Effective Communication of Asset Conditions and Needs

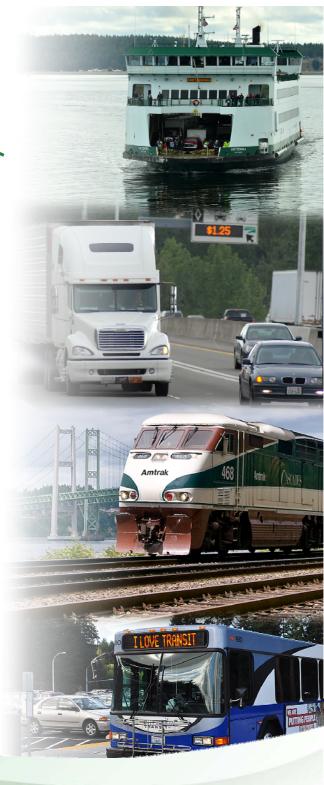
Making a Case for Funding

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WSDOT: Director, Strategic Assessment Office

Asset Management Conference Workshop: Setting Targets to Optimize Performance April 17, 2012; San Diego, California





Washington's transportation system is big, complex and multimodal

Comprehensive system connects roadways, airports, waterways and railways

On the state-owned system alone:

- Highways: 87 million vehicle miles/day (18,500 state highway lane miles)
 - 309 lane miles of the 320 miles funded for HOV systems are in place (Including transit and HOV treatments on arterials and ramps)
 - More than 3,600 bridges and structures
- **Ferries:** 23 million passengers/year (23 ferry vessels, 19 terminals in Washington, and 450 total sailings per day with 900 total sailings)
- Aviation: 17 WSDOT-managed airports (138 public-use airports)
- Passenger rail: Nearly 850,000 passengers in 2011 (partner in Amtrak Cascades state passenger rail)
- Freight rail: 3,600 miles of operated public and private freight railroads move 103 million tons of freight. (2009 data)
 - Grain Train delivers more than 1.6 million tons of grain since 1994, 100 tons per car in 2010. (The Grain Train program runs 118 cars, including 29 added in 2010.)
 - WSDOT owns 326 miles of short-line railroad. (During 2010, shipping on the Palouse-Coulee City rail system increased 20% over 2009 to 8,000 carloads)

Transit support

- Business and state partnerships in commute programs support more than 810,000 workers statewide (160 million vehicle miles traveled reduced annually)
- Vanpool program includes more than 2,400 vans (largest public fleet in the nation)



WSDOT finds a need to tell its own story

WSDOT enhances communications to address concerns



Reasons that drove WSDOT to an unprecedented level of performance measurement and management

- 1. Addressing a voter-initiated repeal of the MVET tax, a 30% revenue erosion
- 2. Blue Ribbon Commission and gubernatorial concerns over departmental inefficiency and lack of accountability
- 3. Media/talk show preoccupation with the state's "transportation crisis"
- 4. General distrust of agency and its ability to deliver the need to tell our story
- 5. To pave the way for a revenue ask despite these concerns

Tool: WSDOT's quarterly performance report

The *Gray Notebook* (then called "Measures, Markers and Mileposts") became the agency's face and primary communication brand.

Why the poor public perception of WSDOT?

Bridging the Gap = Communicating

"Information Asymmetry" created a communications problem

Information Asymmetry definition:

A state of imbalance between what an *agency knows* about its performance, compared to what the *public knows* about the agency's performance.

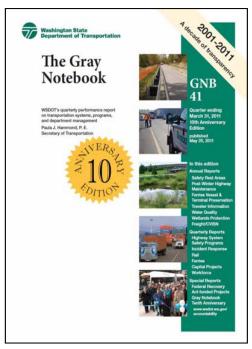
Causes:

- 1. Ineffective communication from the agency to the citizens
- 2. Most people get their information from the media
- 3. Agencies are the exclusive sources of their performance data; if agencies aren't reporting, then no one knows what goes on



WSDOT's Response:

Communication and Accountability



The Gray Notebook, WSDOT's quarterly performance report

WSDOT responded to the challenge of bridging this information gap: our brand

WSDOT's Strategic Approach - adopted in 2001

- 1. Accountability and transparency
- Comprehensive performance analysis and reporting for all programs
- 3. Adaptive and dynamic performance measurement to meet changing needs

Tool: WSDOT's quarterly performance report – *our brand* The *Gray Notebook* (GNB)

WSDOT's Strategic Plan – *linking the pieces*Commits to transparency and accountability

More than a report, the *Gray Notebook* anchors WSDOT's management philosophy: "What gets measured, gets managed" and "No Surprises Reporting."

How did WSDOT Craft the *Gray Notebook* Brand

Into a key communications tool to support general revenue increases and asset management?

"If we could turn back the clock a few decades, we might say that the government program least likely to be caught up in taxpayer backlash would be transportation. After all, this is an area of public spending where we get something tangible for our money. The results can be seen – and used – by those paying for the cost....."

Puget Sound Business Journal, May 2002

The Accountability R_x: Performance Results +

Clear Communication



Communicate Performance:

Principles of transparency

Our goal: "to share the performance of WSDOT's most complex and diverse programs and projects clearly and concisely in a format that everyone can easily understand and explain to their neighbors...."

- 1. Use candor and transparency: "The good, the bad, and the ugly" no exceptions
- 2. Use "Plain Talk" language people can understand
- 3. Combine quantitative and narrative reporting in Performance Journalism to tell the story
- 4. Make reports easily accessible to the public and the media



WSDOT's Performance Management Philosophy for all Programs:

WSDOT pioneered the concept of *Performance Journalism* and it formed the basis for the *Gray Notebook*

Performance Journalism crafts compelling stories; Performance Management achieves results

- 1. Communicate clear, relevant and easy-to-understand measures and results using Performance Journalism
- 2. Demonstrate how programs contribute to priorities
- 3. Monitor and analyze detailed program data
- 4. Evaluate effectiveness (Before and After)
- 5. Hold regular problem-solving sessions
- 6. Allocate resources based on strategies that work performance based investment decisions
- 7. Target and define your key audience
- 8. Regularly report to governor, legislature, media and public on performance seek and create opportunities to report



Tangible Results and Benefits:

Accountability, credibility, and funding

Enhanced WSDOT credibility and accountability supports positive funding considerations:

2003 State Gas Tax Increase

 Transportation Revenue Package: 5 cents/gallon gas tax increase took effect July 1, 2003 (\$4 billion)

2005 State Gas Tax Increase

 Transportation Revenue Package: 9.5 cents/gallon gas tax increase (phased in over three years) July 1, 2005 (\$7 billion)

Nov 2005: 'No' on I-912

- Through a simple majority vote, Washington State citizens had a choice to eliminate the 9.5 cents gas tax that was passed by the 2005 WA Legislature.
 - 47% voted YES eliminate the new gas tax
 - 53% voted NO don't eliminate the new gas tax

Nov 2011: 'No' on I-1125

Washington State citizens voted 'no' to restrict how tolling revenues are used

Washington State

Other System and Asset Benefits

How does Asset Management benefit from Performance Reporting?

Ability to tell your story and report on condition and needs

- 1. Informed media
- 2. Informed officials and decision makers
- 3. Informed managers and employees

Allows for better management of the system and enhanced operations

- Squeeze every ounce of productivity out of your existing investments
- 2. Understand effectiveness of various strategies and investments when applying limited resources

Pavement:

Target lowest lifecycle cost



Communicating the funding crisis, while achieving pavement preservation goals

WSDOT uses graphs and charts to illustrate declining funding:

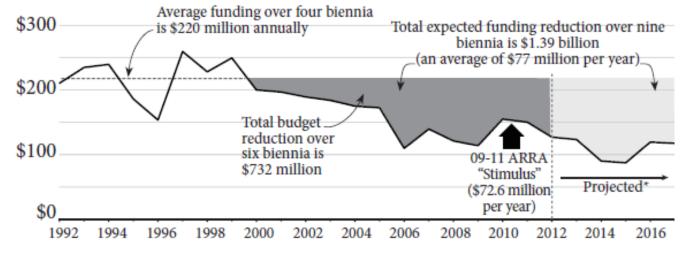
 Maintaining over 20,000 lane miles while funding dropped by \$600 million in 10 years (27% reduction)

WSDOT uses performance management to create efficiencies:

 Target lowest life-cycle cost – WSDOT achieves pavement condition goals amidst funding crisis (next slide)

Pavement preservation funding FY 1992 - 2018

Dollars in millions; Constant 2010 dollars



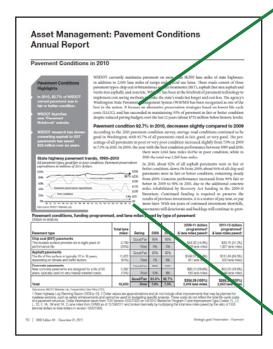
Data source: WSDOT Materials Lab.

*Note: Projections as of December 2011.



Pavement:

Innovations to lower costs, preserve life



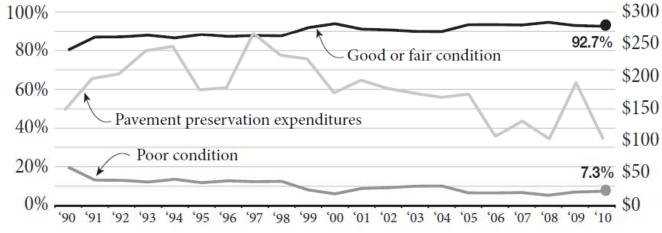
Telling the story WSDOT's pavement technology innovations help offset declining investments

WSDOT uses pavement technology to make the state's roads last longer and cost less. Efficiencies include:

- Dowel bar retrofits on concrete pavements
- Selective panel replacement and diamond grinding on concrete pavements
- Converting higher cost asphalt pavements to lower cost chip seal pavements (\$151 million saved as of December 2011)

State highway pavement trends, 1990–2010

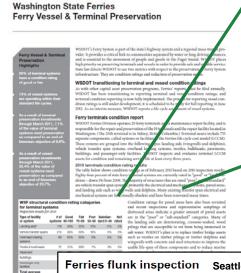
All pavement types; good/fair or poor condition; Pavement preservation expenditures in millions of 2011 dollars



Data source: WSDOT Materials Lab.

Ferries:

Terminal condition; / Vessel life-cycle '



Preserving Ferries terminal assets

85% of terminal systems have a condition rating of fair or better
 WSF structural condition for terminal systems
 Inspection results for 2010
 Type of facility

Terminal preservation investments result in 7.1% of the value of terminal systems needing preservation, compared to 6.6% target

for terminal systems
Inspection results for 2010

Type of facility # of Good Fair or system systems 90-100 70-89 5

WSF structural condition rating categories

Type of facility or system	# of systems	Good 90-100	Fair 70-89		Substan- dard 0-49	Not rated
Landing aids*	179	55%	22%	12%	11%	0%
Vehicle transfer spans	210	35%	49%	16%	0%	0%
Overhead loading systems	66	62%	30%	8%	0%	0%
Trestle & bulkheads	72	31%	58%	7%	3%	0%
Pavement	77	25%	42%	19%	14%	1%
Buildings	136	45%	54%	1%	0%	1%
Passenger only facilities	15	53%	33%	13%	0%	0%
Total average	755	43%	42%	11%	4%	0%

Data source: WSDOT Ferry System.

* Landing aids Includes wingwalls and dolphins.

Vessel preservation: life-cycle assessment

- WSDOT tracks the life cycle status of vessel systems in terms of how close systems are to the end of standard life cycle
- Low vessel preservation investments resulted in 33.4% of the value of vessel systems needing preservation, compared to the 24.7% target
- Four vessels pulled from service in 2007. Emergency replacement funds needed: Construction of three new vessels within 2009-2011

Ferries flunk inspection Seattle Times, December 9, 2007
They've worked 20 years past their expected life span, were ordered into retirement in 2001 and yet remained active up until la month...

By Kyung M. Song Seattle Times staff reporter

They've worked 20 years past their expected life span, were ordered into retirement in 2001 and yet remained active up until last month despite cracks, holes and pitting.

But the curtain may be close to falling on Washington state's four oldest ferries.

Emergency inspections on two of the 80-year-old Steel Electric-class ferries on Seattle's Harbor Island have uncowered more extensive pitting and corrosion than expected, posing a dilemma for state officials who must now decide whether repairing the vessels would be a wise investment.

Opting to buy new boats could leave the Port Townsend-Keystone route without car-ferry service for two years while the boats are built, said Traci Brewer-Rogstad, deputy executive director of the ferry system



⊕ enlarge ALAN BERNE!
The 80-year-old Steel Electric-class ferry Quinault will not be returned to service unless the damage to its hull is repaired.

- □ Lummi Island ferry's red ink may sink discounts
- Lummi Island ferry's red ink may sink discount:
 Archive | Ferry options would all be costly
- Archive | Cracks in hulls sideline 4 state ferri



Bridges:

Condition rating used to prioritize spending



Bridge condition ratings prioritize investments:

- 95% of WSDOT bridges in fair or better condition
- Bridge structural condition rating identifies needs, guides decision-making for preservation funding

Bridge load ratings help ensure public safety

- Load rating tests verify structures can safely carry legal and permitted loads
- Truck load rating is re-analyzed based on bridge age/condition
- Deficient structures posted with allowable truck weights

Benefits of consistent bridge condition reporting

 Consistent reporting on bridge conditions allowed for rapid response to media and public concerns in the wake of the Minnesota I-35W bridge failure

Bridge structural condition ratings

Condition ratings by fiscal year (based on the number of bridges)					I		
	Description	2006	2007	2008	2009	2010	2011*
Good	A range from no problems to some minor deterioration of structural elements.	88%	88%	88%	89%	90%	86%
Fair	All primary structural elements are sound but may have deficiencies such as minor section loss, deterioration, cracking, spalling, or scour.	9%	9%	9%	8%	8%	9%
Perce	ntage of Good + Fair bridges	97%	97%	97%	97%	98%	95%
Poor	Advanced deficiencies such as section loss, deterioration, cracking, spalling, scour, or seriously affected primary structural components. Bridges rated in poor condition may have truck weight restrictions.	3%	3%	3%	3%	2%	5%

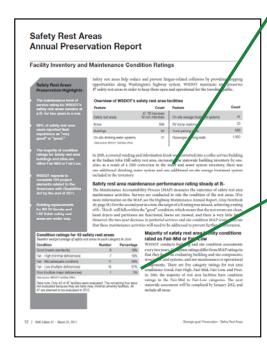
Source: WSDOT Bridge and Structures Office.

^{*} Note: For fiscal year 2011 NBIS deck codes are now included as part of the "good/fair/poor" performance measure, previously only superstructure and substructure codes were included. The addition of deck codes brings WSDOT's "good/fair/poor" into alignment with FHWA's SD metric.



Safety Rest Areas:

Facilities condition and public perception



Facility condition ratings prioritize replacement

- The majority of condition ratings for safety rest area buildings and sites are either Fair-Mid or Fair-Low
- 88% of safety rest area users who submitted comment cards reported their experience as "very good" or "good"
- Condition ratings used to prioritize facility replacements

Condition ratings for 43 safety rest areas

Number and percentage of safety rest areas in each category in 2010

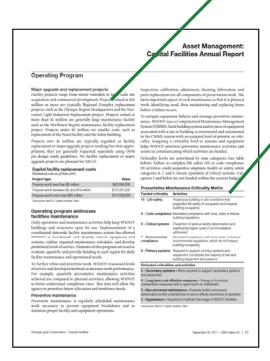
Condition	Number	Percentage
Good (meets standards)	8	19%
Fair - High (minimal deficiencies)	7	16%
Fair - Mid (adequate condition)	11	26%
Fair - Low (multiple deficiencies)	16	37%
Poor (multiple major deficiencies)	1	2%

Data source: WSDOT Facilities Office.

Data note: Only 43 of 47 facilities were evaluated. The remaining four were not evaluated because they are fairly new, minimal-amenity facilities. All 47 are planned to be evaluated in 2012.

Capital Facilities:

Preventive maintenance is planned work



Planning for preventive maintenance:

Identifying needs, then maintaining and replacing items before a failure occurs.

Computerized Maintenance Management System

WSDOT inventories each building system in CMMS, and assigns a level of criticality which is used to prioritize investments.

- Life-safety and code compliance (9-10) affect employee health, safety
- Levels 6-8 operate critical systems
- Levels 5 and below are not funded within the current budget
- Emergency repairs are top priority and absorb funding

Preventative Maintenance Criticality Matrix

Funded criticality	Activities
10 - Life safety	Hazardous building or site conditions that jeopardize life safety of occupants and impacts building occupancy
9 - Code compliance	Mandated compliance with local, state or federal building regulations
8 - Critical systems	Prevention of serious facility deterioration and significantly higher costs if not immediately addressed
7 - Environmental compliance	Mandated compliance with local, state, or federal environmental regulations, which do not impact building occupancy
6 - Primary systems	Required to support primary systems and equipment. Comprises the majority of site and building equipment and systems

Unfunded criticalities and activities

- 5 Secondary systems Work required to support secondary systems and equipment
- 4 Long-term cost effective measures Energy or functional conservation measures with a rapid return on investmen
- 3 Non-structural maintenance Prevents facility component deterioration and/or potential loss of use or affects economies of operation

Data source: WSDOT Capital Facilities Office.

Challenges

 Capital Facilities investment 2 - Appearance - Required to maintain the image of WSDOT facilities deficit of over \$150 million

Room for improved communication of asset preservation



Other Performance Reporting Tools:

Telling the story about WSDOT's asset condition and value

WSDOT's portfolio of communication tools:

Folios: 1- to 8-page briefs focused on a single topic

ARRA, mobility, safety, transportation investments

Website

- Accountability page for Gray Notebook
- Program web-pages with specific performance reported

Each communication venue helps WSDOT establish good public relationships, with candor and transparency, and to define our processes for performance reporting and decision-making.



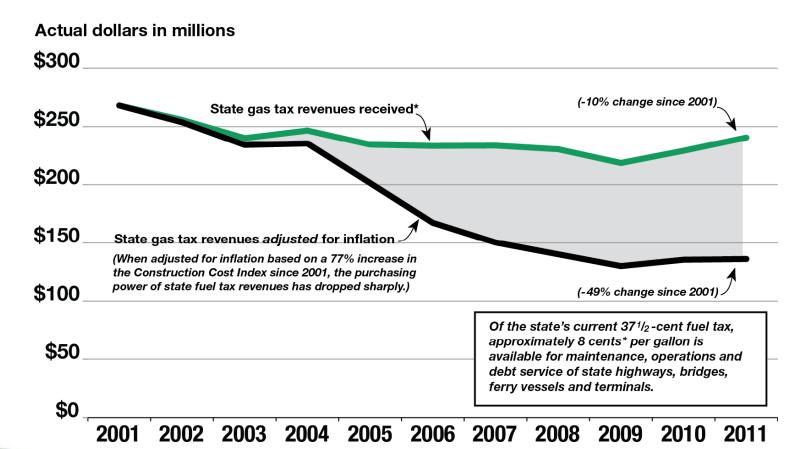
Gas tax purchasing power declines over time

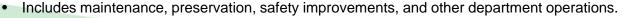
Gas tax not indexed to inflation

...and compelling communication is more important than ever

Funding crisis

- Revenue significantly under projections
- Inflation increasing cost of maintenance and construction
- Challenge in getting another tax increase





Less Debt Service.



Key messages include:

"Transportation investment is not an option - it is a necessity."

WSDOT redoubling communication efforts

Key Messages from the "State of Transportation" 2012 presentation include:

- A strong transportation system is needed for a strong, healthy state
- Transportation investments create jobs, spur recovery, create vibrant communities and position businesses for the global economy
 - Maintaining, preserving and improving Washington's statewide, multimodal transportation system is vital. It is the foundation that moves goods to market, people to jobs and families to activities
 - Investing in transportation creates living-wage jobs. It builds the infrastructure to support long-term economic growth. It supports the flow of commerce and the health of businesses large and small

Investing in transportation puts people to work

2003 and 2005 revenue packages supported an average of 10,000 jobs annually

Key Messages (continued):

- Statewide unemployment drops to 8.3% in January 2012*
- Private-sector construction jobs have been impacted
 - Laborers: 30% unemployment statewide decrease in employment from the peak
 - Building trades: 40% unemployment statewide decrease in employment from the peak and 35% in the Puget Sound region
- Federal Recovery Act-funded highway projects provided more than \$199.5 million in payroll to workers between March 2009 and January 2012
- 74% of highway program dollars are contracted to the private sector



Investments deliver benefits - WSDOT delivers results

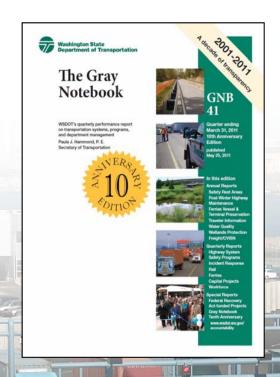
Projects enhance safety, mobility, economy and environment

Key Messages (continued):

- Safety: Between 2005 and 2010, annual traffic fatalities declined 29%, resulting in lowest fatality rate in state's recorded history
 - Low-cost improvements: Cable median barrier and centerline rumble strips together reduced serious and fatality collisions up to 48%
 - Washington State Ferries has the best pedestrian safety record in the world*
- Highways: 95% bridges and 93% of pavements are in fair or better condition in 2011
- State ferry terminals: 85% are in fair or better condition
- Mobility: In 2010, 45 out of 48 HOV lane segments provided better reliability compared to general purpose lanes
- Travel options: In 2011, Washington's statewide transit-operated vanpool program added 160 vanpools, for a total of 2,971
- Environment: Since 1991, investments have restored 258 fish passages, improving access to 850 lineal miles of habitat

Then & now:

A decade of accountability and communication



Then: Blue Ribbon Commission (2000)

- Convened to address concerns about government efficiency and accountability
- Response to unfavorable public perceptions of WSDOT
- Focus was on WSDOT's performance and transparency
- Critical need to invest in transportation, but little public trust

Now: Connecting Washington Task Force (2012)

- Collaborative and diverse group focusing on critical transportation needs
- Conversations focused on transportation needs and revenue
- Agency credibility and trust



Resources:

WSDOT's Accountability Website: http://www.wsdot.wa.gov/accountability/

WSDOT's quarterly performance report: the *Gray Notebook*:

http://www.wsdot.wa.gov/Accountability/GrayNotebook/navigateGNB.htm

- Safety Rest Areas (GNB 41, p. 12)
- Ferries (GNB 41, p. 18)
- Bridges (GNB 42, p. 8)

- Capital Facilities (GNB 43, p. 10)
- Pavement (GNB 44, p. 10)

Performance Measurement at WSDOT, four page folio

http://www.wsdot.wa.gov/NR/rdonlyres/91089378-E709-49EF-AE42-AE80BC44A91C/0/TRB_Performance_Folio.pdf

WSDOT's Strategic Plan: http://www.wsdot.wa.gov/Accountability/PerformanceReporting/StrategicPlan.htm

Performance Journalism: http://www.wsdot.wa.gov/NR/rdonlyres/685F6B37-9082-47DE-81FC-676EE95C5EE9/0/Bridging_Gap_PJ_TRBprintedvsn.pdf

Making the Case for Funding: The WSDOT Experience (2008, Transportation Research Record)

http://www.wsdot.wa.gov/NR/rdonlyres/E5D34B36-6662-4464-B4BA-1E858BBD710D/0/2007 TRB Making Case Funding.pdf

Performance Management and Accountability at WSDOT, four page folio

http://www.wsdot.wa.gov/NR/rdonlyres/024555DA-3CAD-4793-8FD9-8BF1CF4A6D07/0/2010_WSDOT_PerformanceManagement_Folio.pdf

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