified 15 process improvements and a three-stage implementation plan that addresses data entry, accuracy and timeliness. At our sign shop in Yakima, we are also applying Lean to our processes, identifying 26 improvements that will reduce costs and level out the fabrication production flow. We continue to look for opportunities to apply Lean principles to other areas of WSDOT where it would be beneficial, saving both time and money.

### Building a better transportation system through partnerships

Washington's transportation system is an interconnected, multimodal network of state highways, county roads, city streets, ports, ferries, rail lines, transit systems, sidewalks, and bike paths that are operated by multiple government agencies and private companies.

Our federal partners provide funding for some of Washington's most important economic-corridor projects, such as the Columbia River Crossing and the North Spokane Corridor. In addition, federal programs support our communities with grants for local roadway and bridge safety projects, make it easier for children to walk to school through Safe Routes to School and enhance travelers' experience through scenic byway programs.

WSDOT and Washington State Patrol have had a long-term partnership, working together to quickly clear collisions and highway blockages, and coordinating closures when weather and other conditions threaten traveler safety.

Partnerships with freight rail take trucks off our congested roadways and provide agricultural growers with reliable transport for products to market on the Grain Train. We're working with rail stakeholders to improve and expand capacity on Washington's rail network, reducing delays for both freight and passenger trains.

Transit and passenger rail give people an alternative to driving, provide transportation for those who are unable to drive and make more room for those who must drive on crowded highways. Washington boasts the largest vanpool program in the nation and Amtrak Cascades passenger rail's fare-box recovery continues to increase at a time when other rail lines across the country are struggling.

By working together, we can ensure that our state's transportation system will continue to function effectively and support the needs of its diverse users, our communities and our industries.

### Looking for new ways to fund transportation in the future

Here in Washington and elsewhere across the nation, transportation organizations have realized that the gas tax, a 1920s-era funding mechanism, can no longer meet the needs of a 21st century transportation system.

When gasoline prices climb, people drive less, as they did during the recession. People are also driving more fuel-efficient and alternative-fuel vehicles. With a flat tax not indexed to inflation, our purchasing power declines and material, fuel and labor costs increase. Combined, all of these point to a steep erosion in gas-tax revenues and the need for reform.

Washington, along with nearly 20 other states, is looking at the feasibility of a road user charge as a means of funding transportation. Under this funding mechanism, drivers are charged based on how much of the road system they use. We have just begun studies to examine the technology, policy, and social issues surrounding this concept and much greater discussion of this concept can be expected in the near future.



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#### Focusing on transportation priorities

Our transportation system priorities will guide our future investment decisions and position WSDOT to be ready when new revenue comes.

At the top of the priority list is the need to maintain and preserve what we have already built. We have a long backlog of maintenance and preservation needs. Ignoring these means we will end up paying more to repair our system later.

In addition, safety continues to be a top priority as we work to meet the goal of zero fatalities by 2030. Our low-cost safety improvements have been effective toward reducing traffic-related injuries and fatalities and we want to continue on this downward trend.

We'll continue to look for ways to increase the efficiency of our existing transportation system and manage demand. These improvements will come through new and existing technology, better coordination between modes and measures that enhance speed and reliability of the system.

We'll also focus on strategic capacity improvements in specific corridors, such as I-90 at Snoqualmie Pass, that improve the movement of people and goods, create jobs and support the state's economic growth.