Washington State
Department of Transportation

Measures, Markers and Mileposts

The Gray Notebook for the quarter ending
March 31, 2007

WSDOT's quarterly report to the Governor and the
Washington State Transportation Commission
on transportation programs and department management

Douglas B. MacDonald
Secretary of Transportation

What Gets Measured, Gets Managed

This periodic report is prepared by WSDOT staff to track a variety of performance and accountability measures for review by the Transportation Commission and others. The content and format of this report is expected to develop over time. Information is reported on a preliminary basis as appropriate and available for internal management use and is subject to correction and clarification. The Gray Notebook is published quarterly in February, May, August, and November. For an online version of this or a previous edition of the Gray Notebook, visit www.wsdot.wa.gov/accountability.

Contributors (Beige Pages)	WSDOT's Capital Delivery Programs	Project Control and Reporting Office, Claudia Lindhal, Regional Program Managers
	Tacoma Narrows Bridge Project Update	Miles Sergeant
	Hood Canal Bridge Project Update	Sarah Lamb
	Tacoma/Pierce County HOV Program Update	Heather Clarke, Jamie Swift
	Cross-Cutting Management Issues	Erin Britton, Marion Carey, Jenna Fettig, Erik Johnson, Linea Laird, Rose This, Bob Thomas
Contributors (White Pages)	Asset Management: Rest Areas	Yvonne Medina, Thanh Nguyen, Doug Pierce
	Aviation	Eric Johnson, Nisha Marvel, Tracy Paul, John Sibold, Kerri Woehler
	Highlights of Program Activities	Ann Briggs
	Highway Maintenance	Rico Baroga, John Himmel, Tom Root
	Incident Response	Katherine Boyd, Paula Connelley, Diane McGuerty, Rick Phillips
	Rail: State-Supported Amtrak *Cascades* Washington Grain Train	Kirk Fredrickson, Andrew Wood, Carolyn Simmonds
	Trucks, Goods, and Freight	Elizabeth Stratton
	Washington State Ferries	John Bernhard, David Burns, Bill Greene, Matt Hanbey, Susan Harris-Huether, Charles Prestrud, Steven Vandor
	Worker Safety	Joel Amos, Cathy English, Ferry Safety Office
	Workforce Level and Training	Dave Acree, Stewart Souders
GNB Production	Production Team	Kimberly Howard, Clinton McCarthy, Jesse Ruhl, Ed Spilker, Tyler Winchell
	Graphics	Diana Lessard, Steve Riddle, Connie Rus, Chris Zodrow
	Publishing & Distribution	Linda Pasta, Trudi Phillips, Dale Sturdevant, Deb Webb
	For Information Contact:	Daniela Bremmer, Director WSDOT Strategic Assessment Office 310 Maple Park Avenue SE PO Box 47374 Olympia, WA 98504-7374 Phone: 360-705-7953 E-mail: bremmed@wsdot.wa.gov

Measures, Markers and Mileposts

The *Gray Notebook* for the quarter ending March 31, 2007
25th Edition, Published: May 23, 2007

Navigating the *Gray Notebook* iv
Linking Measures to Strategic Objectives v
Beige Pages
Project Reporting on the Capital Project Delivery Program.....vii
WSDOT's Capital Project Delivery Programs 1
Highway Construction Roll-Up of Performance Information 1
Ferries and Rail Roll-Up of Performance Information 2
Overview of WSDOT's Three Capital Project Delivery Mandates 3
Schedule, Scope, and Budget Summary 4
Advertisement Record 9
Projects to be Advertised.....13
Selected Capital Project Delivery Highlights.....15
"Watch List" Projects.....17
Project Delivery Summary Reports 24
Financial Information 26
Pre-Existing Funds Reporting by Program..... 29
Pre-Existing Funds Program: Advertisement Record 29
Pre-Existing Funds Program: Individual Reporting..... 30
Pre-existing Funds Program: Financial Information..... 34
Cross-Cutting Management Issues..... 35
Project Management Information Systems..... 35
Environmental Documentation, Review, Permitting, and Compliance 36
Construction Material Cost Trends 38
Hot Mix Asphalt 39
Consultant Utilization 40
Special Reports 42
Special Report: Tacoma Narrows Bridge, Quarterly Update.. 42
Special Report: Hood Canal Bridge Project, Quarterly Update..... 43
Special Report: Tacoma/Pierce County HOV Program, Quarterly Update..... 44
White Pages
Worker Safety Quarterly Update 45
Annualized Recordable Injuries and Illnesses Rates 45
Number of Recordable Injuries and Illnesses by Region 46
Quarterly Recordable Injuries and Illnesses Rates..... 47
Workforce Level and Training Quarterly Update 48
Number of Full-time WSDOT Employees..... 48
Required Diversity Trainings: Percent of Employees in Compliance 48
Required Maintenance Trainings: Percent of Employees in Compliance 49
Required Maintenance Training: Compliance by Region..... 49
Highway Maintenance Annual Update 50
Winter Severity and Snow and Ice Expenditures..... 50
Statewide Deicer Use and Winter Roadway Conditions..... 50
Snoqualmie Pass Winter Closure Hours 51
Safety Rest Areas Annual Update..... 55
Visitor Data 55
Service Levels..... 56
Preservation Program Goals..... 58
Trucks, Goods, and Freight Annual Update 60
Commercial Trucking..... 60
Waterborne Freight 61
Freight Rail 62
Air Cargo 62
Freight Use Surveys..... 63
Aviation Annual Update 65
Airport Pavement Condition Ratings..... 65
Airport Pavement Projects..... 66
Aircraft Registration 67
Local Airport Aid Grant Program 67
Airport Land Use Compatibility Program..... 68
Incident Response: Quarterly Update 69
Number of Responses and Average Clearance Time..... 69
Response to Fatality Collisions..... 69
Cabinet Strategic Action Plan Goal 70
Analysis of Incidents Lasting 90 Minutes or Longer 71
Washington State Ferries Quarterly Update 72
Farebox Revenue..... 72
Average Number of Complaints..... 72
On-Time Performance..... 74
Vessel and Terminal Preservation 75
Capital Expenditures..... 76
Rail: Quarterly Update..... 77
Amtrak *Cascades* Monthly Ridership 77
State-Supported Amtrak *Cascades* On-time Performance 77
State-Supported Amtrak *Cascades* Ridership by Funding Entity..... 77
State-Supported Amtrak *Cascades* Revenue per Month 78
Washington Grain Train Carloads per Month 79
Highlights of Program Activities 80
Subject Index 84

Navigating the *Gray Notebook*

How is the Gray Notebook Organized?

Measures, Markers and Mileposts, also called the *Gray Notebook*, provides in-depth reviews of agency and transportation system performance. The report is organized into two main sections. The *Beige Pages* report on the delivery of the projects funded in the 2003 Transportation Funding Package, 2005 Transportation Funding Package, and Pre-Existing Funds. The *White Pages* describe key agency functions and provide regularly updated system and program performance information. The *Gray Notebook* is published quarterly in February, May, August and November. This edition and all past editions are available online at www.wsdot.wa.gov/accountability/default.htm

A separate detailed navigation folio is available at www.wsdot.wa.gov/publications/folio/GNBFolio.pdf

Beige Pages

The *Beige Pages* is WSDOT's project delivery performance report on the Nickel, Transportation Partnership Account, and Pre-Exisiting Funds project programs. It contains detailed narrative project summaries and financial information supporting WSDOT's "no surprises" reporting focus. See page 1 for details.

White Pages

The *White Pages* contain three types of transportation system and agency program performance updates:

Annual Performance Topics

System performance updates are rotated over four quarters based on data availability and relevant data cycles. Annual updates provide in-depth analysis of topics and associated issues. Examples include Pavement Condition, Congestion, and Bridge Condition.

Quarterly Performance Topics

Quarterly topics are featured in each edition since data is generally available more frequently. Quarterly topics include Worker Safety, Incident Response, Washington State Ferries, and Amtrak *Cascades*.

Special Topics

Selected Special Features and Program Highlights are provided in the back of each edition and focus on noteworthy items, special events, and innovations.

Tracking Business Directions' Results

WSDOT's business plan, *Business Directions,* outlines the agency's strategic initiatives and associated activities. It reflects WSDOT's program and project delivery responsibilities with the goal of demonstrating the best possible return for taxpayers' dollars. The *Gray Notebook* complements the plan and tracks progress of the six key initiatives. For a copy of *Business Directions*, please visit: http://www.wsdot.wa.gov/accountability/publications/StrategicPlanWEB.pdf

Gray Notebook Lite

WSDOT publishes a quarterly excerpt of key performance topics and project delivery summaries from the *Gray Notebook*, called *Gray Notebook Lite*. *Lite* allows for a quick review and provides a short synopsis of selected topics. It is published as a four page folio with a two page *Beige Page* summary insert and can be accessed at www.wsdot.wa.gov/accountability/graynotebook/Lite.pdf

How to Find Performance Information

The electronic subject index gives readers access to current and archived performance information. The comprehensive index is easy to use and instantly links to every performance measure published to date. Measures are organized alphabetically within program areas. A click on the subject topic and edition number provides a direct link to that page. A copy of the subject index is also provided in the back of each edition. To access the index electronically, visit www.wsdot.wa.gov/accountability/graybookindex.htm

Linking Measures to Strategic Objectives

The mission of WSDOT is to keep people and business moving by operating and improving the state's transportation systems vital to our taxpayers and communities.

WSDOT Strategic Plan

Business Directions: WSDOT's 2007-11 Strategic Plan is a summary of WSDOT's work plan based on the programs and budgets authorized by the State Legislature and the policies adopted by the Governor. The plan describes the agency strategic directions and initiatives that are part of WSDOT's program and service delivery mandates. The plan also reflects WSDOT's internal performance management needs, Priorities of Government (POG) responsibilities, the Government Management and Accountability Performance (GMAP) process, the Cabinet Strategic Action Plan, the Legislative Transportation Benchmarks, the OFM Budget Activities, and the Washington State Transportation Plan's current investment priorities.

WSDOT's Plan Supports Priorities of Government and Government Management Accountability and Performance (GMAP)

"Priorities of Government" (POG) is the statewide approach used by the Governor to identify results as the basis for budget decision-making. This approach facilitates strategic thinking and uses performance evidence to make investment choices that maximize results. POG looks at all state activities and how these activities contribute to the framework for the ten statewide results that citizens expect. WSDOT's GMAP forums support the POG process by evaluating and improving the effectiveness of POG activities and reporting its progress in the Gray Notebook. The agency's strategic plan (2007-11 Business Directions) supports the "Improve statewide mobility of people, goods, and services" POG.

WSDOT actively supports POG goals through the agency's six initiatives (objectives) defined in the agency's strategic plan (2007-11 Business Directions). By tracking the progress of WSDOT's initiatives with key performance measures, the *Gray Notebook* connects WSDOT's initiatives with statewide outcome goals. The table below shows the six WSDOT initiatives and key related performance measures, as well as where and how the results are reported. WSDOT's strategic plan is available at www.wsdot.wa.gov/accountability/publications/StrategicPlanWEB.pdf

Draft Cabinet Strategic Action Plan

The Cabinet Strategic Action Plan is the focus of the Governor's Cabinet performance reporting efforts for 2007. It is a management tool based on a series of discussions with citizens, cabinet agency staff, and the Governor's policy and budget staff. The Draft Cabinet Strategic Action Plan sets the following goals for WSDOT to accomplish by December 31, 2007:

- Complete 90% of highway projects on time and within budget.
- Preserve 97% of bridges and 90% of roads in good or satisfactory condition.
- Reduce congestion by clearing highway accidents quickly: Reduce the average length of over 90 minute incidents by 5% (in coordination with the Washington State Patrol).
- Reduce highway fatalities by 4% (in coordination with the Washington State Patrol).

The *Gray Notebook* tracks results as indicated in the table below.

WSDOT Strategic Initiative	Linked to:	Key Performance Measure	Reporting Cycle	Last Report[1]
1. Manage and operate state transportation facilities to improve the safety and reliability of state transportation systems for the benefit of travelers, shippers, and communities.	Highway Safety	Fatality rates (Vehicle) Before and After collision analysis for safety projects Fatality rates (Bicyclists, Pedestrian) Cabinet Strategic Action Plan Measure: Reduce highway fatalities by 4%	Annual	GNB 20 pp. 54-55 GNB 24 pp. 61-62
	Incident Response	Number of over 90 min incidents; average clearance time Cabinet Strategic Action Plan Measure: Reduce the average length of over 90 minute incidents by 5%	Quarterly	pp. 69-71
	Delay and Congestion	Travel time performance for 35 Puget Sound routes; 95% Reliable Travel Time Duration of congestion	Annual	GNB 20 pp. 54-74
	Amtrak *Cascades*	Percent of trips on-time	Quarterly	pp. 77-78
	Ferries	Percent of trips on-time	Quarterly	pp. 74

Linking Measures to Strategic Objectives

WSDOT Strategic Initiative	Linked to:	Key Performance Measure(s)	Reporting Cycle	Last Report[1]
2. Maintain structures, facilities, support systems, and services to optimize their short-term and long-term usefulness and enhance environmental performance in highway and ferry operations.	Highway Maintenance	Rating for 33 maintenance activities tracked through the Maintenance Accountability Process (MAP)	Annual	GNB 24 pp. 72-74
3. Deliver asset and rehabilitation projects to preserve the state's existing infrastructure assets and utilize lowest lifecycle approaches to extend their useful life.	Ferries	Life Cycle Preservation Performance: Planned projects vs. actual systems/structures preserved, change in cost rating	Quarterly	pp. 75-76
	Pavement Conditions	Percent of pavement in good, fair, or poor condition (cumulative and by type) Cabinet Strategic Action Plan Measure: Maintain 90% of roads in good or satisfactory condition	Annual	GNB 24 pp. 53-57
	Bridge Conditions	Percent of bridges in good, fair, or poor condition (cumulative) Cabinet Strategic Action Plan Measure: Maintain 97% of bridges in good or satisfactory condition	Annual	GNB 23 pp. 49-53
4. Deliver high quality capital projects that add to and improve the state's transportation systems on-time and on-budget.	Capital Project Delivery Programs	Planned vs. actual results of scope, schedule and budget Cabinet Strategic Action Plan Measure: Complete 90% of highway projects on time and within budget	Quarterly	pp. 1-8
5. Communicate transportation system performance and WSDOT agency performance to the public through clear and consistent project delivery and program management reporting.	Performance Reporting	The *Gray Notebook* (Governor, WSTC, Public) GMAP Quarterly Review (Governor) Benchmarks Report (Legislature, WSTC) Priorities of Government (OFM) Budget Activities (OFM)	Quarterly Quarterly Annual Biannual Quarterly	
6. Assure the capability, efficiency, and safety of WSDOT's workforce.	Workforce Training	Compliance ratings for 25 statutory training courses	Quarterly	pp. 48-49
	Workforce Safety	Recordable injuries per 100 workers per calendar year	Quarterly	pp. 45-47

[1]When no *Gray Notebook* edition is indicated above, the measure can be found in this edition of the *Gray Notebook*. Previous editions are available in the *Gray Notebook* Subject Index at www.wsdot.wa.gov/accountability/graybookindex.htm. When viewing this report electronically, edition numbers are hyperlinked to the respective *Gray Notebook* article.

Transportation Policy Goals

In 2002, the Legislature passed RCW 47.01.012, instituting the transportation benchmarks recommended in 2000 by the Governor-appointed Blue Ribbon Commission on Transportation. The benchmarks require WSDOT to report performance data related to nine policy elements to the Legislature and the Washington State Transportation Committee.

In 2007, the Legislature amended RCW 47.01.012 and adopted new policy goals for transportation agencies in Washington, streamlining various existing state transportation system goals, objectives, and responsibilities, and the process by which these elements are measured. Under the new legislation, the Washington State Office of Financial Management (OFM) will be responsible for setting objectives and related performance measures. The new policy goals are:

- Preservation: To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services;
- Safety: To provide for and improve the safety and security of transportation customers and the transportation system
- Mobility: To improve the predictable movement of goods and people throughout Washington state;
- Environment: To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment; and
- Stewardship: To continuously improve the quality, effectiveness, and efficiency of the transportation system.

WSDOT will measure against the new policy goals and work closely with OFM to ensure the performance measures used are clear and consistent. By December 2007, OFM will submit a baseline report on the progress toward attaining the policy goals.

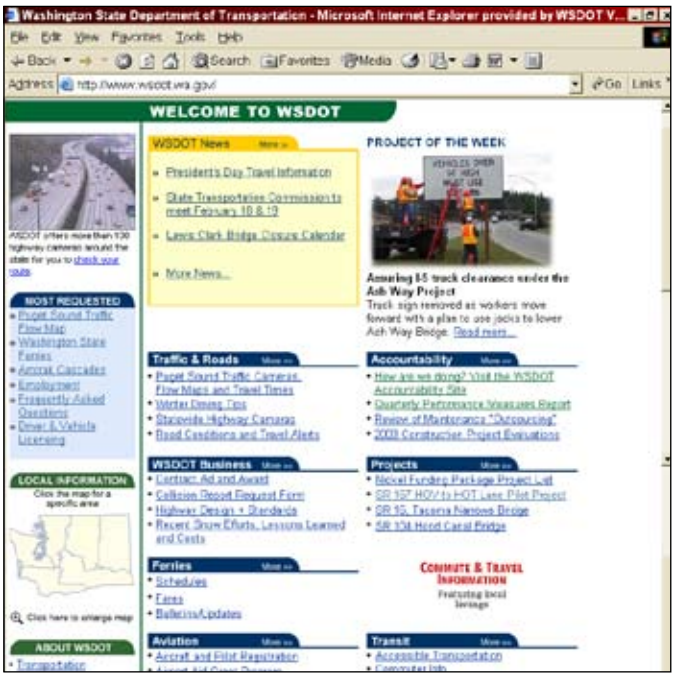
Project Reporting on the Capital Project Delivery Program

Introduction

WSDOT prepares information for legislators, state, and local officials, interested citizens and the press on the progress of the capital delivery program, including the 2003 Transportation Funding Package, the 2005 Transportation Funding Package, and the Pre-Existing Funds Program. Much of the detailed information can be found on-line at the WSDOT website. The Gray Notebook, in these special Beige Pages, highlights each quarter's progress and reports on financial and other program management topics as well as detailed information on key projects.

The Beige Pages for this quarter are organized in the following manner:

- Overview of the Three Capital Delivery Mandates
- 2003 and 2005 Transportation Funding Package Project Delivery
- Financial Information
- Pre-Existing Funds
- Special Project Updates
- Cross-Cutting Management Issues



We welcome suggestions and questions that can help us strengthen this project delivery and accountability reporting.

Overall, WSDOT's project reporting uses several different tools, including the *Gray Notebook*, web-based Project Pages, and Quarterly Project Reports (QPRs). There is a Project Page on the website for each major WSDOT project, and QPRs for Nickel funded projects in the 2003 Transportation Funding Package.

Navigation to the Home Page and the Project Pages

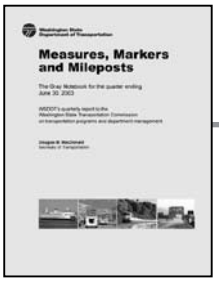
The Home Page (shown below) has several links that allow access to the individual Project Pages. The Accountability navigation bar provides access to the on-line version of the Gray Notebook which provides some project "hot links." The Projects navigation bar provides direct links to several of the state's largest projects and access to WSDOT's Projects Page. The Projects Page can also be accessed from any WSDOT web page by clicking on the "projects" tab at the top of every page. WSDOT's home page can be found at www.wsdot.wa.gov/

While WSDOT has developed user-friendly reports and front end applications to access project information on-line, it is important to note that the data used to generate these reports comes from antiquated legacy mainframe computer systems. Although the quality of the data is good, the time and effort needed to compile, verify and validate the data in these reports each quarter is considerable (in other words, these reports are the result of much manual input and effort, not the output of a modern project management information system).

This overall issue was addressed in two recently completed reports: one from the Joint Legislative Audit Review Committee titled, "Overview of Washington State Department of Transportation Capital Project Management" and a second report, commissioned by the Transportation Performance Audit Board, titled "Review of WSDOT's Use of Performance Measurement." In each of these reports, a key recommendation was made to conduct an assessment of the effectiveness of current information systems and options for addressing any deficiencies.

Project Reporting on the Capital Project Delivery Program

Project Information Roadmap



Home Page

Gray Notebook

Project Pages

Project Pages report on all WSDOT capital delivery program projects. Project Pages provide detailed information updated regularly:

- Overall Project Vision
- Financial Table, Funding Components
- Roll-up Milestones
- Roll-up Cash Flow, Contact Information
- Maps and Links QPR
- Quarterly Project Reports

Quarterly Project Reports (QPRs) summarize quarterly activities:

- Highlights
- Milestones
- Status Description
- Problem Statement
- Risks and Challenges
- Project Costs/Cash Flow
- Contact Information

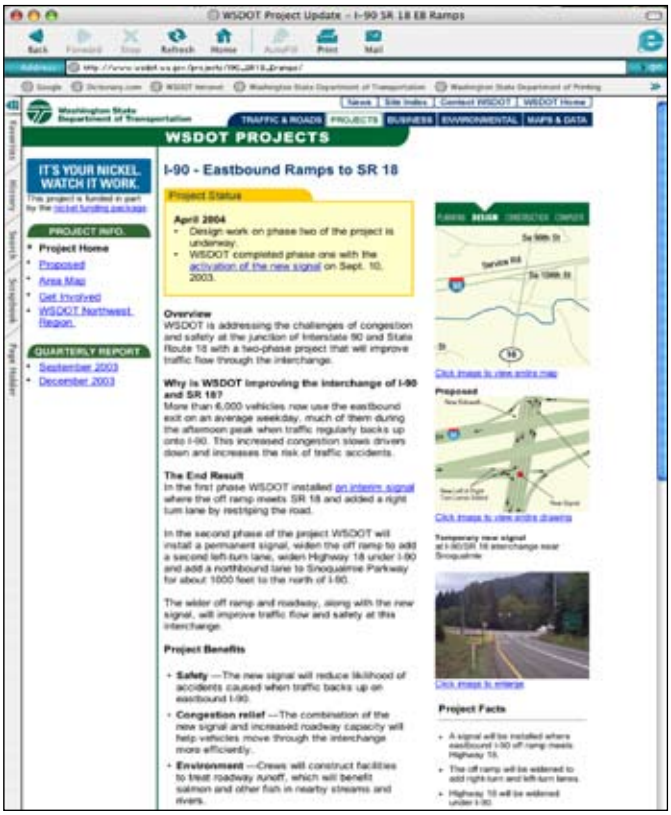
Project Pages

Project Pages contain information on all aspects of a specific project. An existing Project Page is shown below.

Project Pages provide details on overall project vision, funding components, financial tables, milestones, status description, problem discussions, risks and challenges, forecasting, maps, photos, links and more.

The Quarterly Project Reports are accessible through a link on the Project Page.

Project Pages provide a summary of the project status to date and are updated regularly to the best of WSDOT's ability. Project Pages can be found at www.wsdot.wa.gov/projects/



WSDOT'S Capital Project Delivery Programs

Executive Summary: Highway Construction Roll-Up of Performance Information

Each quarter WSDOT provides a detailed update on the delivery of the highway capital programs through the Gray Notebook, and on the web through the Project Pages and Quarterly Project Reports. As WSDOT's primary delivery report, the Gray Notebook includes the Beige Pages for the purpose of providing the current status of the Capital Improvement and Preservation Programs: major Pre-Existing Fund (PEF) projects, the projects funded by the 2003 5-cent gas tax (Nickel), and the 2005 9 1/2-cent gas tax (Transportation Partnership Account, TPA). Since PEF projects are budgeted by program for improvement and preservation of the highway system, the delivery of the work included in the 828 PEF projects is reported programmatically in six categories of work. By contrast, each of the 136 Nickel and 183 TPA projects funded in the 2005-07 biennium has a line item budget and is monitored and reported at the individual project level. Program budgets for PEF, Nickel, and TPA in this edition of the Gray Notebook are based on the 2006 Supplemental Budget. Updates to incorporate the 2007-2009 Biennial Transportation Budget will be made in a later *Gray Notebook*.

Performance Information *As of March 31, 2007, Dollars in Thousands*	**Nickel (2003)**	**Transportation Partnership Account (TPA, 2005)**	**Combined Nickel & TPA**	**Pre-Existing Funds**
Total Cumulative Number of Projects	155	233	388	N/A
Total Cumulative Program Value	$4,910,241	$10,026,517	14,936,758	N/A
Schedule, Scope and Budget Summary: Results of Completed Projects				
Cumulative to Date, 2003 – March 31, 2007	See Pages 4-7	See Pages 4-7	See Pages 4-7	NA
Total Number of Projects Completed	62	17	79	-
% of Projects Completed Early or On-Time	94%	88%	92%	-
% of Projects Completed Within Scope	100%	100%	100%	-
% of Projects Completed Under or On-Budget	89%	71%*	85%	-
% of Projects Completed On-Time and On-Budget†	84%	59%*	78%	-
Current Legislative Expectation (Baseline)	$626,813	$9,393	$636,206	-
Current Estimated Cost to Complete (WSDOT)	$628,764	$9,904	$638,668	-
% of Total Program On or Under Budget	99.7%	94.8%	99.6%	-
Biennium to Date, 2005-07				
Total Number of Projects Completed	43	17	60	291
% of Projects Completed Early or On-Time	91%	88%	90%	-
% of Projects Completed Within Scope	100%	100%	100%	-
% of Projects Completed Under or On-Budget	88%	71%	83%	-
% of Projects Completed On-Time and On-Budget†	81%	59%	75%	-
Current Legislative Expectation (Baseline)	$508,238	$9,393	$517,631	$500,540
Current Estimated Cost to Complete (WSDOT)	$510,314	$9,904	$520,218	$557,435
Advertisement Record: Results of Projects Under Construction or Entering into the Construction Phase				
Biennium to Date, 2005-07	See Pages 9-12	See Pages 9-12	See Pages 9-12	See Pages 9-12
Total Advertised	25	27	52	278
% Advertised Early or On-Time	60%	81%	71%	75%
Total Award Amounts to Date	$224,117	$182,992	$407,109	NA
Advertisement Schedule for Projects in the Pipeline: Results of Projects Now Being Advertised for Construction or Planned to be Advertised				
April 1, 2007 through September 30, 2007	See Page 13-14	See Page 13-14	See Page 13-14	NA
Total Projects Being Advertised for Construction	12	13	25	109
% On or Better than Schedule	50%	46%	48%	-

Data Source: WSDOT Project Control and Reporting
*TPA performance improved in this category partly because of revised project information on two projects that were completed in a prior quarter. See footnotes 9 and 10 on page 7 for details.
†New Measure: Reflects Draft Cabinet Strategic Action Plan Measure

WSDOT'S Capital Project Delivery Programs

Executive Summary: Ferries and Rail Roll-Up of Performance Information

In addition to capital highway projects, WSDOT provides a detailed update on the delivery of Ferry System and Rail projects that are funded by Nickel and Transportation Partnership Account (TPA) funds. PEF projects, which are funded by program, are not included here. By contrast, each of the 135 Nickel and 183 TPA projects funded in the 2005-2007 biennium has a line item budget and is monitored and reported at the individual project level. Program budgets for PEF, Nickel and TPA in this edition of the *Gray Notebook* are based on the 2006 Supplemental Budget. Updates to incorporate the 2007-2009 Biennial Transportation Budget will be made in a later *Gray Notebook*.

For Rail construction project delivery, a total of three Nickel projects have been delivered on-time and on-budget as of March 31, 2007 (100% on-time, 100% on-budget) for $14.650 million. To date the Ferry System has not completed any construction projects using Nickel or TPA funding. Both Rail and the Ferry System have projects entering into the construction phase and have a number of projects that are being advertised for construction or planned for advertisement.

Rail Project Delivery: Completed Projects
Results of Project Delivery for Biennium to Date

	Nickel (2003)	Transportation Partnership Account (TPA, 2005)	Combined Nickel & TPA
Cummulative to Date, 2003-March 31, 2007	3	0	3
% of Projects Completed Early or On-Time	100%	N/A	100%
% of Projects Completed Within Scope	100%	N/A	100%
% of Projects On-Time and On-Budget	100%	N/A	100%

Rail Advertisement Record: Results of Projects Entering into the Construction Phase

	Nickel (2003)	Transportation Partnership Account (TPA, 2005)	Combined Nickel & TPA
Biennium to Date, 2005-2007			
Total Advertised	2	3	5
% Advertised Early or On-Time	0%	33%	20%
Total Award Amounts to Date	$14,300	$8,530	$22,830

Rail Advertisement Schedule for Projects in the Pipeline:
Results of Projects Now Being Advertised for Construction or Planned to be Advertised

April 1 2007 through September 30 2007			
Total in Pipeline	4	3	7
% On or Better than Schedule	25%	0%	14%

Ferries Advertisement Record: Results of Projects Entering into the Construction Phase

	Nickel (2003)	Transportation Partnership Account (TPA, 2005)	Combined Nickel & TPA
Biennium to Date, 2005-2007			
Total Advertised	1	0	1
% Advertised Early or On-Time	100%	N/A	100%
Total Award Amounts to Date	$6,435	$0	$6,435

Ferries Advertisement Schedule for Projects in the Pipeline:
Results of Projects Now Being Advertised for Construction or Planned to be Advertised

April 1 2007 through September 30 2007			
Total in Pipeline	1	0	1
% On or Better than Schedule	0%	N/A	0%

Data Source: WSDOT Project Control and Reporting Office

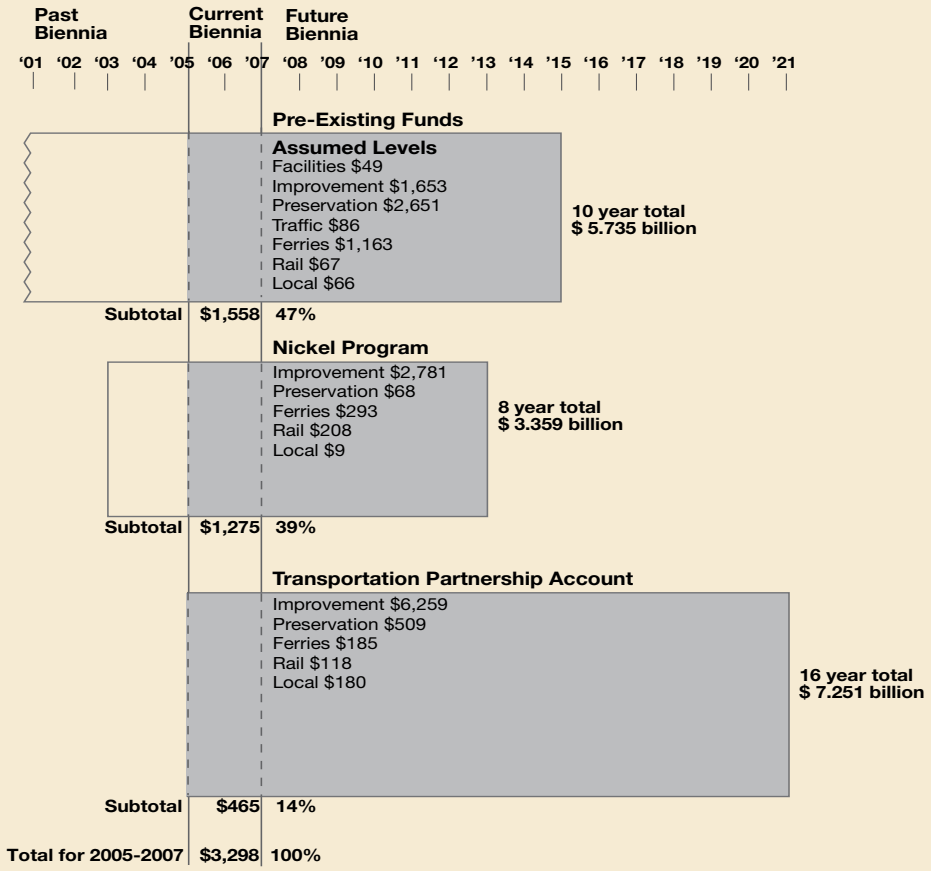
WSDOT's Capital Project Delivery Programs

Overview of WSDOT's Three Capital Project Delivery Mandates

WSDOT's Capital Program: Current and Future Biennium Outlook

2006 Supplemental Budget

Dollars in Millions



2005-07 Capital Delivery Program

The Department's 2005-07 capital program focuses on project and program delivery from all fund sources. WSDOT continues to move forward with the 10-year investment plan for the 2003 Transportation Funding Package as well as beginning the 16-year investment plan associated with the 2005 Transportation Funding Package.

In the 2005-07 biennium, based on the 2006 supplemental budget, capital funds total approximately $3.3 billion. Approximately $1.275 billion will be spent on projects associated with the 2003 Funding Package (Nickel), $465 million will be invested in projects from the 2005 Funding Package (Transportation Partnership Account - TPA), and $1.558 billion will be invested from pre-existing funding sources.

WSDOT'S Capital Project Delivery Programs

Schedule, Scope, and Budget Summary

Seventy-Nine Projects Completed as of March 31, 2007

Funded with Nickel and Transportation Partnership Accounts
(Dollars in Thousands)

Project Description	Fund Type*	On-Time Advertised	On-Time Completed	Within Scope	Current Legislative Expectation (Baseline)	Current Estimated Cost to Complete	On Budget†	On-Time and On Budget†‡
Cumulative to Date								
2003-05 Biennium Summary See the *Gray Notebook* for quarter ending September 30, 2006 for project listing	19 Nickel	4 early 15 on-time	6 early 13 on-time	19	118,575	118,448	9 under, 8 on - budget, 2 over	17 on-time and on-budget
Biennium to Date (2005-07)								
NC Regionwide - Upgrade Guardrail (Chelan, Douglas, Grant, Okanogan)	Nickel	√	Early	√	849	801	Under	√
I-5/NE 175th St to NE 205th St - Add NB Lane (King)	Nickel	√	Early	√	8,915	8,915	√	√
I-5/52nd Ave W to SR 526 - Roadside Safety and Ramp Improvements (Snohomish)	Nickel	√	Early	√	2,642	2,782	Over[1]	
I-5/300th St NW Vic to Anderson Rd Vic - Install Cable Barrier (Skagit, Snohomish)	TPA	Early	Early	√	1,288	1,288	√	√
I-5/2nd Street Bridge-Replace Bridge (Skagit)	Nickel	√	Early	√	14,333	14,412	√	√
I-5/SR 11 Vic to Weigh Station Vic - Install Cable Barrier (Skagit)	TPA	Early	Early	√	436	436	√	√
I-5/SB Ramps at SR 11/Old Fairhaven Parkway - Add Ramp Lane (Whatcom)	Nickel	√	Early	√	1,647	2,456	√[2]	√
I-5/SR 11 to 36th St - Install Cable Barrier (Whatcom)	TPA	Early	Early	√	68	103	Over[3]	
I-5/SR 542 Vicinity to Bakerview Rd - Install Cable Barrier (Whatcom)	TPA	Early	Early	√	202	254	Over[4]	
I-5/Main St to SR 548 - Install Cable Barrier (Whatcom)	TPA	Early	Early	√	409	409	√	√
I-5/Blaine Vicinity - Median Cross Over Protection (Whatcom)	TPA	√	Early	√	245	245	√	√
I-5/Salmon Creek to I-205 - Widening (Clark)	Nickel	Early	Early	√	43,109	44,308	√	√
I-5/Roanoke Vicinity Noise Wall (King)	Nickel	√	Late[5]	√	3,764	3,764	√	
SR 9/Nooksack Rd Vicinity to Cherry St - New Alignment (Whatcom)	Nickel	√	Early	√	18,010	18,027	√	√
U.S. 12/Montesano Vicinity to Elma - Install Cable Barrier (Grays Harbor)	TPA	√	Early	√	1,620	1,923	Over[6]	
U.S. 12/SR 124 to McNary Pool - Add Lanes (Walla Walla)	Nickel	√	√	√	12,299	12,092	√	√

WSDOT'S Capital Project Delivery Programs

Schedule, Scope, and Budget Summary

Seventy-Nine Projects Completed as of March 31, 2007

Funded with Nickel and Transportation Partnership Accounts
(Dollars in Thousands)

Project Description	Fund Type*	On-Time Advertised	On-Time Completed	Within Scope	Current Legislative Expectation (Baseline)	Current Estimated Cost to Complete	On Budget†	On-Time and On Budget†‡
US 12/Columbia, Garfield, and Whitman Co - Upgrade Gaurdrail (Columbia, Garfield)	Nickel	√	Early	√	302	190	Under	√
SR 14/Riverside Dr and E Camas Slough Bridge - Upgrade Bridge Rail (Clark)	Nickel	√	√	√	340	323	Under	√
SR 14/W of Paterson - Upgrade Guardrail (Benton)	Nickel	√	Early	√	320	285	Under	√
SR 16/36th St to Olympic Dr NW - Add HOV Lanes (Pierce)	Nickel	Early	Early	√	8,914	8,891	√	√
SR 17/N of Mesa - Upgrade Guardrail (Franklin)	Nickel	√	Early	√	114	86	Under	√
SR 17/N of Mesa - Upgrade Guardrail (Franklin)	Nickel	√	Early	√	114	86	Under	√
SR 18/SE 304th to SR 516 - Install Cable Barrier (King)	TPA	Early	Early	√	250	250	√	√
SR 18/Maple Valley to Issaquah/ Hobart Rd - Add Lanes (King)	Nickel	√	Late[7]	√	115,429	127,922	Over[7]	
SR 21, 23, 27, and 272 - Upgrade Guardrail (Adams, Franklin, Lincoln, Whitman)	Nickel	√	Early	√	858	785	Under	√
SR 24/Vernita Bridge - Upgrade Bridge Rail (Benton, Grant)	Nickel	√	Early	√	402	263	Under	√
SR 31/Metaline Falls to Canadian Border - All Weather Road (Pend Oreille)	Nickel	√	√	√	18,862	17,392	√[8]	√
I-90/Silica Road to East of Adams Road - Median Cross Over Protection (Grant)	TPA	Early	Early	√	322	294	Under	√
I-90/SR 17 to Grant/Adams County Line - Median Cross Over Protection (Grant)	TPA	Early	Early	√	787	749	√	√
I-90/Potato Hill Bridge - Add Pedestrian Access (Grant)	TPA	√	Early[9]	√	750	750	√	√
I-90/Moses Lake Area - Replace Bridges (Grant)	Nickel	√	Early	√	8,056	7,900	√	√
I-90/Pines Rd to Sullivan Rd - Add Lanes (Spokane)	Nickel	Early	√	√	17,894	15,812	Under	√
I-90/Argonne Rd to Pines Rd - Add Lanes (Spokane)	Nickel	Early	√	√	18,468	17,834	√	√

WSDOT'S Capital Project Delivery Programs

Schedule, Scope, and Budget Summary

Seventy-Nine Projects Completed as of March 31, 2007

Funded with Nickel and Transportation Partnership Accounts
(Dollars in Thousands)

Project Description	Fund Type*	On-Time Advertised	On-Time Completed	Within Scope	Current Legislative Expectation (Baseline)	Current Estimated Cost to Complete	On Budget†	On-Time and On Budget†‡
US 97/Ellensburg Vic to Tonasket Vic - Roadside Safety Improvement (Chelan, Douglas, Kittitas, Okanogan)	TPA	√	Early	√	1,000	978	√[10]	√
SR 99/SR 599 to Holden St - Install Cable Barrier (King)	TPA	Late[11]	Early	√	380	437	Over[11]	
SR 105/Smith Creek Bridges - Bridge Rail Retrofit (Pacific)	Nickel	√	√	√	514	514	√	√
SR 105/Smith Creek Bridge to Alexson Rd - Guardrail Upgrade (Pacific)	Nickel	√	√	√	314	314	√	√
SR 106/Skobob Creek - Improve Fish Passage (Mason)	Nickel	√	√	√	1,777	1,786	√	√
SR 122/Cinebar Rd to Jerrells Rd - Guardrail Upgrade (Lewis)	Nickel	Early	Early	√	180	208	Over[12]	
SR 124/E of Pasco - Upgrade Guardrail (Walla Walla)	Nickel	√	Early	√	494	439	Under	√
SR 127/N of Dodge - Upgrade Guardrail (Garfield)	Nickel	√	Early	√	281	224	Under	√
SR 128/Clarkston Vicinity - Upgrade Guardrail (Whitman)	Nickel	√	Early	√	68	52	Under	√
SR 161/Jovita Blvd to S 360th St, Stage 2 - Widen to Five Lanes (King, Pierce)	Nickel	√	Early	√	30,164	26,165	Under	√
SR 161/204th St to 176th St - Widen Roadway (Pierce)	Nickel	Late[13]	Early	√	16,789	16,349	√	√
SR 161/234th St to 204th St E - Add Lanes (Pierce)	Nickel	√	Early	√	17,231	15,631	Under	√
SR 167/SR 410 to Pierce/King Co Line - Install Cable Barrier (King, Pierce)	TPA	Early	Late[14]	√	487	487	√	
SR 194/SW of Colfax - Upgrade Guardrail (Whitman)	Nickel	√	Late[15]	√	1,079	1,130	√[15]	√
SR 202/244th Ave NE Intersection - Add Signal and Turn Lane (King)	Nickel	√	Early	√	1,104	1,210	Over[16]	
SR 202/Jct 292nd Ave SE - Add Signal and Turn Lane (King)	Nickel	√	√	√	586	594	√	√
I-205/Mill Plain SB Off Ramp - Add Turn Lane (Clark)	TPA	Early	Early	√	633	781	Over[17]	

WSDOT'S Capital Project Delivery Programs

Schedule, Scope, and Budget Summary

Seventy-Nine Projects Completed as of March 31, 2007

Funded with Nickel and Transportation Partnership Accounts
(Dollars in Thousands)

Project Description	Fund Type*	On-Time Advertised	On-Time Completed	Within Scope	Current Legislative Expectation (Baseline)	Current Estimated Cost to Complete	On Budget†	On-Time and On Budget†‡
SR 260/Connell to Kahlotus - Upgrade Guardrail (Franklin)	Nickel	√	Early	√	642	546	Under	√
SR 261/Lyon's Ferry Vicinity - Upgrade Guardrail (Columbia, Garfield)	Nickel	√	√	√	273	215	Under	√
SR 410/Traffic Ave to 166th Ave E - Install Cable Barrier (Pierce)	TPA	Early	Late[18]	√	245	245	√	
SR 410/Cliffdell Vicinity - Upgrade Guardrail (Yakima)	Nickel	√	Early	√	331	243	Under	√
SR 522/N Creek Vic to Bear Creek Vic - Install Cable Barrier (King)	TPA	Early	Early	√	271	275	√	√
SR 527/132nd St SE to 112th St SE - Add Lanes (Snohomish)	Nickel	√	Late[19]	√	20,933	20,962	√	
US 730/S of Wallula - Upgrade Guardrail (Walla Walla)	Nickel	√	Early	√	91	77	Under	√
SR 823/Selah Vicinity - Upgrade Guardrail (Yakima)	Nickel	√	Early	√	25	33	Over[20]	
Current Quarter (Ending March 31, 2007)								
SR 14/Columbia River Gorge - Upgrade Guardrail (Skamania)	Nickel	Early	Early	√	765	529	Under	√
SR 16/I-5 to Tacoma Narrows Bridge - Add HOV Lanes (Pierce)	Nickel	√	Early	√	118,201	118,100	√	√
SR 167/Ellingson Rd Interchange NB Off Ramp - Add Signal and Turn Lane (King)	Nickel	√	√	√	869	854	√	√

Project Details

[1]This project was completed over budget due to higher mobilization and construction materials cost.
[2]The Current Estimated Cost to Complete includes $757,000 of Local Agency funded added work. When the additional local funds are added to the Current Legislative Expectation (Baseline) for this project, the project was actually completed within budget.
[3]This project is over budget due to the replacement of regular cable barrier with high-tension cable barrier.
[4]This project is over budget due to the replacement of regular cable barrier with high-tension cable barrier.
[5]The noise wall panels, designed per agreement with the neighborhood, required a longer time for approval and procurement than anticipated by the Design Office.
[6]Increase due to extensive slope work.
[7]Heavy rain delayed the project and resulted in significantly higher cost for erosion control, street sweeping, storm water treatment, and storm water detention ponds.
[8]The Baseline budget included $1.6M in dedicated FHWA federal funding. The funding was not required and, with FHWA approval, the funding was transferred to SR 31/Pend Oreille County Bridge Project. This project's Estimated Cost to complete is now within 5% of the adjusted baseline.
[9]This project was previously reported as on-time. A technical error was identified and corrected. Project was completed earlier than planned in the original Legislative expectation.
[10]Although previously reported as over-budget, WSDOT has determined that the total final project cost was within budget after considering unused contract contingencies
[11]Advertisement delayed to complete Shoreline Permitting requirements. This project is over budget due to the replacement of regular cable barrier with high-tension cable barrier.
[12]The project costs increased due to materials cost escalation for guardrail items.
[13]This project was the second of a two-stage project. Advertisement date was delayed to better accomodate construction work and lessen impacts to the public.
[14]This project combined and advertised as a statewide contract for efficiency which resulted in a savings.
[15]The Operationally Complete Date was delayed until the harvest season was complete to allow for the free flow of the harvest trucks. Although previously reported as over-budget, WSDOT has determined that the total final project cost was within budget after considering unused contract contingencies
[16]This project was completed ahead of schedule but over budget due to cost escalation and higher prices on construction materials.
[17]Increase in construction cost due to higher fuel and asphalt prices.
[18]This project combined and advertised as a statewide contract for efficiency.
[19]The Open to Traffic date was originally planned for March 2006. Delay due to contractor unable to complete the final layer of asphalt pavement on time.
[20]This project was part of a contract involving twelve projects. The contract as a whole was completed 21% under budget. Traffic control and contract administration costs for this project were underestimated.

WSDOT'S Capital Project Delivery Programs

Schedule, Scope, and Budget Summary

Seventy-Nine Projects Completed as of March 31, 2007

Funded with Nickel and Transportation Partnership Accounts
(Dollars in Thousands)

	% On-Time Advertised	% On-Time Completed	% Within Scope	Current Legislative Expectation (Baseline)	Current Estimated Cost to Complete	% of Projects On Budget†	% of Projects On-Time and Budget†‡
Totals Current Quarter (March 31, 2007)	100%	100%	100%	$119,835	$119,483	100%	100%
3 Nickel Projects	100%	100%	100%	$119,835	$119,483	100%	100%
0 TPA Projects	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Totals Biennium to Date (2005-07)	97%	90%	100%	$517,631	$520,218	83%	75%
43 Nickel Projects	98%	91%	100%	$508,238	$510,314	88%	81%
17 TPA Projects	94%	88%	100%	$9,393	$9,909	71%	59%
Totals Cumulative to Date†	97%	92%	100%	$636,206	$638,668	85%	78%
62 Nickel Projects	98%	94%	100%	$626,813	$628,764	89%	84%
17 TPA Projects	94%	88%	100%	$9,393	$9,909	71%	59%

*As established by the 2005 Legislative Evaluation and Accountability Program (LEAP) committee. However, dollars shown are for all fund types not just Nickel or Transportation Partnership Account funds.
†As established by the 2005 Legislative Evaluation and Accountability Program (LEAP) committee. However, dollars shown are for all fund types, not just Nickel or Transportation Partnership Account funds.
‡New Measure: Reflects Draft Cabinet Strategic Action Plan Measure
Source: WSDOT Project Control and Reporting Office

Definitions

On-Time Advertised
The project was advertised within the quarter as planned based on the original Legislative expectation (2003-05 Nickel, 2005-07 TPA).
On-Time Completed
The project was operationally complete within the quarter as planned in the original Legislative expectation (2003-05 Nickel, 2005-07 TPA).
Within Scope
The project was completed within the specific functional intent of a project as last approved by the Legislature.
On-Budget
The project was within +/- five percent of the current Legislative expectation (baseline).

WSDOT's Capital Project Delivery Programs

Advertisement Record

Sixty-Five Projects Now in Construction Phase as of March 31, 2006

Nickel and Transportation partnership Account (TPA) Projects
Dollars in Thousands.

Project Description	Fund Type	On-Time Advertised	Ad Date	Contractor	Operationally Complete Date	Award Amount
Cumulative to Date						
SR 7/SR 507 to SR 512 - Safety Improvements (Pierce)	Nickel	√	Jun-05	Scarsella Bros. Inc.	Apr-07	13,745
I-5/Pierce Co Line to Tukwila Interchange - Add HOV Lanes (King)	Nickel	Early	Nov-04	Icon Materials	Jul-07	35,847
**SR 240/I-182 to Richland Y - Add Lanes (Benton)	Nickel	Early	Feb-03		Oct-07	
• Yakima River Bridge 240/12 (Benton)	PEF		Feb-03	Wildish Standard	Aug-05	16,123
• SR 240/I-182 to Columbia Center Blvd. (Benton)	Nickel		Dec-04	Icon Materials	Oct-07	30,473
SR 240/Richland Y to Columbia Center I/C - Add Lanes (Benton)	Nickel	√	Dec-04	For construction efficiencies, this project was combined with the one above.		
I-90/EB Ramps to SR 18 - Add Signal and Turn Lanes (King)	Nickel	√	Sep-03	KLB Construction	Oct-07	2,599
SR 9/SR 522 to 228th St SE, Stages 1a and 1b - Add Lanes (Snohomish)	Nickel	√	Jan-96	Wilder Construction	Nov-07	17,993
SR 9/228th St SE to 212th St SE (SR 524), Stage 2 - Add Lanes (Snohomish)	Nickel	√	May-05	For construction efficiencies, this project was combined with the one above.		
SR 24/I-82 to Keys Rd - Add Lanes (Yakima)	Nickel	Early	Feb-05	Max J. Kuney	Dec-07	33,964
I-5/SR 526 to Marine View Drive - Add HOV Lanes (Snohomish)	Nickel	Early	Oct-04	Atkinson CH2M	Jun-08	184,993
I-5/41st St Interchange - Widening and Rebuild Ramps (Snohomish)	TPA	Early	Oct-04	For construction efficiencies, this project was combined with the one above.		
I-5/S 48th to Pacific Ave - Add HOV Lanes (Pierce)	Nickel	√	Mar-05	Kiewit Pacific	Jun-08	72,869
SR 104/Hood Canal Bridge - Replace E Half (Jefferson, Kitsap)	TPA	√	Feb-03	Kiewit-General,	Jun-09	204,000
**US 395/NSC-Francis Ave to Farwell Rd - New Alignment (Spokane)	Nickel	Late[1]	Jan-04		Mar-09	
• NSC-Farwell Road Lowering (Spokane)	Nickel		Jan-04	Max J. Kuney	Jul-05	4,976
• NSC-Gerlach to Wandermere - Grading - CN (Spokane)	Nickel		Nov-04	KLB Construction	Sep-06	9,987
• NSC-Francis Avenue to US 2 Structures - REBID (Spokane)	Nickel		May-06	Max J. Kuney	Oct-07	17,236
• US 395/NSC-Freya to Fairview Vic - Grading and Structures (Spokane)	Nickel		Jan-07	Steelman-Duff	Nov-08	10,571
• US 395/NSC-Freya St to Farwell Rd - PCCP Paving (Spokane)	Nickel		Feb-07	Acme Concrete Paving	Mar-09	19,490
Biennium to Date (2005-07)						
SR 16/NW of Tacoma Narrows to SE of Burley - Install Cable Barrier (Kitsap, Pierce)	TPA	Late[2]	May-06	Petersen Brothers	Apr-07	3,508
**SR 516/208th and 209th Ave SE - Add Turn Lanes (King)	Nickel	Late[3]	Jan-06	Road Construction NW	Apr-07	678
I-5/SR 532 NB Interchange Ramps - Add Turn Lanes (Snohomish)	Nickel	√	Mar-06	Trimaxx Construction	May-07	3,769

WSDOT's Capital Project Delivery Programs

Advertisement Record

Sixty-Five Projects Now in Construction Phase as of March 31, 2006

Nickel and Trasportation partnership Account (TPA) Projects
Dollars in Thousands.

Project Description	Fund Type*	On-Time Advertised	Ad Date	Contractor	Operationally Complete Date	Award Amount
US 12/Wildcat Creek to I-82 - Roadside Safety Improvements (Yakima)	TPA	√	Oct-06	Petersen Brothers	Jun-07	741
SR 410/Morse Creek to US 12 - Roadside Safety Improvements (Yakima)	TPA	√		For construction efficiencies, this project was combined with the one above.		
I-90/Columbia River Bridge - Upgrade Bridge Rail (Grant, Kittitas)	Nickel	Late[4]	Oct-06	Frank Gurney	Jun-07	1,054
SR 3/SR 106 S Belfair - Install Signal (Mason)	TPA	√	Nov-06	Totem Electric of Tacoma	Jun-07	399
SR 821/Selah to Ellensburg - Roadside Safety Improvements (Kittitas, Yakima)	TPA	√	Nov-06	North Star Enterprises	Jun-07	296
I-90/Harvard Rd Pedestrian Bridge - Construct Bridge (Spokane)	TPA	√	Dec-06	Wesslen Construction, Inc.	Aug-07	892
SR 99/S 284th to S 272nd St - Add HOV Lanes (King)	Nickel	√	Apr-06	SCI Infrastructure	Aug-07	8,615
US 2/Dryden - Install Signal (Chelan)	Nickel	√	Oct-06	Central Washing-ton Asphalt	Sep-07	3,319
SR 165/Carbonado Vicinity - Upgrade Guard-rail (Pierce)	Nickel	√	Oct-06	Dirt & Aggregate Interchange	Sep-07	539
Pierce and Thurston Co - Roadside Safety Improvements (Pierce, Thurston)	TPA	√	Nov-06	Petersen Brothers	Oct-07	576
SR 3/SR 303 Interchange (Waaga Way) - Construct Ramp (Kitsap)	Nickel	√	Aug-05	Scarsella Bros	Oct-07	16,744
SR 17/Pioneer Way to Stratford Rd - Widen to Four Lanes (Grant)	TPA	√	Jun-06	Central Washington Asphalt	Oct-07	14,607
SR 20/Thompson Road - Add Signal (Skagit)	TPA	Early	Oct-06	Rinker Materials West	Oct-07	1,437
US 12/40th Ave Interchange - Interchange Improvements (Yakima)	TPA	√	Oct-06	Superior Paving	Oct-07	1,047
SR 112/Hoko and Pysht Rivers - Erosion Control (Clallam)	TPA	Early	Aug-06	(State Forces)	Oct-07	200
SR 397/Columbia River Bridge - Upgrade Bridge Rail (Franklin)	Nickel	Late[5]		For construction efficiencies, this project was combined with the one above.		
SR 270/Pullman to Idaho State Line - Add Lanes (Whitman)	Nickel	Late[6]	Mar-06	North Central Construction,	Oct-07	18,090
SR 202/Jct SR 203 - Construct Roundabout (King)	Nickel	√	Dec-06	Tri-State Construction,	Nov-07	1,391
SR 167/15th St SW to 15th St NW - Add HOV Lanes (King)	Nickel	√	Dec-05	Icon Materials, A Division of CPM	Dec-07[7]	27,849
SR 169/SE 291st St Vicinity (Formerly SE 288th Street) - Add Turn Lanes (King)	TPA	√	Nov-06	Tri-State Construction	Dec-07	1,195
US 12/Attalia Vicinity - Add Lanes (Walla Walla)	Nickel	√	Dec-05	Apollo	Dec-07	11,222

WSDOT's Capital Project Delivery Programs

Advertisement Record

Sixty-Five Projects Now in Construction Phase as of March 31, 2007

Nickel and Trasportation partnership Account (TPA) Projects
Dollars in Thousands.

Project Description	Fund Type*	On-Time Advertised	Ad Date	Contractor	Operationally Complete Date	Award Amount
I-405/SR 520 to SR 522 - Widening (King)	Nickel	√	Jul-05	Kiewit Construction	Dec-07	47,500
SR 543/I-5 to Canadian Border - Add Lanes (Whatcom)	Nickel	Late[8]	Nov-05	IMCO General Construction	Oct-08	28,315
I-5/SR 502 Interchange - Build Interchange (Clark)	Nickel	√	Dec-06	Kerr Contractors	Jun-09	28
SR 509/I-5/SeaTac to I-5 (King)	TPA	Late[9]	Jun-06	Tri-State Construction	Jun-09	344
**SR 522/I-5 to I-405 - Multimodal Improvements (King)	TPA	Early	Jun-06		Jun-09	
• SR 522 Corridor Improvement,153RD Signal & Roadway Widening (King)	TPA		Jun-06	Tri-State Construction	Nov-07	4,038
I-90/Two Way Transit - Transit and HOV Improvements (King)	TPA	Late[10]	Oct-06	Max J. Kuney	Aug-09	28,532
SR 20/Fredonia to I-5 - Add Lanes (Skagit)	Nickel	√	Nov-06	Scarsella Bros.	Oct-09	15,139
I-405/112th Ave SE to I-90 - NB Widening (King)	TPA	Early	Oct-06	Guy F. Atkinson Construction	Dec-09	124,000
I-405/I-90 to SE 8th St - Widening (King)	TPA	Early	For construction efficiencies, this project was combined with the one above.			
I-405/NE 10th St - Bridge Crossing (King)	TPA	Early	Sep-06		Dec-09	
• I-405/NE 10th St Bridge Crossing (King)	TPA		Sep-06	City of Bellevue	Apr-08	
Quarter Ending March 31, 2007						
SR 9/108th Street NE (Lauck Road) - Add Turn Lanes (Snohomish)	Nickel	√	Feb-07	Pacific Road & Bridge	Aug-07	882
SR 531/Lakewood Schools - Construct Sidewalks (Snohomish)	TPA	Early	Mar-07	Wilder Construction	Aug-07	227
I-90/EB Ramps to SR 202 - Construct Roundabout (King)	Nickel	√	Jan-07	Tri-State Construction	Sep-07	1,164
SR 3/Imperial Way to Sunnyslope - Add Lanes (Kitsap)	TPA	Late[11]	Feb-07	ACE Paving	Oct-07	953
SR 20/Ducken Rd to Rosario Rd - Add Turn Lanes (Island, Skagit)	Nickel	Late[12]	Jan-07	Strider Construction	May-08	4,544
SR 167 HOT Lanes Pilot Project - Managed Lanes (King)	TPA	Early	Mar-07	(Bids Rejected)	Jul-08	
I-5/S Seattle NB Viaduct - Bridge Paving (King)	TPA	√	Mar-07	(Award Pending)	Sep-08	
I-5/SB Viaduct, S Seattle Vicinity - Bridge Repair (King)	TPA	√	Mar-07	(Award Pending)	Sep-08	
SR 9/Schloman Rd to 256th St NE - New Alignment (Snohomish)	Nickel	Late[13]	Jan-07	Scarsella Bros., Inc.	Oct-08	10,748
SR 9/252nd St NE Vicinity - Add Turn Lane (Snohomish)	Nickel	Late[14]	For construction efficiencies, this project was combined with the one above.			
SR 9/268th St Intersection - Add Turn Lane (Snohomish)	Nickel	Late[15]	For construction efficiencies, this project was combined with the one above.			

WSDOT's Capital Project Delivery Programs

Advertisement Record

Sixty-Five Projects Now in Construction Phase as of March 31, 2007

Nickel and Trasportation partnership Account (TPA) Projects
Dollars in Thousands.

Project Description	Fund Type*	On-Time Advertised	Ad Date	Contractor	Operationally Complet Date	Award Amount
SR 401/US 101 to E of Megler Rest Area Vic - Upgrade Guardrail (Pacific)	Nickel	Early	Mar-07	(Award Pending)	Nov-08	
SR 522/University of Washington Bothell - Build Interchange (King)	TPA	Late[16]	Jan-07	(Award Pending)	Sep-09	
I-5/Rush Rd to 13th St - Add Lanes (Lewis)	Nickel	√	Mar-07	(Award Pending)	Dec-09	
SR 167/S 180th St to I-405 - SB Widening (King)	TPA	Early	Feb-07	(Award Pending)	Jun-10	
I-405/SR 181 to 167 - Widening (King)	TPA	Early	Feb-07		Jun-10	
• I-405/Springbrook Creek Wetland and Habitat Mitigation Bank (King)	Nickel		Aug-06	Scarsella Bros.	Dec-08	12,539
I-405/I-5 to SR 181 - Widening (King)	TPA	Early	Feb-07	(Award Pending)	Jun-10	
SR 520/W Lake Sammamish Parkway to SR 202, Stage 3 - Widening (King)	Nickel	Late[17]	Jan-07	Tri-State Construction	Dec-11	9,988

	On-Time Advertised	Award Amount
Totals Current Quarter (March 31, 2007)	**61%**	**41,045**
9 Nickel Project	44%	39,865
9 TPA Projects	78%	1,180
Totals Biennium to Date (2005-07)	**71%**	**407,109**
25 Nickel Projects	60%	224,117
27 TPA Projects	81%	182,992
Totals Cumulative to Date (Projects Underway)	**75%**	**1,065,852**
36 Nickel Projects	69%	678,860
29 TPA Projects	83%	386,992

Data Source: WSDOT Project Control and Reporting Office
*As established by the 2005 Legislative Evaluation and Accountability Program (LEAP) committee. However, dollars shown are for all fund types, not just Nickel or Transportation Partnership Account funds.
**Indicates project is on the Watch List

Project Details

[1]Right-of-Way acquisition delay.
[2]Delayed to avoid construction conflicts with the Nickel Project SR 16/36th Ave. to Olympic within the project limits. For efficiency, this project was combined into a single contract with another median barrier project that had a later advertisement date.
[3]Right-of-Way and environmental permitting issues
[4]This project was combined in the same contract for cost efficiency with another bridge retrofit project, SR 397/Bridge Rail Retrofit - Columbia River Bridge West of Kennewick, which was delayed for redesign. See note 2 for SR 397/Bridge Rail Retrofit - Columbia River Bridge West of Kennewick
[5]The existing bridge rail required development of an unique bridge rail retrofit that would be compatible. In addition, this project was tied to I-90/Columbia River Bridge which provided economy of scale over advertising separately.
[6]The advertisement of this project was delayed due to environmental permitting issues and the need for redesign to stay within budget after geological conditions, Right-of-Way cost increases, and Corps of Engineers mitigation negotiations.
[7]Operationally complete moved to 3/31/08, contractor has been struggling with bad weather conditions causing delay in work. Concrete workers strike in Aug 06 caused delays in work.
[8]Advertisement date delay due to Right-of-Way acquisition delay.
[9]The original planned advertisement date of November, 2005, was unrealistic. Funding on this TPA project was uncertain until Initiative I-912 was decided in November, 2005. The unrealistic schedule was overlooked when updating the project list for the 2006 Legislative Budget.
[10]Agreement of Access with Mercer Island delayed the ad to 10/16/06.
[11]Delay is due to unresolved utilities issues.
[12]Advertisement date was delayed due to environmental permitting issues.
[13]Advertisement date was delayed due to environmental permitting issues.
[14]Advertisement date delayed due to environmental permitting issues.
[15]Advertisement date delayed due to environmental permitting issues.
[16]Advertisement date delayed due to environmental permitting issues.
[17]The advertisement for the flyover ramp portion of this project has been delayed to January, 2007, due to stormwater and wetland design changes. The widening portion of the project will be advertised at a later date.

WSDOT Capital Project Delivery Programs

Projects to be Advertised

Twenty-Five Projects in Delivery Pipeline for April 1, 2007 Through September 30, 2007

Nickel and Transportation Partnership Account (TPA) Projects Now Being Advertised for Construction or Planned to be Advertised
Dollars in Thousands

Project Description	Fund Type*	Original Planned Ad Date	Current Planned Ad Date	On Schedule	Baseline Estimated Cost at Completion	Current Estimated Cost at Completion
SR 542/Boulder Creek Bridge - Replace Bridge (Whatcom)	TPA	Jan-07	Apr-07	Delayed[1]	6,054	6,937
US 101/Mt Walker - Add Passing Lane (Jefferson)	TPA	Jan-07	Apr-07	Delayed[2]	2,500	2,440
SR 509/SR 518 Interchange - Signalization and Channelization (King)	TPA	Jul-07	Apr-07	Advanced	10,618	13,488
SR 518/SeaTac Airport to I-5 - Eastbound Widening (King)	TPA	Apr-07	Apr-07	√	35,589	34,125
US 2/Pickle Farm Road and Gunn Road - Add Turn Lanes (Snohomish)	Nickel	Mar-07	Apr-07	Delayed[3]	972	1,349
**SR 20/Quiet Cove Rd Vicinity to SR 20 Spur - Widening (Skagit)	Nickel	Apr-07	May-07	√	16,920	26,625
SR 25/Spokane River Bridge - Upgrade Bridge Rail (Lincoln, Stevens)	Nickel	May-07	May-07	√	354	296
SR 25/Columbia River Bridge - Upgrade Bridge Rail (Stevens)	Nickel	May-07	May-07	√	448	430
I-90/Latah Creek and Lindeke St Bridges - Upgrade Bridge Rail (Spokane)	Nickel	May-07	May-07	√	737	770
SR 116/SR 19 to Indian Island - Upgrade Bridge Rail (Jefferson)	Nickel	Mar-06	May-07	Delayed[4]	154	487
SR 542/Woburn to McLeod - Widen to Four Lanes (Whatcom)	TPA	Apr-07	May-07	√	1,000	1,000
Adams and Franklin Co - Roadside Safety Improvements (Adams, Franklin)	TPA	Feb-07	Jun-07	Delayed[5]	1,000	1,000
Whitman and S Spokane Co - Roadside Safety Improvements (Spokane, Whitman)	TPA	Feb-07	Jun-07	Delayed[6]	1,000	1,000
US 12/Wynoochee River Bridge - Upgrade Bridge Rail (Grays Harbor)	Nickel	Mar-07	Jun-07	Delayed[7]	220	257
US 101/Quinault River Bridge - Upgrade Bridge Rail (Grays Harbor)	Nickel	Mar-07	Jun-07	Delayed[8]	230	268
SR 105/Johns River Bridge - Upgrade Bridge Rail (Grays Harbor)	Nickel	Mar-07	Jun-07	Delayed[9]	287	338
SR 241/Rattlesnake Hills Vicinity - Roadside Safety (Benton, Yakima)	TPA	Jun-07	Jun-07	√	1,665	2,176
SR 260,263, and 278 - Upgrade Guardrail (Franklin, Spokane, Whitman)	Nickel	Jan-07	Jun-07	Delayed[10]	1,025	954
US 2/Fern Bluff to Sultan Startup - Stormwater Drainage Improvements (Snohomish)	TPA	May-07	Jun-07	√	862	1,009
US 2/10th St Intersection Vic - Stormwater Drainage Improvements (Snohomish)	TPA	Apr-07	Jun-07	√	452	536
SR 169/140th Way SE to SR 900 - Add Lanes (King)	TPA	Mar-07	Jul-07	Delayed[11]	2,818	2,818

WSDOT Capital Project Delivery Programs

Projects to be Advertised

Project Description	Fund Type*	Original Planned Ad Date	Current Planned Ad Date	On Schedule	Baseline Estimated Cost at Completion	Current Estimated Cost at Completion
I-5/Lexington Vicinity - Construct New Bridge (Cowlitz)	Nickel	Jan-08	Jul-07	Advanced	5,000	5,000
**SR 515/SE 182nd St to SE 176th St Vic - Construct Traffic Island (King)	TPA	Mar-07	Aug-07	Delayed[12]	1,080	2,173
US 2 and SR 92 - Roadside Safety Improvements (Snohomish)	TPA	Apr-07	Aug-07	Delayed[13]	1,200	1,200
US 2/US 97 Peshastin E - New Interchange (Chelan)	Nickel	Sep-07	Sep-07	√	17,548	21,575
Total (April 1 2007 through September 30 2007				**48%**	**$109,733**	**$128,251**
12 Nickel Projects				50%	$43,895	$58,349
13 TPA Projects				46%	$65,838	$69,902

Data Source: WSDOT Project Control and Reporting Office
*As established by the 2005 Legislative Evaluation and Accountability Program (LEAP) committee. However, dollars shown are for all fund types, not just Nickel or Transportation Partnership Account funds.
**Indicates project is on the Watch List

Project Details:

[1]Advertisement date delay due to time required to analyze alternative bridge footings, which delayed environmental review and permitting process.
[2]Project advertisement was delayed to address possible redesign from geotechnical review. Additional study confirmed that redesign is not necessary and project will be back on track. This delay will not affect the operationally complete date.
[3]Advertisement delayed to address design deviations and late addition of consultant staff to ensure timely delivery of the project.
[4]Advertisement date delay due to DAHP(Historic Preservation) review required for this project.
[5]Advertisement date delay due to the delay in completing cultural resource survey and environmental permits.
[6]Advertisement date delay due to the delay in completing cultural resource survey and environmental permits.
[7]Delay is to tie with another project for efficiency.
[8]Advertisement date changed to balance with Nickel Bridge Rail retrofit allocation.
[9]Advertisement date changed to balance with Nickel Bridge Rail retrofit allocation.
[10]Advertisement date delay due to the delay in completing cultural resource survey and environmental permits.
[11]Advertisment date delay due to environmental issues.
[12]Advertisement date delay due to utility relocation issues
[13]Advertisement date delayed due to permitting issues and the need for Right-of-Way easement in some sections of the National Forest Service lands. Also due to the weather conditions (snow) that prevented biologists from delineating wetlands and surveying of these areas.

WSDOT's Capital Project Delivery Programs

Selected Capital Project Delivery Highlights

HIGHWAY CONSTRUCTION

Updated Since December 31, 2006

SR16 /I-5 to Tacoma Narrows Bridge - Add HOV Lanes (Pierce)

The second of two major contracts on this project, SR16/ Union Avenue to Jackson Avenue, is now complete, finishing the project on time and on budget. This project extends from Union Ave. near I-5 to the east end of the new Tacoma Narrows Bridge. After completion of the new Tacoma Narrows Bridge in late summer of 2007, and after the rehabilitation of the existing bridge, scheduled for the following year, the corridor will be fully operational.

SR7/SR507 to SR512 – Safety (Pierce)

This safety project is 88% complete and currently on budget. It will define traffic access points by constructing curbs, sidewalks and road approaches along the entire corridor. Other safety improvements include new traffic signals and lighting. This project, awarded in September 2005, is scheduled to be operationally complete in April 2007 with some minor decorative lighting work completed in May 2007.

SR16/NW of Tacoma Narrows Bridge to SE of Burley Olalla Cable Median Barrier (Kitsap)

Work on this $2.0 million project should be completed within the construction schedule, despite a work start delay of several months due to difficulties in procuring materials. The installation of a high-tension cable barrier guardrail system in medians less than fifty feet wide on two highways, SR 16 and SR 3 in Kitsap County, will improve safety. The contract was awarded in July 2006 for 14% over the Engineer's Estimate.

The SR 16 portion of work was completed on January 7, 2007. Work on SR 3, now 30% complete, is expected to be finished by the end of April.

SR 165/Carbonado Vicinity - Upgrade Guardrail (Pierce)

This project was awarded in December 2006 within 2% of the Engineer's Estimate, on schedule and on budget. The goal of this project is to provide a safer roadway and eliminate maintenance problems. Work is expected to begin in April 2007 and to be completed in September 2007.

State Highways in Pierce and Thurston Counties – Roadside Safety Improvements

This project is designed to reduce fatal and disabling injury accidents at thirty-two locations on State Routes 7, 165, 507, and 510. Work is scheduled to begin March 19, 2007. The bulk of the work will be completed by April 2007. After that, construction will be suspended to accommodate utility relocations and right-of-way availability. Work is expected to resume on July 9, 2007 and completed by July 20, 2007.

I-5 SR 502 Interchange (Clark)

This project was advertised for construction as scheduled, and the successful bid was 9% below the Engineer's estimate. Constructing a new interchange with SR 502 at 219th Street will reduce congestion (thereby improving traffic flow) on a three-mile stretch of I-5. Construction is scheduled to start April 9, 2007 with a ground breaking event on April 12, 2007.

SR 167/HOT Lanes Pilot Project (King)

This pilot project advertised the civil construction work on March 26, 2007, six months early. Bid opening is scheduled for May 2007. The construction will convert the existing SR 167 HOV lanes into High Occupancy Toll (HOT) lanes. Single-occupant vehicles will be charged a toll; HOV, buses, and motorcycles will continue to use the lanes toll-free. There will be no toll booths; tolls will be collected electronically from vehicles fitted with transponders. The toll rate to enter the HOT lane will change throughout the day depending on the volume of traffic in the HOT lane; the priority is to maintain a reliable speed within the HOT lane.

SR 518/SeaTac Airport to I-5/ I-405 Interchange (King)

WSDOT has resolved the issue regarding the Muckleshoot Indian Tribe's comments in response to permit requests, and Army Corps of Engineers permitting can proceed. This project is moving forward with an April 2007 Advertisement date.

The project will reduce traffic congestion (thereby improving traffic flow) from SeaTac Airport to I-5 and I-405 by adding a third eastbound lane from the North Airport Expressway to the I-5/I-405 Interchange.

WSDOT's Capital Project Delivery Programs

"Watch List" Projects - Cost and Schedule Concerns

Watch List Summary

New to the Watch List	Project Type	Watch List Issue
SR 20/Quiet Cove Rd Vicinity to SR 20 Spur – Widening (Skagit)	Highway	Schedule, Right-of-way impacts, Fish window
SR 522, I-5 to I-405 Multimodal Project (King)	Highway	Right-of-way, Utility relocation, Weather delays
SR3/Belfair Bypass – New Alignment (Mason)	Highway	Design, Cost increase, Environmental
SR3/Belfair Area Improvements – Mobility (Mason)	Highway	Cost increase due to expanded design of new utility
US101/Purdy Creek Bridge Replacement (Mason)	Highway	Cost increase, Environmental mitigation, Geotechnical
SR 241, Rattlesnake Hills Vic-Roadside Safety	Highway	Permitting delays, Third party environmental process
SR 167 – SR 410 to 15th St SW - HOV (King/Pierce)	Highway	Design, Cost increase, Fish passage
Everett – Curve Realignment and Storage Tracks (Snohomish)	Rail	Wetland permitting, BNSF permitting delay
Geiger Spur/Airway Heights - New Rail Connection (Spokane)	Rail	Cost increases
Impacts to Large Terminal Projects by Recent Legislative Action	Ferries	Legislation requiring project plan revisions
Eagle Harbor Maintenance Facility (Kitsap)	Ferries	Delay, Litigation, Cost increase, Schedule impacts
System-wide Catch-Up Preservation	Ferries	Cost increase due to scope change, Weather delay
Mukilteo Multimodal Ferry Terminal (Snohomish)	Ferries	Delay, Cost increase, Schedule impact
Keystone Ferry Terminal (Island)	Ferries	Suspended, City concerns, Cost increase, Schedule impact
Port Townsend Ferry Terminal (Jefferson)	Ferries	Suspended, City concerns, Cost increase, Schedule impact
Updated Since December 31, 2006	**Project Type**	**Watch List Issue**
SR 539/Tenmile Road to SR 546 – Widening (Whatcom)	Highway	Environmental/utility permitting, Schedule
U.S. 395/NSC – Francis Ave to Farwell Rd – New Alignment (Spokane)	Highway	BNSF negotiations, Scheduling
SR 24/I-82 to Keys Road - Add Lanes (Yakima)	Highway	Environmental costs, Engineering costs
U.S. 12/SR 124 Intersection - Build Interchange (Walla Walla)	Highway	Environmental documentation, Cost increase, Road closures
I-405, I-5 to SR 169 Stage 1 - Widening (King) I-405 / SR 167 to SR 169 - NB Widening (King)	Highway	Tribal negotiations
SR 515/SE 182nd St to SE 176th St Vic - Construct Traffic Island (King)	Highway	Schedule delay due to right-of-way, Cost increase, Design
SR 516/208th and 209th Ave SE - Add Turn Lanes (King)	Highway	Cost increase, Utility and weather delay
New 144-Auto Ferry Project	Ferries	Delay, Litigation, Cost increase, Labor cost increase
Anacortes Multimodal Terminal (Skagit)	Ferries	Deferred, Marine construction regulatory issues, Cost increase
Mt. Vernon – Siding Improvements (Skagit)	Rail	Schedule, Public mitigation activities, Wetlands
Stanwood – New Station (Snohomish)	Rail	Design, Scope increase, Cost increase
Vancouver - Rail Bypass and W 39th St. Bridge (Clark)	Rail	Design, Cost increase, Schedule
White Swan/Toppenish - Yakama Sawmill Traffic Upgrades (Yakima)	Rail	Third party negotiations
Palouse River and Coulee City RR - Acquisition and Rehabilitation (Grant, Lincoln, Spokane, Whitman)	Rail	Funding, MOU on Real Estate
Removed From Watch List this Quarter	**Project Type**	**Watch List Issue**
SR 543/I-5 to Canadian Border – Add Lanes (Whatcom)	Highway	Cost Increase, Drilling
SR 539/Horton Road to Tenmile Road – Widen to Five Lanes (Whatcom)	Highway	Cost increase, Delays, Wetland mitigation
SR 9/SR 522 to 228th St SE, Stages 1a and 1b – Add Lanes (Snohomish)	Highway	Cost increases on right-of-way, Roadway excavation

"Watch List" Projects - Cost and Schedule Concerns

Watch List Summary (continued)

Removed From Watch List this Quarter (continued)	Project Type	Watch List Issue
SR 20/Ducken Rd to Rosario Rd – Add Turn lanes (Island, Skagit)	Highway	Design, funding, Unique guardrails
SR16, Burley Olalla Interchange (Kitsap()	Highway	Cost increase, Environmental
SR 161/24th to Jovita - Add Lanes (Pierce)	Highway	Funding availability, Schedule
US 101/MP 341 Lilliwaup Vicinity - Slope Stabilization (Mason)	Highway	Environmental, Endangered fish species
SR 9/Schloman Rd to 256th St NE – New Alignment (Snohomish)	Highway	Budget, Environmental permitting delays
SR 522/University of Washington Bothell - Build Interchange (King)	Highway	Cost increase, Scheduling delay, Environmental
SR 542/Boulder Creek Bridge – Replace Bridge (Whatcom)	Highway	Design, Cost increase
I-5/S 48th to Pacific Avenue - Add HOV Lanes (Pierce)	Highway	Cost increase
SR3/SR303 Interchange (Waaga Way) (Kitsap)	Highway	Cost increase, Erosion control
SR3/Imperial Way to Sunnyslope (Kitsap)	Highway	Franchise agreement with utilities
US101/Mt. Walker North Bound and South Bound Passing/Truck Lanes (Jefferson)	Highway	Geotechnical issues
I-5, Chehalis River Flood Control – Construct Levies (Lewis)	Highway	Design, Third party decision

New to the Watch List this Edition

SR 20/Quiet Cove Rd Vicinity to SR 20 Spur – Widening (Skagit)
This lane-widening and bridge-building project faces a schedule risk. The advertisement date for Stage 1 is delayed from April to May 2007 due to right-of-way acquisition issues concerning federal septic system relocation requirements. The right-of-way issues must be resolved in time for a May 2007 advertisement. This will leave sufficient time to complete construction work before the Meadow Creek fish window closes in late September 2007. Resolution would avoid a year's delay; otherwise, completion will be extended to 2010 from 2009.

SR 522, I-5 to I-405 Multimodal Project (King)
This project constructs pedestrian and road enhancements in the City of Lake Forest Park. Right-of-way acquisition issues required utility relocation work, which is currently six weeks behind schedule because utility crews were diverted to service restoration work following severe weather in November.

WSDOT is meeting regularly with the contractor and utility companies to manage the schedule risk. Additionally, WSDOT is assessing ways to mitigate a potential $100,000 cost increase on a $21.2 million project due to utility conflicts, right-of-way issues, and higher costs for utility trench repair and traffic control.

SR3/Belfair Bypass – New Alignment (Mason)
WSDOT estimates that this project is going to cost significantly more than the 2007 Transportation Budget. This project constructs a new alignment around the town of Belfair to reduce travel time.

This project was funded with the 2005 Transportation Partnership Act funds using an estimate developed by Mason County in 1999 of $15 million. This amount represents Mason County's cost estimate from 1999. This funding level is only enough for design of the project, environmental permitting and the start of right-of-way acquisition. In the eight years since 1999, environmental mitigation, highway runoff treatment standards, wetland mitigation costs, and unusually high cost escalation in construction materials have put the total project cost well beyond the Mason County estimate. An additional $20 million to $34 million dollars will be needed for other stages to meet the purpose and traffic needs through the design year of 2030.

SR3/Belfair Area Improvements – Mobility (Mason)
This project will be evaluated by WSDOT to determine if the scope, schedule, and the Legislative estimate are still reasonable given the new, expanded utility design parameters from Mason County and the changed construction market conditions since the estimate was completed in 2005.

The project was originally funded in the 2005 Transportation Partnership Act for $15.7 million and $16.1 million in 2007-09 as a joint roadway improvement and sanitary sewer project on the SR 3 corridor in Mason County. The sanitary sewer project, set to be constructed prior to the roadway improvements, received final funding from the 2007-09 Legislature .

The preliminary engineering phase of the Belfair Area Improvements project begins July 1, 2007.

WSDOT's Capital Project Delivery Programs

"Watch List" Projects - Cost and Schedule Concerns

U.S. 101/Purdy Creek Bridge Replacement (Mason)
This project is facing a potential cost increase and schedule delay. The total cost of the project may increase by approximately $1.5 million because of additional environmental mitigation and geotechnical issues that have arisen. The cost increase was not included in the budget proposal that was developed for the 2007 Legislative Session.

Advertising the project on time depends upon timely real estate acquisition, which depends upon timely processing of environmental permits. The environmental documentation is scheduled for completion in April, but may be delayed to the end of July. Any further delay will delay the advertisement.

This project will eliminate road closures caused by flooding at this location on US 101 by replacing the existing timber bridge with a more modern bridge at a higher elevation.

SR 241, Rattlesnake Hills Vic-Roadside Safety (Yakima)
There is potential for a delay in the June 2007 Advertisement date due to environmental permitting issues.

This $2.2 million project will realign 0.6 miles of SR 241, improving two substandard curves that contribute to a higher than average accident rate. The project will also address high priority guardrail and sign locations to improve motorist safety throughout the SR 241 corridor.

WSDOT must acquire property from the Bureau of Land Management (BLM) in order to realign the curves. In order to sell the property, BLM must complete an Environmental Assessment (EA) separate from WSDOT's environmental process. WSDOT is working closely with BLM to mitigate the potential delay and expects to complete the project on time in Summer 2008.

SR 167/SR 410 to 15th St SW - HOV (King/Pierce)
There are up to eight culverts within the project limits that may be fish passage barriers. Under U.S. Army Corps of Engineers' permitting requirements, the Department may be required to remove some or all of these barriers. The cost of replacing a culvert under SR 167 is about $2 million apiece. Our maximum liability thus could be as much as $16 million. WSDOT will do a detailed stream survey to determine which culverts constitute barriers and how to remove those barriers in the most cost effective manner. The final decision on needed mitigation will be negotiated with the Corps and interested parties.

This project will widen SR 167, adding a new southbound HOV lane for additional capacity to relieve congestion and improve safety for commuters.

Rail

Everett – Curve Realignment and Storage Tracks (Snohomish)
Wetland permitting delayed the anticipated start of construction to October 2007, from April 2007. BNSF must fill wetlands on its property, which then must be mitigated.

WSDOT anticipated delay in BNSF obtaining the required permits; therefore, $8 million was moved from the 2005-07 biennium to 2007-09 through the National Historic Preservation Act Section 106 compliance process. As a result of the latest information, the project will underspend the remaining 2005-07 Legislative appropriation by an additional $5 million.

This project will realign curves to improve speeds for passenger trains, and guarantees the continued operation of the second train on the Seattle-Vancouver, B.C. route.

Geiger Spur/Airway Heights - New Rail Connection (Spokane)
The design is nearing completion and archaeological and cultural resource investigations are currently underway. The cost of the project has increased approximately $2 million above the $5 million provided by the 2005 Legislature. The 2007 Legislature has funded the increased costs and the project should be completed in the 2007-2009 biennium (from June 2007).

The project will build a new rail connection to Spokane County's Airway Heights Industrial Park to replace the connection that currently passes through Fairchild Air Force Base.

Ferries

Impacts to Large Terminal Projects by Recent Legislative Action (New to Watch List)
The 2007 Legislature has passed legislation (Engrossed Substitute House Bill 2358) and a transportation budget (ESHB 1094) that affect current terminal improvement and preservation projects at Anacortes, Bainbridge Island, Port Townsend, Keystone, Mukilteo, Edmonds and Seattle. The legislation and related budget provisions require the completion of certain planning and evaluation processes before finishing the environmental processes and finalizing design on these projects.

"Watch List" Projects - Cost and Schedule Concerns

The effects to the project's scope, schedule and budget are difficult to quantify at this early stage of implementing the new project requirements. However, some impacts can be identified at a general level:

- The schedule for the projects are going to slide, how far depends on how long it will take to finish the processes and the impact the outcomes have on the projects.
- Generally, when schedules are extended, cost is impacted by additional inflation.

Eagle Harbor Maintenance Facility (Kitsap)
The program currently estimates an additional $3 million is necessary, due to materials escalation, legal costs and project delays. WSDOT is examining various options (e.g., scope reductions, moving funds from other projects, etc.) to mitigate the increase.

A delay in the the second of three projects associated with this facility is due to pending litigation with the City of Bainbridge Island. The Advertisement date is postponed approximately one year while the case is being resolved. The first court day was held in February 2007, and a court schedule is currently being developed.

The design for the third project, the maintenance building annex, is also on hold due to the litigation.

System-wide Catch-Up Preservation
The "Catch-Up Preservation" program addresses the backlog of deferred terminal preservation work. The current biennium's projects include dolphin replacements at both the Lopez Island and Anacortes terminals.

On the Lopez dolphin project, the scope of work was changed to include a floating concrete dolphin, which increased the costs. Stormy weather in November also caused the loss of several weeks of construction.

Mukilteo Multimodal Ferry Terminal (Snohomish)
The environmental documentation will not be completed until July 2008, resulting in a one-year delay in the Advertisement date. Additionally, due to new legislative requirements included in Engrossed Substitute House Bill (ESHB) 2358 and ESHB 1094, further effects on scope, schedule and budget are likely. (See Impacts to Large Terminal Projects, this section.)

This project relocates the terminal, provides a new terminal building, improves options for connecting to other modes of transportation, and alleviates local traffic congestion.

Keystone Ferry Terminal (Island)
This project is currently suspended while WSF works with the cities of Port Townsend and Coupeville to address their interests and concerns.

Due to the suspension, the project will experience inflationary impacts to the budget. Additionally, further impacts on scope, schedule and budget are possible due to new legislative requirements included in ESHB 2358 and ESHB 1094. (See Impacts to Large Terminal Projects, page 18)

The proposed options for this project include preserving the terminal and changing the vessels used, altering some aspects of the terminal to allow for different vessels, and relocating the terminal.

Port Townsend Ferry Terminal (Jefferson)
This project is currently suspended while WSF works with the cities of Port Townsend and Coupeville to address their interests and concerns. Due to the suspension of the project, in addition to the schedule impacts, the project will also experience cost increases due to inflation. Additionally, further impacts on scope, schedule and budget are likely due to new legislative requirements included in ESHB 2358 and ESHB 1094. (See Impacts to Large Terminal Projects, this section.)

The current project scope includes additional vehicle holding via a trestle extension; preservation work; and adding a remote vehicle holding site.

Updated Since December 31, 2006

U.S. 395/NSC – Francis Ave to Farwell Rd – New Alignment (Spokane)
BNSF Railway's delay in approving the design for the new railroad tunnel has affected this project's schedule.

The first and second contracts are complete, the third contract is underway, and the fourth was awarded in March 2007. The bid opening on the fifth contract is scheduled for April. Construction of a BNSF railroad tunnel, the sixth contract, has been delayed from March 2007 to July 2007. Assuming BNSF does not require any further tunnel design changes, WSDOT estimates that there will not be a significant cost impact if the advertisement date for the sixth contract can occur by September 2007. Any further delay in receiving BNSF approval for the design of the new railroad tunnel adds risk to the March 2009 Operationally Complete date.

"Watch List" Projects - Cost and Schedule Concerns

SR 24/I-82 to Keys Road - Add Lanes (Yakima)
The estimated cost increase of $1.9 million for this project is included in the 2007 Transportation Budget. The increase includes $0.7 million for additional work requested and funded by a local utility, as well as increases due to engineering and environmental costs. WSDOT is monitoring the project to minimize additional costs.

This project widens SR 24 from I-82 to Riverside Road, improves the interchange, relieves congestion, and improves safety. Final roadway work should be completed in Summer 2007, ahead of the scheduled Winter 2007 completion.

U.S. 12/SR 124 Intersection - Build Interchange (Walla Walla)
This project constructs a new interchange and bridge to replace two existing at-grade intersections. WSDOT estimates the current cost to complete the project is $25.9 million, which is included in the 2007 Transportation Budget. The estimate includes a $4.5 million increase due to material cost escalation for petroleum products and inflation.

The Advertisement and Operationally Complete dates have been delayed one year to allow adequate time to receive Congressional approval for a land exchange with the federally owned McNary Wildlife Refuge affected by the project. Although continuing to move forward, any delay in receiving Congressional approval or with locating and acquiring suitable replacement property could result in further delay of the project.

Although WSDOT is managing to the current budget, a recent Cost Risk Assessment (CRA) by the Department has identified a slight risk that the project cost could increase $10-$12 million if the Department is required to modify the design and environmental documentation to accommodate local community concerns over highway access requiring additional highway construction.

I-405, I-5 to SR 169 Stage 1 - Widening (King)
(I-405/SR 167 to SR 169 - NB Widening (King))
WSDOT has resolved the permitting issue with the Muckleshoot Indian Tribe and advertised the Request For Proposals in February 2007. However, based on the ongoing and uncertain contractor bidding climate, WSDOT continues to have concerns that the bid proposals may exceed the budget.

This project will widen I-405 from I-5 to SR 167, add one lane southbound on SR 167, and extend the southbound SR 167 HOV lane to I-405.

This project includes construction elements from several projects identified and approved by the Legislature: I-405/I-5 to SR 181, I-405/W. Valley Highway to Maple Valley Highway, SR167/I-405 to SE 180th Street, and SR167/HOT Lanes Pilot Project.

SR 515/SE 182nd St to SE 176th St Vic - Construct Traffic Island (King)
Due to the recent discovery (February 2007) of existing utility easements on the existing right-of-way, the Advertisement date has been delayed to late Summer 2007. The total project cost estimate currently exceeds the 2006 Legislative budget by $1.1 million due to escalating material costs, redesign costs, and costs of purchasing the utility easements and utility relocations.

This project improves safety by replacing an existing two-way, left-turn lane with a traffic island and U-turn pockets around the SE 176th Street/Carr Road intersection.

SR 516/208th and 209th Ave SE - Add Turn Lanes (King)
Project completion has been delayed from 2006 to mid-2007. Project costs increased because utility relocation took longer than expected; and heavy rains delayed construction, resulting in higher contractor's costs.

This project constructs turn lanes and a bus pull-out on SR 516. Drainage, illumination, signing, paving, and landscaping improvements are included.

Ferries

New 144-Auto Ferry Project
The Design/Build Request For Proposals is currently delayed by legal action affecting schedule and budget. A unique vessel SEPA Checklist is now finishing internal WSDOT review. The propulsion system contract is experiencing minor delays related to design drawing approval and manufacturing deliveries. Current and possible future delays, legal actions, and expectations of contingency pricing by the shipyards for their assumed risks may negatively impact the project budget.

This project builds four (4) new 144-Auto Ferries using the modified design and build RFP process required by RCW 47.60.810 – 822 (SHB 1680).

"Watch List" Projects - Cost and Schedule Concerns

Anacortes Multimodal Terminal (Skagit)
Replacement of the terminal building was planned to start in the Fall of 2007. However, the project will be deferred until the processes defined in ESHB 2358 and ESHB 1094 can be completed and the results incorporated into the project. (See Impacts to Large Terminal Projects, this section.)

As previously reported, the project budget will require approximately $22 million more to cover material escalation costs associated with construction delays, and requirements for traffic mitigation on SR 20.

This project replaces the terminal building, improves pedestrian and vehicle access and safety, improves connections to other modes of transportation, and increases the services and amenities available at the terminal.

Rail

Mt. Vernon – Siding Improvements (Skagit)
Delays to the schedule arise from the proposed closure of Hickox Road. As previously reported, unknown costs for mitigating the Hickox Road closure, wetland mitigation, and rail control signals put the project budget of $3.8 million at risk. However, BNSF is examining the benefits of the project and may participate in funding the project. If not, WSDOT intends to reduce the scope and utility of the project to keep it on budget.

This project will extend the existing siding to allow full-length freight trains and Amtrak *Cascades* trains to pass.

Stanwood – New Station (Snohomish)
Increases in scope and costs have delayed this project intended to design and construct a new passenger platform and other facilities at Stanwood to be served by Amtrak *Cascades* trains. Construction is estimated to be completed by November 2007, a five-month delay.

As previously reported in the Gray Notebook, BNSF Railway had notified WSDOT that an extension to the siding at Stanwood will be required before Amtrak Cascades trains can serve the station facility.

Vancouver - Rail Bypass and W 39th St. Bridge (Clark)
A delayed Advertisement date and increased costs have impacted this project. The current cost estimate for building the bridge is $5 million higher than anticipated. WSDOT is continuing to work with the City of Vancouver to limit costs.

The project builds mainline tracks to allow freight trains to bypass the Vancouver, Washington, rail yard. A rail siding for stopping freight trains and a new vehicle overpass will also be constructed. This will free up capacity on the north-south main line and improve Amtrak Cascades on-time performance.

As previously reported, the Advertisement date has been rescheduled from November 2007 to March 2008.

White Swan/Toppenish - Yakama Sawmill Traffic Upgrades (TS&W Yakima Sawmill Traffic Upgrades (Yakima))
Ongoing negotiations between the Columbia Basin Railroad and Yakima County have delayed the project's completion date beyond June 30, 2007.

Palouse River and Coulee City RR - Acquisition and Rehabilitation (Grant, Lincoln, Spokane, Whitman)
Due to the increased cost of interim operations and acquisition of the Palouse River and Coulee City Railroad (PCC), the amount of funding available for the rehabilitation of the system is no longer sufficient to complete the project as originally scoped. The physical condition of the PCC will be evaluated in the summer of 2007 to prioritize use of remaining funds and to identify future needs.

"Watch List" Projects - Cost and Schedule Concerns

Removed From Watch List this Quarter

SR 543/I-5 to Canadian Border – Add Lanes (Whatcom)
WSDOT will construct new lanes for a separate truck route to address congestion and safety issues on SR 543. The project remains on schedule to be Operationally Complete in Fall 2008.

The project cost increase reported in the last *Gray Notebook* has been resolved in the 2007 Transportation Budget.

SR 539/Horton Road to Tenmile Road – Widen to Five Lanes (Whatcom)
The budget and schedule issues reported in the last *Gray Notebook* were resolved and the project was advertised in January. Bids were opened in March and the lowest bid was $3.6 million over the Engineer's Estimate due to higher than anticipated contractor costs for asphalt, copper and storm sewer work. Since this unanticipated higher cost was not in the Governor's proposed 2007-2009 budget, the Department notified the Legislative Transportation Committees of the increase. The cost increase was included in the 2007 Transportation Budget passed by the Legislature in April; the project was awarded for $39.9 million.

SR 9/SR 522 to 228th St SE, Stages 1a and 1b – Add Lanes (Snohomish)
WSDOT is working closely with the contractor to minimize construction risks associated with the remaining wall and ramp widening work. The project is ahead of schedule and is currently planned to be Operationally Complete in November 2007.

The budget issues reported in the last *Gray Notebook* were resolved.

SR 20/Ducken Rd to Rosario Rd – Add Turn lanes (Island, Skagit)
The design documentation on this project was finalized in time to advertise in January 2007 because WSDOT was able to resolve questions from the State Historic Preservation Office (SHPO) related to replacing the historic guardrails. The project was awarded to Strider Construction Company, Inc. for a construction contract of $4.5 million, which was 15.3% above the Engineer's Estimate. The higher-than-anticipated construction cost was for the special guardrails required by the SHPO.

SR16, Burley Olalla Interchange (Kitsap)
This Nickel project is currently funded at $25.1 million in the 2007-2009 Transportation Budget.

The project team continues to work through the environmental issues delaying the safety project, and that were reported last quarter (wetland mitigation and barrier to fish passage within the project limits).

The Advertisement date is delayed to February 2008 from November 2007. The construction phase of the project is expected to be completed in October 2009, as originally scheduled.

SR 161/24th to Jovita - Add Lanes (Pierce)
This project improves capacity and safety by widening SR 161 between 36th Street East and Milton Way from two lanes to four lanes with a two-way, left-turn lane, including raised medians where feasible. Because the original project experienced significant cost increases due to escalating land values, escalating costs of construction materials above normal inflation, and the need to purchase additional property, it was necessary to split it into two stages.

The 2007-09 Budget includes funding to construct both stages of the project. To allow time for the environmental and right-of-way issues, the Stage One construction, "Milton Way to 24th Street," will be delayed by one year to 2010. Stage Two construction is scheduled for 2021.

US 101/MP 341 Lilliwaup Vicinity - Slope Stabilization (Mason)
The required public review needed for an environmental regulatory process has delayed the Advertisement date on this project to June 16, 2008 from January 2, 2007. After the environmental review identifies how the project will mitigate impacts from erosion, construction will begin in October 2008. The project's Operationally Complete date is delayed to December 31, 2008 from November 30, 2007 . The project is still anticipated to be delivered within the Legislative intent and within current budget proposals.

SR 9/Schloman Rd to 256th St NE – New Alignment (Snohomish)
WSDOT advertised this project in January 2007 and it was awarded in March 2007 for $205,000 or 1.9% above the Engineer's Estimate. The project is scheduled to be Operationally Complete in Fall 2008.

"Watch List" Projects - Cost and Schedule Concerns

The gravel pit permitting issue reported in last quarter's *Gray Notebook* was resolved.

SR 522/University of Washington Bothell - Build Interchange (King)
This project was advertised in January 2007. However, the advertisement is delayed because the cost increase (as reported in the previous *Gray Notebook*) was not fully funded in the 2007 Transportation Budget recently passed by the Legislature. The Department is working with the Governor's staff to resolve the funding issue and determine when the project can be re-advertised.

SR 542/Boulder Creek Bridge – Replace Bridge (Whatcom)
This project is scheduled for advertisement in April 2007. The existing bridge will be replaced with a wider and taller bridge designed to current safety standards. The project remains on schedule to be Operationally Complete in December 2008.

The $1.2 million cost increase reported in the last *Gray Notebook* has been resolved in the 2007 Transportation Budget.

I-5/S 48th to Pacific Avenue - Add HOV Lanes (Pierce)
This project will improve safety for traffic merges at one of the highest accident locations in the State. It is on schedule for completion in Spring 2008.

This Nickel project is funded at $79.2 million. Estimated cost at completion has increased by $1.8 million, primarily due to the design of existing structures needing additional stabilization during bridge removal and the need for unforeseen hazardous material (asbestos) removal.

SR3/SR303 Interchange (Waaga Way) (Kitsap)
Construction costs increased on this project after extensive efforts to stabilize slope failures and resolve turbid water issues due to heavy rains in November and December 2006. Designed to widen and upgrade Waaga Way at a major interchange, this project remains on schedule for an Operationally Complete day in October 2007.

SR3/Imperial Way to Sunnyslope (Kitsap)
Widening SR 3 will provide safety improvements along this high accident corridor. This project was delayed due to utility relocation issues with a utility company, but can still be completed on schedule. The Estimate at Completion is within the authorized budget.

The project's Advertisement date and Bid Opening were delayed to resolve utility relocation issues because the project widening will impact existing utilities. A written commitment to relocate facilities within the project schedule was acquired from Qwest on March 9, 2007. This allowed the bids to be opened on March 14. Construction is scheduled to commence in May 2007.

U.S. 101/Mt. Walker North Bound and South Bound Passing/ Truck Lanes (Jefferson)
WSDOT resolved the geotechnical issue that threatened to increase the construction cost of this project, as reported in previous *Gray Notebook* Watch Lists. Although the advertisement was delayed from January 2007 to March 2007, it was advertised within the quarter and is scheduled to be completed on time in October 2007 and within budget.

I-5, Chehalis River Flood Control – Construct Levies (Lewis)
The January 2007 Advertisement date associated with the 2006 legislatively approved budget for this project was not achieved because the local agencies are currently undecided on whether to build their Airport Road project. No engineering or environmental work has been done to date. Lewis County has asked the Legislature to shift some of the funding to a future biennium since the County is not ready to begin construction as it originally planned.

WSDOT is financially contributing to this project. It is believed the total contribution from the WSDOT will stay at $2.5 million. In addition to WSDOT's contribution, the County has a TIB grant and other funding available for this project.

The 2007 Transportation Budget delays the State's construction contribution, splitting it between 2007-09 and 2009-11 biennia. This will allow the local agencies time to develop their plan for flood control

WSDOT's Capital Project Delivery Programs

Project Delivery Summary Reports

Schedule Milestone Tracking for Nickel Projects

Milestone Results for all Nickel Projects with One or More Milestone Activities

Milestone	Scheduled Milestones to Date	Scheduled Milestones Achieved to Date	Scheduled Milestones not Achieved	Scheduled Milestone Achievement Rate[1]	Milestones Achieved Early[2]
Project Definition Complete					
Biennium to Date (2005-07)	19	17	2	89%	2
Cumulative to Date	137	134	3	98%	4
Begin Preliminary Engineering					
Biennium to Date (2005-07)	33	31	2	94%	0
Cumulative to Date	143	139	4	97%	0
Environmental Documentation Complete					
Biennium to Date (2005-07)	56	54	2	96%	4
Cumulative to Date	114	112	2	98%	5
Right of Way Certification					
Biennium to Date (2005-07)	34	27	7	79%	3
Cumulative to Date	59	51	8	86%	3
Advertisement Date					
Biennium to Date (2005-07)	56	46	10	82%	2
Cumulative to Date	107	96	11	90%	2
Operationally Complete					
Biennium to Date (2005-07)	41	35	6	85%	8
Cumulative to Date	60	54	6	90%	8

Data Source: WSDOT Project Control and Reporting Office
Baseline Data: Baseline milestone dates are derived from the original Legislative expectation (2005-2007 budget). Advertise Project and Operationally Complete Milestones are considered on-time if completed within the scheduled baseline calendar quarter. All other milestones are reported as on-time if they are completed within +/- 6 weeks of baseline date.
[1]Achievement rate may be higher than 100% where the actual number of milestones achieved exceed the number of scheduled milestones. This results when milestones are achieved ahead of their scheduled dates.
[2]Project Milestones Achieved Early were originally scheduled beyond the current quarter and are not included in this quarter's Scheduled Achievement Rate

Milestone Definitions:

Project Definition Complete
Project definition is the preliminary picture of what a project will achieve and generally how it will do so. It includes deficiencies being addressed, the purpose for a project, location, and project information to the best available level. It is not a true project scope (that requires design effort) but it does support the very first preliminary cost estimate.

Begin Preliminary Engineering
A project schedule usually has two general phases, the pre-construction phase and the construction phase. Preconstruction involves design, right of way, and environmental activities. Beginning the preliminary engineering marks the start of the project design and is usually the first capital spending activity in the delivery process.

Environmental Documentation Complete
The National Environmental Protection Act (NEPA) and the State Environmental Protection Act (SEPA) require that an appropriate level of environmental assessment be prepared for almost all WSDOT projects. Depending on the project, these can take the form of an Environmental Impact Statement (EIS) or another document of lesser scale. These assessments end in the issuance of a Record of Decision (ROD) or other summary document. This milestone is the date that WSDOT will have finished and submitted to the appropriate regulatory agencies, the documentation for the ROD and/or issuance of permits.

Right of Way Certification
Often WSDOT projects require the acquisition of right of way or property rights. The Right of Way Certification marks the point in time that right-of-way acquisition requirements are met and the process is complete for advertisement.

Advertisement Date
This is the date that WSDOT schedules to publicly advertise a project for bids from contractors. When a project is advertised, it has a completed set of plans and specifications, along with a construction cost estimate.

Operationally Complete
This is the date when the public has free and unobstructed use of the facility. In some cases, the facility will be open, but minor work items may remain to be completed.

WSDOT's Capital Project Delivery Programs

Project Delivery Summary Reports

Schedule Milestone Tracking for Transportation Partnership Account (TPA) Projects

Milestone Results for all TPA Projects with One or More Milestone Activities

Milestone	Scheduled Milestones to Date	Scheduled Milestones Achieved to Date	Scheduled Milestones not Achieved	Scheduled Milestone Achievement Rate[1]	Milestones Achieved Early[2]
Project Definition Complete					
Biennium to Date (2005-07)	117	111	6	95%	14
Cumulative to Date	159	151	8	95%	14
Begin Preliminary Engineering					
Biennium to Date (2005-07)	132	130	2	98%	5
Cumulative to Date	167	165	2	99%	5
Environmental Documentation Complete					
Biennium to Date (2005-07)	70	53	17	76%	11
Cumulative to Date	83	62	21	75%	12
Right of Way Certification					
Biennium to Date (2005-07)	32	22	10	69%	1
Cumulative to Date	37	26	11	70%	2
Advertisement Date					
Biennium to Date (2005-07)	50	35	15	70%	8
Cumulative to Date	52	37	15	71%	8
Operationally Complete					
Biennium to Date (2005-07)	8	8	0	100%	9
Cumulative to Date	8	8	0	100%	9

Data Source: WSDOT Project Control and Reporting Office
Baseline Data: Baseline milestone dates are derived from the original Legislative expectation (2005-2007 budget). Advertise Project and Operationally Complete Milestones are considered on-time if completed within the scheduled baseline calendar quarter. All other milestones are reported as on-time if they are completed within +/- 6 weeks of baseline date.
[1]Achievement rate may be higher than 100% where the actual number of milestones achieved exceed the number of scheduled milestones. This results when milestones are achieved ahead of their scheduled dates.
[2]Project Milestones Achieved Early were originally scheduled beyond the current quarter and are not included in this quarter's Scheduled Achievement Rate

Milestone Definitions:

Project Definition Complete
Project definition is the preliminary picture of what a project will achieve and generally how it will do so. It includes deficiencies being addressed, the purpose for a project, location, and project information to the best available level. It is not a true project scope (that requires design effort) but it does support the very first preliminary cost estimate.

Begin Preliminary Engineering
A project schedule usually has two general phases, the pre-construction phase and the construction phase. Preconstruction involves design, right of way, and environmental activities. Beginning the preliminary engineering marks the start of the project design and is usually the first capital spending activity in the delivery process.

Environmental Documentation Complete
The National Environmental Protection Act (NEPA) and the State Environmental Protection Act (SEPA) require that an appropriate level of environmental assessment be prepared for almost all WSDOT projects. Depending on the project, these can take the form of an Environmental Impact Statement (EIS) or another document of lesser scale. These assessments end in the issuance of a Record of Decision (ROD) or other summary document. This milestone is the date that WSDOT will have finished and submitted to the appropriate regulatory agencies, the documentation for the ROD and/or issuance of permits.

Right of Way Certification
Often WSDOT projects require the acquisition of right of way or property rights. The Right of Way Certification marks the point in time that right-of-way acquisition requirements are met and the process is complete for advertisement.

Advertisement Date
This is the date that WSDOT schedules to publicly advertise a project for bids from contractors. When a project is advertised, it has a completed set of plans and specifications, along with a construction cost estimate.

Operationally Complete
This is the date when the public has free and unobstructed use of the facility. In some cases, the facility will be open, but minor work items may remain to be completed.

Paying for the Projects: Financial Information

2003 Transportation Funding Package

2003 Transportation Funding Package Highlights

Deposited into the Transportation 2003 (Nickel) Account
(established in 2003)

- 5¢ increase to the gas tax
- 15% increase in the gross weight fees on trucks

Deposited into the Multimodal Account
(established in 2000)

- An additional 0.3% sales tax on new and used vehicles
- A $20 license plate number retention fee

Revenue Forecast Update

The following information incorporates the March 2007 forecast. The accompanying charts compare the current projected revenue forecast to the baseline forecast used in the budget making process when the 2003 Funding Package was adopted. The 2003 Funding Package was developed as a ten-year plan from 2003 through 2013. Due to timing issues, the 2005 Legislature moved several preservation projects into the 2013-15 biennium. Both cumulative ten-year totals and individual biennial amounts are shown.

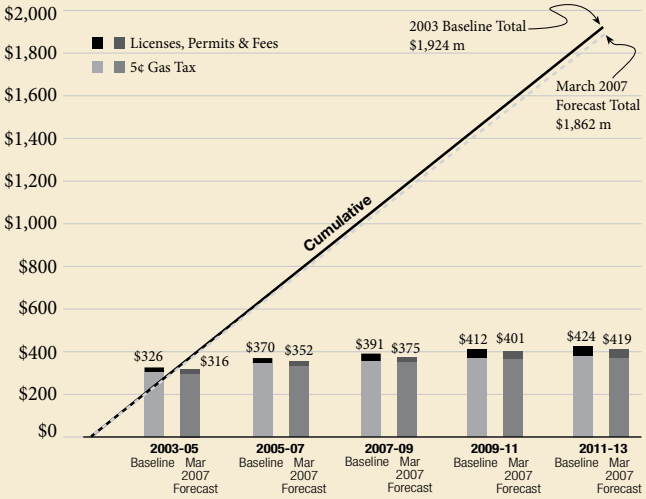
Current forecasted revenues include the most recent actual revenue collection data available as well as updated projections based on new and revised economic variables.

The March 2007 forecast for gas tax receipts and licenses, permits, and fees for the Transportation 2003 (Nickel) Account are slightly lower than the baseline forecast, causing a minor decrease in the ten-year outlook for the account (-3.3%).

Multimodal Account projections for the vehicle sales tax are slightly higher than the baseline forecast, resulting in a slight increase in the ten-year outlook (+2.4%).

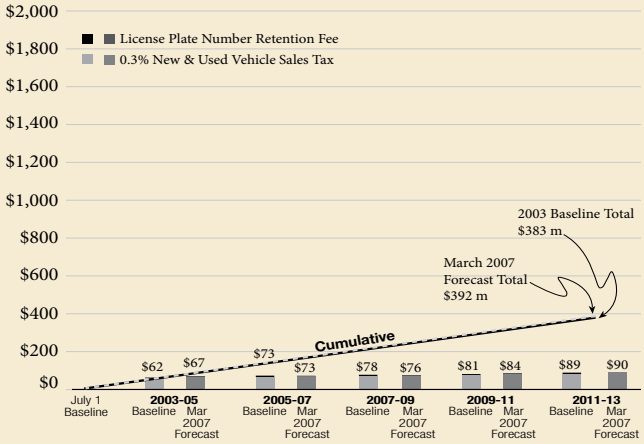
Forecasted revenues are still closely aligned with the legislative baseline projection for both accounts.

Transportation 2003 (Nickel) Account Revenue Forecast
March 2003 Legislative Baseline Compared to the March 2007 Transportation Revenue Forecast Council
Dollars in Millions



Numbers do not add due to rounding.
Data Source: Financial Planning.

Multimodal Account (2003 Package) Revenue Forecast
March 2003 Legislative Baseline Compared to the March 2007 Transportation Revenue Forecast Council
Dollars in Millions



Numbers do not add due to rounding.
Data Source: Financial Planning.

WSDOT's Capital Project Delivery Programs

Paying for the Projects: Financial Information

Transportation Partnership Program

2005 Transportation Package Revenue Sources

9.5¢ increase to the gas tax phased in over four years

- 3.0¢ in July 2005
- 3.0¢ in July 2006
- 2.0¢ in July 2007
- 1.5¢ in July 2008

New vehicle weight fees on passenger cars

- $10 for cars under 4,000 pounds
- $20 for cars between 4,000 and 6,000
- $30 for cars between 6,000 and 8,000

Increased combined license fees for light trucks

- $10 for trucks under 4,000 pounds
- $20 for trucks between 4,000 and 6,000 pounds
- $30 for trucks between 6,000 and 8,000 pounds
- Farm vehicles are exempt from the increase

A $75 fee for all motor homes

Fee increases to various driver's license services

- Original and renewal license application increased to $20 (previously $10)
- Identicards, Driver Permits and Agricultural Permits increased to $20 (previously $15)
- Commercial Driver License and Renewal increased to $30 (previously $20)
- License Reinstatement increased to $75 (previously $20)
- DUI Hearing increased to $200 (previously $100)

Fee increases to various license plate charges

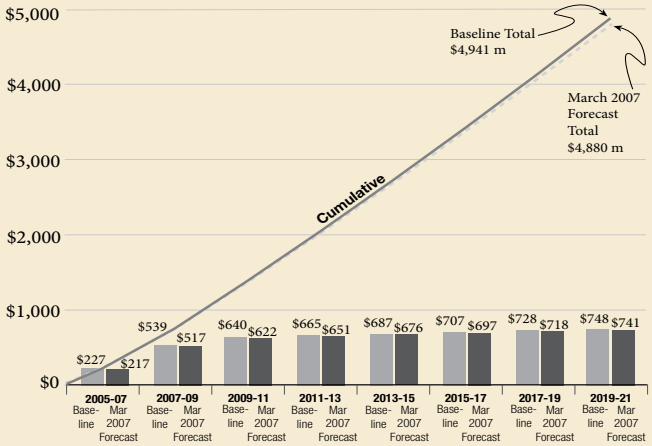
- Reflectorized Plate Fee increased to $2 per plate (previously 50¢)
- Replacement Plates increased to $10 (previously $3)

Revenue Forecast Update

The accompanying chart compares the current March 2007 revenue forecast to the "baseline" forecast used in the budget making process when the 2005 Funding Package was adopted. The 2005 Funding Package was developed as a 16-year plan extending from 2005 through 2021.

The March 2007 forecast for gas tax receipts over the 16-year period decreased slightly (-1.3%); however, forecasted revenues are still closely aligned with the legislative baseline projection.

Transportation Partnership Account
Gas Tax Revenue Forecast
March 2005 Legislative Baseline Compared to the March 2007 Transportation Revenue Forecast Council
Dollars in Millions



Forecast figures do not add due to rounding.
Data Source: Financial Planning.

Pre-Existing Funds Reporting by Program

PEF Program Milestone Reporting

This quarter begins the first report on the progress of Pre-Existing Funds (PEF) projects by program categories. The chart below shows the six program categories that are being reported on and the number of projects associated with each category for this biennium. Additionally, WSDOT continues to report on six PEF projects that were selected due to size and visibility on a quarterly basis (see p. 33).

Why is the Pre-Existing Funds Program reported differently than the Nickel and TPA Program?

Unlike Nickel and Transportation Partnership Account (TPA) projects, which are fixed lists of projects set by the Legislature and funded with a line item budget for each individual project, the Pre-Existing Funds (PEF) projects are funded at the program level. Funding is aligned to commitments to address set priorities such as number of miles paved per biennium. Each biennium, new PEF projects are programmed based on prioritized needs and available funds so the list of PEF projects changes each biennium.

Because Nickel and TPA projects were defined and budgeted at the project level from the beginning, milestones and other benchmark data to monitor individual project delivery were established and are available. However, since PEF projects have been historically funded by program category, this type of data has not been collected and is not currently available. Future programs will collect benchmark project data such as for the milestones reporting

Milestone Tracking for Pre-Existing Funds

Number of Projects with Milestones, Biennium-to-Date
Milestone and Expenditure Achievement-to-Date
Dollars in Millions

	Begin Engineering		Advertised for Bids		Operationally Complete		Expenditures	
Programmatic Categories	**Planned**	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**
Pavement Preservation	175	174	150	139	156	149	210	197
Bridges (Preservation/Replacement)	50	46	39	32	40	29	173	159
Slope Stabilization	7	24	10	26	18	26	43	41
Safety (roadside, rumble strips, median cross-over, etc.)	43	54	44	50	58	55	89	85
Environmental Retrofit (fish passage improvement, stormwater runoff)	9	9	8	9	13	12	15	15
Other facilities (rest area, weigh stations, etc.)	21	33	25	23	28	20	396	312
Totals	**305**	**340**	**276**	**279**	**313**	**291**	**926**	**809**

Source: WSDOT Project Control and Reporting Office

WSDOT's Capital Project Delivery Programs

Pre-Existing Funds Reporting by Program

Advertisement Record: Two Hundred Seventy-Eight Projects Advertised as of March 31, 2007

Biennium to Date (2005-07)

The 2005-07 Highway Construction Program includes a commitment to advertise 313 Pre-Existing Funds (PEF) projects. There were 276 PEF advertisements planned through the quarter ending March 31, 2007. 279 advertisements were achieved in those six quarters. Of the 276 scheduled, 15 were delayed to future quarters of this biennium, 34 were deferred to future biennia, and 7 projects were deleted.

Current Quarter (January 1 - March 31, 2007)

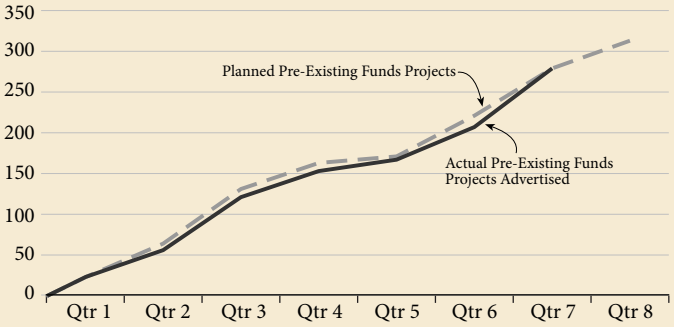
For the quarter there were 55 planned PEF advertisements. Thirty-two of these projects were advertised as scheduled. Three of the planned advertisements were delayed to later in this biennium, fourteen have been deferred to a future biennium, and one was deleted. There were twenty advanced, nine emergent, and eleven delayed projects advertised.

Highway Construction Program Advertisements

Pre-Existing Funds Projects

Planned vs. Actual Number of Projects Advertised
2005-2007 Biennium, Quarter 7 ending March 31, 2007

Project Count

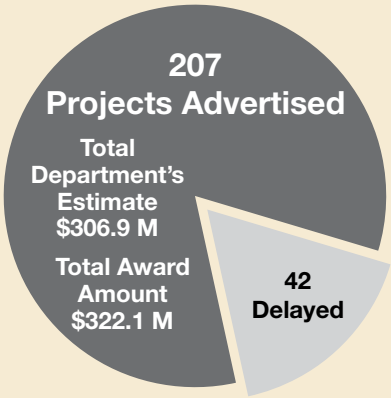


Data Source for all graphs: WSDOT Project Control and Reporting Office.

The table below summarizes the status of PEF projects advertised during the seventh quarter of the 2005-07 Biennium.

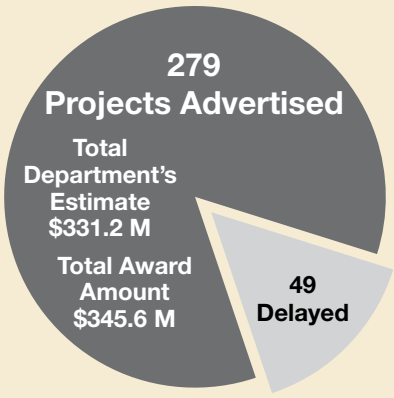
Pre-Existing Funds Projects: A Snapshot of Quarterly Progress and Total Biennial Progress to Date

End of Last Quarter
December 31, 2006



Projects Advertised	Projects Through Last Quarter	This Quarter's Progress	Biennium to Date Total
As Scheduled	147	32	179
Project Ads Early	10	20	30
Project Ads Late	22	11	33
Emergent Projects	28	9	37
Total Advertised	**207**	**72**	**279**
Projects Delayed			
Within the biennium (delayed)	22	3	15
Out of the biennium (deferred)	20	14	34
Total Delayed	**42**	**17**	**49**
Projects Deleted			
Projects Deleted	6	1	7
Total Deleted	**6**	**1**	**7**

End of This Quarter
March 31, 2007



Note: Due to WSDOT's ongoing effort to analyze and correct project data, the number of advertised projects will be updated to reflect small changes from quarter to quarter. Data has been updated and revised since PEF project data was last reported.

WSDOT's Capital Project Delivery Programs

Pre-Existing Funds Program: Advertisement Record

Advertisement Record: Projects Scheduled for and/or Advertised This Quarter

January 1, 2007-March 31, 2007

Project Description	On-Time Advertised	Project Description	On-Time Advertised
US 12/US 101/SR 105/Aberdeen Signals - Major Electrical (Grays Harbor)	Late[1]	SR 22/Toppenish to SR 223 - Paving (Yakima)	Deferred[15]
US 2/50th Avenue SE Vic to SR 204 Vic - Bridge Rehabilitation (Snohomish)	Emergent[2]	SR 23/Lincoln Co Line to Jct I-90 - 2007 Chip Seal (Lincoln)	Early
US 2/West Stevens Pass - Paving (Chelan, King)	Early[3]	SR 23/Jct I-90 to Lords Creek Rd - 2007 Chip Seal (Lincoln)	Early
SR 3/SR 304 Off Ramp to SR 304 On Ramp Vicinity - Paving (Kitsap)	Late[4]	SR 24/SR 240 Intersection Improvement (Benton)	√
SR 4/Kandoll Rd Vicinity to Grays River Bridge - Chip Seal (Wahkiakum)	√	SR 25/Davenport to Fruitland - 2007 Chip Seal (Lincoln, Stevens)	Early
SR 4/Coal Creek Road to I-5 - Paving (Urban) (Cowlitz)	√	SR 28/West of Ephrata - Paving (Grant)	Early[16]
SR 4/Stella Vicinity - November 2006 Rockfall (Cowlitz)	Emergent[5]	SR 28/Lamona to Harrington - 2007 Chip Seal (Lincoln)	Early
I-5/S 272nd St to Southcenter Parkway - Ramp Paving (King)	Deferred[6]	I-82/Yakima Vicinity - Install Median Barrier (Yakima)	Late[17]
I-5/52nd Ave W to SR 526 - NB Paving (Snohomish)	Deferred[7]	I-82/Badger Road Interchange - Paving (Benton)	Deferred[18]
I-5/Dearborn to Dayton Ave - Fiber Replacement (King)	Late[8]	I-82/Locust Grove Road Interchange - Paving (Benton)	Deferred[19]
I-5/Bakerview Rd to Nooksack Rd Br - Concrete Pavement Rehab (Whatcom)	Deferred[9]	I-90/Boylston Road to Vantage - Interstate Safety (Kittitas)	Early
I-5/Nisqually River Bridge - Special Repair (Thurston)	Deferred[10]	I-90/Edgewick Road I/C-Paving (King)	Advanced
SR 9/Pilchuck Creek Bridge - Bridge Scour (Snohomish)	Delayed[11]	I-90/Homestead Valley Road I/C-Paving (King)	Advanced
US 12/Wynoochee River to Brady I/S Vicinity - Paving (Grays Harbor)	√	I-90/Tinkham Road I/C-Paving (King)	Advanced
US 12/I-82 Vicinity - Median Barrier Cross-Over Protection (Yakima)	Emergent[12]	I-90/Denny Creek I/C-Paving (King)	Advanced
US 12/Emergency Embankment Repair - Yakima Vicinity (Yakima)	Emergent[13]	I-90/East Easton Interchange - Paving (Kittitas)	√
US 12/Pomeroy Vicinity - Paving (Garfield)	√	I-90/Bullfrog Interchange - Paving (Kittitas)	√
SR 18/Carey Creek Tributary to I-90 Vic.- Safety, MP 19.66 to MP 27.60 (King)	√	I-90/Interstate Ramp Safety - Safety Improvements (King, Kittitas)	Late[20]
SR 20/Prevedell Road to Pinelli Road Vicinity - Paving (Skagit)	√	I-90/West Nelson Siding Interchange - Paving (Kittitas)	√
SR 20/Bacon Creek Rd Vic to Damnation Creek Vicinity - Paving (Skagit)	Late[14]	I-90/Golf Course Road Interchange - Paving (Kittitas)	√
2005-2007 Region Chip Seal Safety Restoration - SR 21, 23, 27 (Adams, Franklin, Lincoln, Whitman)	√	I-90/Elk Heights Interchange - Paving (Kittitas)	√
SR 21/Vicinity Canniwai Creek to Jct US 2 - 2007 Chip Seal (Lincoln)	Early	I-90/Thorp Road Interchange - Paving (Kittitas)	√

WSDOT's Capital Project Delivery Programs

Pre-Existing Funds Program: Advertisement Record

Advertisement Record: Projects Scheduled for and/or Advertised This Quarter

January 1, 2007-March 31, 2007

Project Description	On-Time Advertised	Project Description	On-Time Advertised
I-90/Boylston Road to Vantage - Paving (Kittitas)	Early	SR 215/Omak - Intersection Safety Improvement (Okanogan)	Late[32]
I-90/Ryegrass EB/WB Safety Rest Area - Paving (Kittitas)	√	SR 215/SR 155 Omak - Signal Rebuild (Okanogan)	√
I-90/Ryegrass Rest Areas - Interstate Safety (Kittitas)	√	SR 224/Yakima River to SR 240 - Paving (Benton)	Deferred[33]
I-90/Pines Rd Interchange - Signal System Rebuild (Spokane)	Late[21]	SR 231/Jct SR 23 To Jct US 2 - 2007 Chip Seal (Lincoln)	Early
I-90/Sullivan Rd Interchange South - Signal System Rebuild (Spokane)	Late[22]	SR 231/Reardan to Fisher Rd - 2007 Chip Seal (Lincoln)	Early
I-90/Sullivan Rd Interchange - PCCP Rehabilitation (Spokane)	√	SR 310/Weslon Pl Vicinity to Callow Ave - Paving (Kitsap)	√
US 97/Satus Creek Bridge Vicinity - Paving (Yakima)	Advanced	US 395/Kartchner St Interchange Vicinity - Paving (Franklin)	√
SR 99/Evergreen Way to I-5 Vicinity - Paving (Snohomish)	Late[23]	US 395/I-182 to Hillsboro St - Paving (Franklin)	√
US 101/Simpson Ave Bridge - Mechanical (Grays Harbor)	Late[24]	US 395/Hastings Rd I/S - PCCP Intersection (Spokane)	√
US 101/Lilliwaup Vicinity - Stabilize Slope (Mason)	Delayed[25]	SR 397/Ainsworth Ave to I-182 - Paving (Franklin)	√
US 101/Sandridge Rd - Safety Improvements (Pacific)	Early	SR 401/US 101 to SR 4 - Paving with Chip Seal (Pacific)	Early
US 101/Astoria Bridge to SR 4 - Paving (Pacific)	Early	SR 502/NE 199th St Intersection - Signal (Clark)	Early
US 101/SR 100 Jct - Signal Replacement (Pacific)	Early	SR 503 Spur/SR 503 to Skamania Co Line - Chip Seal (Cowlitz)	Early
SR 107/Chehalis River Bridge - Bridge Scour (Grays Harbor)	Delayed[26]	SR 509/S Normandy Rd Vic to S Normandy Rd Wye Connection - Paving (King)	Deferred[34]
SR 109/Grass Creek Bridge - Special Repair (Grays Harbor)	√	SR 509/Miller/Walker Impervious Area Project - Basin Plan Implementation (King)	Emergent
SR 129/Asotin Vicinity - Paving (Asotin)	√	SR 515/SE 192nd St to Benson Rd - Paving (King)	Deferred[35]
SR 161/SR 167 Couplet to 36th St E - Paving (Pierce)	Early	SR 520/Evergreen Point Bridge - Special Bridge Repair (King)	Emergent[36]
SR 166/SR 16 to Blackjack Creek - Paving (Kitsap)	Deferred[27]	SR 520/WB Off-Ramp to NE 51st St and WB Off-Ramp to 148th Ave NE - Pave (King)	√
SR 167/I-405 I/C Vic to SW 7th St Vic - Paving (King)	Deferred[28]	SR 522/NE 195th Street - Signal (King)	√
SR 169/SE 264th to SE Wax Rd - Paving and Concrete Pavement Rehab (King)	Deferred[29]	SR 525/I-5 to Ash Way Br - Paving (Snohomish)	Deferred[37]
I-182/Pasco Vicinity - Install Median Barrier (Franklin)	Late[30]	SR 530/Lake Cavanaugh Rd to Montague Creek - Paving (Snohomish)	√
US 195/Cornwall Rd to Hatch Rd - Dowel Bar Retrofit and Paving - NB (Spokane)	√	SR 532/72nd Ave NW Vic to Old SR 99 Vicinity - Paving (Snohomish)	√
SR 202/Snoqualimie River Bridge - Bank Erosion (King)	Emergent[31]	SR 539/Horton Road to Tenmile Road - Widen to Five Lanes (Whatcom)	√

WSDOT's Capital Project Delivery Programs

Pre-Existing Funds Program: Advertisement Record

Advertisement Record: Projects Scheduled for and/or Advertised This Quarter

January 1, 2007-March 31, 2007

Project Description	On-Time Advertised	Project Description	On-Time Advertised
SR 902/Jct I-90 to Lakeland Village - 2007 Chip Seal (Spokane)	Early	SR 903/Roslyn to National Forest - Paving (Kittitas)	√
SR 903/Cle Elum to Roslyn - Paving (Kittitas)	√	SR 904/Tyler to Cheney - 2007 Chip Seal (Spokane)	Early

Project Details:

[1]This is local agency project with WSDOT contribution. Project Ad was delayed to accommodate the city's and local developers' schedule requirements.
[2]This is stage one of the original "US/Ebey Viaduct and Ebey Sl Br" project.
[3]Emergent need project was added to address substantial pavement deterioration.
[4]Project was initially combined with another project to achieve efficiency; subsequently delayed to await more favorable, competitive bidding condition given the current market condition.
[5]Embankment erosion was continuing at such a rate that WSDOT geologists and other experts concluded that the roadway would not survive another severe storm event.
[6]Advertisement delayed to balance the financial plan for the proposed 2007 budget.
[7]Advertisement delayed to balance the financial plan for the proposed 2007 budget.
[8]Advertisement was delayed in order to combine this work with another project in the same location.
[9]Advertisement delayed to balance the financial plan for the proposed 2007 budget.
[10]Project was deferred to an out biennium to accommodate cash flow and the funding availability.
[11]Advertisement date delayed due to Shoreline permit from Snohomish County.
[12]Emergent need project was added to address numerous crossover collsions occuring on this section of highway.
[13]Emergent need project was added to address highway stability caused by flooding of the Naches River which was eroding the roadbed in two locations.
[14]Project delayed to accommodate a Transportation Improvement Board request to add small city paving for City of Lyman to project. The advertisement was also delayed one month so that the work could be combined with another project.
[15]Advertisement delayed to balance the financial plan for the proposed 2007 budget.
[16]Emergent need project was added to address substantially deteriorated pavement.
[17]The advertisement was delayed to provide additional design time needed to accommodate a requirement for existing median slopes of 6:1 or flatter and to avoid conflicts with the interchange work underway on the SR 24/I-82 Keys Rd - Add Lanes projects currently under construction. Project will be completed in the 2007 construction season.
[18]Advertisement delayed to balance the financial plan for the proposed 2007 budget.
[19]Advertisement delayed to balance the financial plan for the proposed 2007 budget.
[20]This project was delayed to allow advancement of the Stampede Pass and Cabin Creek interchanges which are experiencing pavement deterioration faster than anticipated.
[21]Advertisement being delayed to combine this project with the Sullivan Road I/C PCCP Rehab project. This should result in better prices during construction by melding the work into a larger project.
[22]Advertisement being delayed to combine this project with the Sullivan Road I/C PCCP Rehab project. This should result in better prices during construction by melding the work into a larger project.
[23]Delayed advertisement from December 4, 2006, to January 8, 2007, to address design deviation on non-standard ramps.
[24]Project was previously advertised but all bids were rejected due to insufficient funds to adjust to apparent low bid that was much higher than the Engineer Estimate. Project is currently readvertized according to revised schedule.
[25]Advertisement date delayed to better fit a construction season and work around the fish window.
[26]This project will be accomplished by state forces.
[27]Project schedule was delayed to accomodate local agency's major utility project in the project location.
[28]Advertisement delayed to balance the financial plan for the proposed 2007 budget.
[29]Advertisement delayed to balance the financial plan for the proposed 2007 budget.
[30]For construction efficiencies, this project was combined with the I-82 Cable Median Barrier project. Project will be completed in the 2007 construction season.
[31]Erosion control project. This emergency work was performed by maintenance to prevent damage to bridge approach.
[32]Advertisement date was delayed to modify the signal system to a pedestrian activated warning system and combine this work with another project in the same location.
[33]Advertisement delayed to balance the financial plan for the proposed 2007 budget.
[34]Advertisement delayed to balance the financial plan for the proposed 2007 budget.
[35]Advertisement date delayed due to Utility issues.
[36]This emergency work was performed by maintenance to address an immediate need to replace the gear box of the bridge.
[37]This emergency work was performed by maintenance to address an immediate need to replace the gear box of the bridge.

WSDOT's Capital Project Delivery Programs

Pre-Existing Funds: Individual Reporting

Six Individually Tracked PEF Projects: Results through March 31, 2007

Dollars in Millions

Project Description	First Legislative Budget	Baseline: Current Legislative Approved	Scheduled Date to Begin Preliminary Engineering		Scheduled Date for Advertisement		Schedule Date to be Operationally Complete
			Date	On-Time	Date	On-Time	
US 2/Ebey Is Viaduct and Ebey Sl Br (Snohomish)	$32.1 (2002)	$35.5 (2006)	Dec-98	√	Nov-00	√	Dec-03
• US 2/50th Avenue SE Vic to SR 204 Vic - Bridge Rehabilitation (Snohomish)			Jul-06		Feb-07		Jun-09
• US 2/43rd Ave SE Vic to 50th Ave SE Vic - Bridge Rehabilitation (Snohomish)			Jan-09		Aug-10		Dec-11
SR 202/SR 520 to Sahalee Way - Widening (King)	$36.9 (2001-03)"	$82.1 (2006)	May-98	√	Aug-05	Late[1]	Dec-08
SR 539/Horton Road to Tenmile Road - Widen to Five Lanes (Whatcom)	$32.0 (2001-03)	$52.6 (2006)	Oct-90	√	Jan-07	√	Oct-08
SR 28/E End of the George Sellar Bridge - Construct Bypass (Douglas)	$9.4 (2004)	$9.3 (2006)	Jun-04	√	Oct-09	Late[2]	Sep-11
US 101/Purdy Creek Bridge - Replace Bridge (Mason)	$6.0 (2004)	$11.1 (2006)	Aug-04	√	Jan-08	√	Jan-10
SR 303/Manette Bridge Bremerton Vicinity - Replace Bridge (Kitsap)	$25.5 (2002)	$25.8 (2006)	Sep-96	√	Mar-10	Late[3]	Nov-13

Data Source: WSDOT Project Control and Reporting Office

Future Reporting: Current WSDOT Estimate of Cost at Final Completion is the critical number toward which all modern project management is pointed. Today WSDOT engineers and program managers can only back into these values as best as possible without the management information systems that allow schedule and budgets to be used as the basis for value-earned management systems. WSDOT is considering ways to use estimating techniques to approximate these values until new management information systems are installed and project data is loaded.

Baseline Data: Baseline milestone dates are derived from the 2003 Legislative Transportation Budget. Advertisement Date and Operationally Complete milestones are considered on-time if completed within the scheduled baseline calendar quarter. The Begin Preliminary Engineering milestone is reported as on-time if completed within +/- 6 weeks of baseline date.

Milestone Definitions

Begin Preliminary Engineering
A project schedule usually has two general phases, the pre-construction phase and the construction phase. Pre-construction involves design, right-of-way, and environmental activities. The preliminary engineering marks the start of the project design and is usually the first capital spending activity in the delivery process.

Advertisement Date
This is the date that WSDOT schedules to publicly advertise a project for bids from contractors. When a project is advertised, it has a completed set of plans and specifications, along with a construction cost estimate.

Operationally Complete
This is the date when the public has free and unobstructed use of the facility. In some cases, the facility will be open, but minor work items may remain to be completed.

Project Details:

[1]This project was delayed from the original 2005 Legislative Final advertisement date to address several environmental and permitting issues.

[2]The construction phase has been delayed to balance the financial plan for the 2007 budget.

[3]The construction phase has been delayed to balance the financial plan for the 2007 budget.

Pre-Existing Funds: Financial Information

Paying for the Projects: Financial Information

WSDOT submitted an expenditure plan to the Legislature for the sixth quarter of the biennium totaling approximately $926 million. As of March 31, 2007, actual expenditures totaled $807 million, a variance of approximately $119 million, or 13%, from the biennium plan. The variance as of the end of the sixth quarter for the Highway Construction Program was divided between the Improvement and Preservation programs.

The Preservation Program planned cash flow was $464 million, and actual expenditures were $426 million. This was $38 million under plan, or 8%. The under-spending was primarily due to slower than expected expenditures for several projects, including:

- *US 101/Simpson Ave Bridge* -- Mechanical (The project was delayed due to a shortage of bridge preservation funds in the 2005-07 biennium.)
- *SR 433/Lewis and Clark Bridge* - Painting

The Improvement Program planned cash flow was $462 million, and actual expenditures were $381 million. This was approximately $81 million under plan, or 17%. The under-spending was primarily due to slower than expected expenditures for several projects, including:

- *SR 99/Alaskan Way Viaduct and Seawall* - Replacement Corridor Design
- *SR 202/SR 520 to Sahalee Way* - Widening
- *SR 20/Sidney St Vic to Scenic Heights* - Realignment and Widening
- *SR 167/SR 509 to I-5*, Stage One - New Freeway
- *SR 518/SeaTac Airport to I-5* - Eastbound Widening

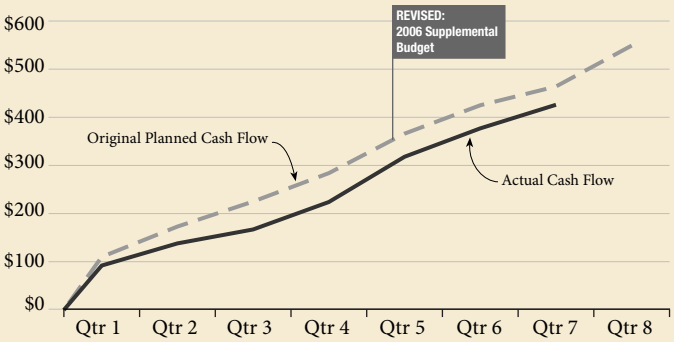
Preservation Program Cash Flow

Pre-Existing Funds

Planned vs. Actual Expenditures

2005-2007 Biennium, Quarter 7 ending March 31, 2007

Dollars in Millions



As of quarter five (July 1 - Sept. 30, 2006), Original Planned Cash Flow values have been updated based on the 2006 Supplemental Budget.

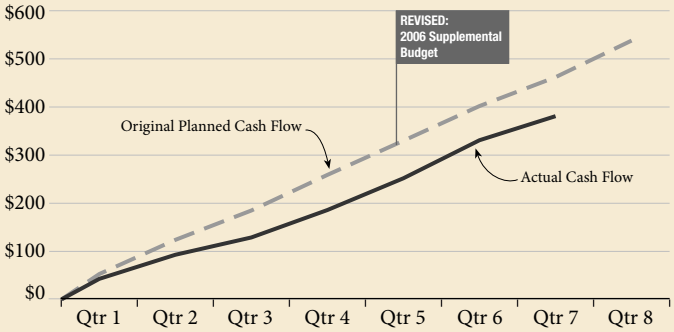
Improvement Program Cash Flow

Pre-Existing Funds

Planned vs. Actual Expenditures

2005-2007 Biennium, Quarter 7 ending March 31, 2007

Dollars in Millions



As of quarter five (July 1 - Sept. 31, 2006), Original Planned Cash Flow values have been updated based on the 2006 Supplemental Budget.

Cross Cutting Management Issues

Project Management Information Systems

New Project Management and Reporting System is Under Development

WSDOT has a capital construction program that is three times larger than the typical biennial construction program. The supplemental funds allocated with the Transportation Partnership Account (TPA) in 2005 when combined with the funding approved from the 2003 "Nickel" finance package, created an unprecedented project delivery challenge. WSDOT's goal is to successfully manage the risks generated by this project delivery challenge.

To ensure that the projects are delivered, WSDOT assessed its project management, control and reporting capabilities. WSDOT looked to other state transportation departments that implemented Best Management Practices (BMPs) such as Project Management Plans, Scope Management, Work Breakdown Structures, and Risk Management in the procurement of future project management information systems.

In 2006, WSDOT received approval to begin development of the Project Management and Reporting System (PMRS). This system is designed to utilize commercial software for transportation project management and information revision and control (also referred to as Enterprise Content Management). PMRS integrates the system with the WSDOT legacy systems, as well as an operational data store and a web portal for reporting key project information. The system will provide tools for project and agency managers to better identify risks early, track performance of individual projects and improve planning and decision making with regards to future projects.

Link to Critical Applications Assessment

PMRS will replace the existing Project Delivery Information System (PDIS), which is one of the eleven systems targeted for replacement in the Critical Applications Assessment study requested by the Legislature in 2005 and later completed in December 2005. In response to recommendations in the assessment, WSDOT plans to build the underlying technical architecture necessary to support PMRS, as well as all of the replacement systems called for in the Critical Applications Assessment. The 2007 Legislature has allocated additional funds to implement other recommendations made in the assessment. For more information about these critical systems and WSDOT's schedule for development and replacement see the September 30, 2006 edition of *The Gray Notebook* p. 34.

Project Management and Reporting System Performance Milestones

- Executive and mid-management steering teams activated
- Project Investment Plan approved by the Information Services Board
- Key project management business processes developed and approved
- Requests for Proposal (RFP's) completed for selection of commercial off-the-shelf software
- Software proposals received and winners selected
- Detailed business requirements gathered

As of March 31, 2007 the following activities are scheduled for completion in April/May 2007:

- Software contracts negotiated
- Hardware Acquisition Plan completed
- Integration Plan and implementation schedule completed

Future Milestones Include:

- Detailed integration design (scheduled for completion October 2007)
- System Pilot (Scheduled for August 2008)
- Agency-wide deployment (Scheduled to start in July 2009)

PMRS is scheduled to be fully deployed to all WSDOT regions by January 2010.

Cross Cutting Management Issues

Environmental Documentation, Review, Permitting and Compliance

The Endangered Species Act (ESA) requires that all projects with federal funds or permits be evaluated for potential effects the project may have on federally listed endangered and threatened species. Projects that will result in adverse effects to listed species undergo formal consultation, while projects which result in "discountable" or insignificant effects undergo informal consultation with the US Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration/ National Marine Fisheries Service (NOAA Fisheries). WSDOT projects that are found to have no impact or effect on ESA listed species are not required to undergo consultation with these federal oversight agencies.

Nickel Projects with ESA Components

As of March 31st, all of the fourteen remaining Nickel projects in the 2005-2007 biennium have completed ESA review. Twenty-two 2007-2009 Biennium Nickel projects have completed ESA review. The remaining projects include four formal and 13 informal consultations. The formal consultations will involve roadway widening and HOV lanes on SR 167, I 5 and SR 22.

TPA Projects with ESA Components

Of the fourteen TPA projects remaining to go to advertisement in the 2005-2007 biennium, there are twelve that have completed ESA review. One project is currently undergoing informal consultation at USFWS. The last project does not yet have enough information to complete a required biological assessment. For the 2007-2009 biennium, there are 129 projects scheduled. Thirty-one of these projects have undergone consultation or have completed an ESA review. Currently, there are four projects undergoing formal consultation and two that are completing informal consultation with the federal oversight agencies.

PEF Projects with ESA Components

There are 70 PEF projects remaining to go to advertisement in the 2005-2007 biennium. Four of these projects have not completed an ESA review at this time. One project, *US 101/ Humptulips River Bridge Scour*, is currently undergoing informal consultation with USFWS. For the 2007-2009 biennium, 77 have completed an ESA review or consultation. At this time, four projects are undergoing formal consultation and four projects are completing an informal consultation.

Ferry, Rail & Aviation Projects

It is expected that thirteen projects (seven ferries and six rail) will go to advertisement in the 2007-2009 biennium. Of these projects, two have completed an ESA consultation: one informally and one formally. Three formal and one informally consulted Washington State Ferries projects are anticipated for completion in the next year. All six of the rail projects will be evaluated for impacts to ESA listed species. However, four of the projects are not expected to undergo consultation with the federal oversight agencies. Two projects will undergo informal consultation in the next six months. WSDOT does not have any active aviation projects at this time requiring ESA consultation.

ESA Compliance and Status for all WSDOT Projects

For the quarter ending March 31, 2007

Project Status	Nickel Projects 2005-07	Nickel Projects 2007-09	TPA Projects 2005-07	TPA Projects 2007-09	PEF Projects 2005-07	PEF Projects 2007-09	Rail, Ferry & Aviation 2005-07	Rail, Ferry & Aviation 2007-09
Projects under review at USFWS/NOAA	0	0	1	6	1	8	0	0
Biological Assessment underway	0	21	0	79	1	117	0	11
Projects which lack sufficient information to start the Biological Assessment[1]	0	1	1	13	3	26	0	0
ESA Review complete[2]	14	22	12	31	65	77	0	2
Total # of Projects that have not gone to advertisement	14	44	4	129	70	228	0	13

Data Source: WSDOT Environmental Services

[1]This means that WSDOT does not yet have enough information regarding design to begin ESA review.

[2]Projects that have completed ESA review include those requiring consultation (formal, informal and programmatic) with the services and those that did not require consultation (no effect reviews).

Cross Cutting Management Issues

Environmental Documentation, Review, Permitting and Compliance

Environmental Consultant Utilization

For the 2007-2009 biennium, WSDOT has more than 20 primary on-call environmental consultants to assist in a wide range of topics from ESA, cultural resources, archaeological resources, stormwater, hazardous materials and noise. WSDOT uses environmental consultants in three ways: the first is through project contracts, where the consultant performs work that can not be completed internally due to staffing, expertise or technological limitations.

Secondly, consultants may also be contracted as in-house staff working in the Headquarters Environmental Services Office or in regional offices one to five days a week. The consultants used in this capacity assist staff members on various projects such as developing training material, preparing white papers, writing biological assessments and preparing guidance documents.

Lastly, in rare instances, consultants are place based at NOAA Fisheries, USFWS or other resource agencies to act as liaisons on a temporary basis to meet a heavy workload.

New Wetlands Delineation Standards

The Army Corps of Engineers (Corps) is in the process of preparing regional supplements to the 1987 Wetland Delineation Manual. These regional supplements include modified protocols for making wetland determinations. The intent of these regional supplements is in part to standardize how wetlands are documented by delineators. The Interim Arid West Regional Supplement has been issued and is now required for use. WSDOT staff are working closely with Corps and the Washington State Department of Ecology staff to understand how to use the new protocols that are included in the supplement. The draft version of the Mountains, Valleys, and Coasts Regional Supplement is tentatively scheduled for release later in 2007. For more information about WSDOT's wetlands replacement program, see the *Gray Notebook* December 31, 2007 edition, page 68.

The proposed delineation standards are intended to reflect the differences between arid wetlands, like this one in eastern Washington, and those found in temperate climates (such as western Washington).

Cross Cutting Management Issues

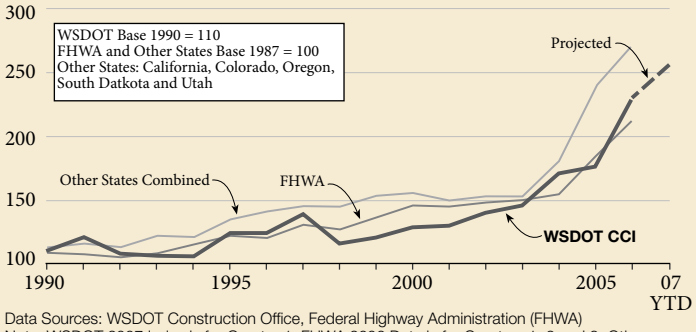
Construction Material Cost Trends

WSDOT prepares construction cost estimates using historical information about market conditions drawn from recent bids. Like other state transportation departments, WSDOT must extrapolate for the future based on past records. WSDOT accumulates construction cost information and calculates a Construction Cost Index (CCI). The CCI is then compared against the experience of other western states. WSDOT's CCI is a composite of unit price information from low bids on seven of the most commonly used construction materials. These items reflect a composite cost for a completed item of work and include the costs of labor, equipment, and materials.

Construction Cost Index Increases 11% in the First Quarter of 2007

The graph below presents the past 17 years of CCI data for Washington State. This is plotted against the CCI of the Federal Highway Administration (FHWA) and a line representing the combined CCIs of several nearby western states: California, Colorado, Oregon, South Dakota and Utah.

Construction Cost Indices Washington State, FHWA, and Other States



Data Sources: WSDOT Construction Office, Federal Highway Administration (FHWA)
Note: WSDOT 2007 Index is for Quarter 1; FHWA 2006 Data is for Quarters 1, 2 and 3; Other States 2006 Data is for the entire year.
Note: 2003 and 2004 WSDOT CCI data points adjusted to correct for spiking bid prices on structural steel.

The following components (weighted as shown) are used to compute the CCI:

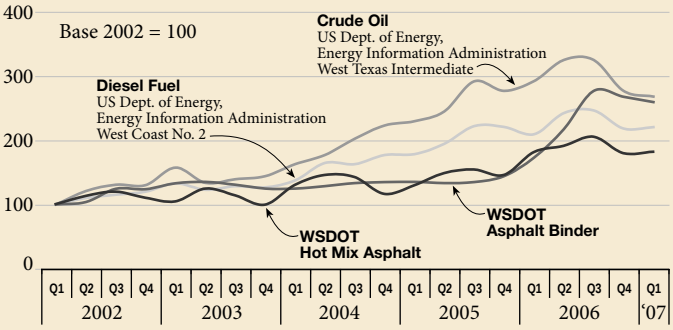
Hot Mix Asphalt (48.5%)	Structural Steel (6.9%)
Structural Concrete (17.4%)	Steel Reinforcing Bar (5.4%)
Roadway Excavation (10.7%)	Concrete Pavement (3.2%)
Crushed Surfacing (7.9%)	

The average annual growth rate of the CCI held steady at about 1.5% per year from 1990 through 2001. Beginning in 2002 and continuing through 2005, the growth rate increased to 8% per year. In 2006, WSDOT's CCI increased 30% over 2005. WSDOT's construction cost index (CCI) has increased 11% in the first quarter of 2007 over the annual average for 2006, from 228 to 254. Several factors have contributed to this increase including: increasing worldwide demand for construction materials; rising crude oil prices and other energy supply issues; and recent increases in national and international construction activity.

Hot Mix Asphalt

Of the seven materials WSDOT tracks in the CCI, Hot Mix Asphalt (HMA) comprises almost half the weight of the index. HMA prices typically follow a similar pattern to the price of crude oil and diesel fuel. However, in recent quarters, WSDOT has seen the gap between crude oil price increases and asphalt price increases narrow. This may be due to contractors no longer being able to lock-in prices from suppliers due to volatility in current market conditions. Further, with the high demand for lighter fuels such as gasoline, refineries are investing in modifications to further break down heavier end crude oils into more lucrative lighter end fuels. This may increase demand pressure relative to supply for liquid asphalt and result in higher prices. The following graph depicts price indices for HMA, crude oil and diesel fuel. For more information on how WSDOT awards HMA for projects, see page 39.

WSDOT Hot Mix Asphalt, Crude Oil and Diesel Fuel Indices



Data Sources: WSDOT Construction Office, Federal Highway Administration (FHWA)

For additional details on current construction cost trends in Washington State, WSDOT has a folio online: visit http://www.wsdot.wa.gov/biz/construction/pdf/risingcosts0407.pdf

Cross Cutting Management Issues

Hot Mix Asphalt

WSDOT tracks both the projected and awarded amounts of Hot Mix Asphalt (HMA) for two reasons. First, the agency projects HMA tons so that asphalt-producing contractors can better anticipate future HMA volumes. This helps private contractors better manage their construction projects and reduce their costs associated with producing HMA, which ultimately results in improved competitive bidding and accurate estimates for construction costs on WSDOT projects. Secondly, WSDOT tracks actual tons awarded to measure the accuracy of the agency's estimation processes.

Actual HMA Awards Below Projections by 36%

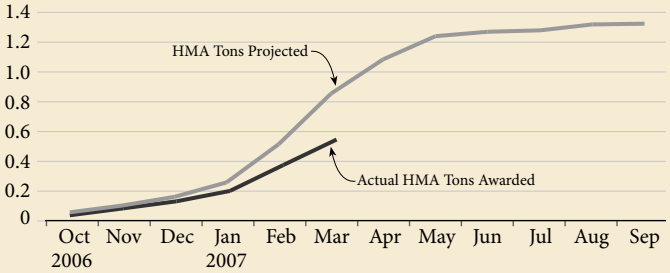
WSDOT's HMA forecast projected that from October 1, 2006 through March 31, 2007, 51 projects would be awarded a combined total of 833,677 tons of HMA. At the end of March, the actual awarded total is 44 projects with 532,695 tons of HMA. Of this total, 32 were from Pre-Existing Funds (PEF) amounting to 367,341 tons, five were Nickel projects amounting to 123,381 tons, six were TPA projects amounting to 37,634 tons, and one was a Sound Transit project with 4,339 tons. The 532,695 tons awarded between October and March represents a difference of 300,982 tons from the projected 833,677 tons. The actual HMA awarded was under the October 2006 projection by 36%.

Delayed projects accounted for the reduced amounts of HMA awarded in the six month period. Many of these projects are currently being advertised. WSDOT anticipates that its original estimate of 1,297,601 tons of HMA will be awarded by the end of September, 2007.

Forecasts for Upcoming Construction Season

Because of the seasonal nature of construction industries, HMA amounts increase during the warmer months when more projects are underway compared with the colder months of Fall and Winter. In preparation for the 2007 season, in September 2006, WSDOT forecasted that 1,297,601 tons of HMA would be awarded in contracts throughout the state from October 1, 2006 to September 30, 2007. The 2007 forecast of 1,297,601 tons of HMA is a 7% increase compared to the 2006 forecast of 1,213,985 tons. Increases can be attributed to the addition of delayed projects that were moved into this estimating period as well as the addition of Nickel and TPA projects to the project delivery schedule. WSDOT estimates that HMA tonnage will likely continue to increase in future years as more TPA projects are scheduled to be awarded in the 2007-2009 biennium.

Hot Mix Asphalt Tons Awarded
October 2006 - March 2007
Tons in Millions



Data Source: WSDOT Construction Office.

Hot Mix Asphalt Pavement - Projected vs. Actual, 2002-2007
In Tons, October through September of each year [1]

Year	Projected	Actual	% Difference
2002	1,373,465[2]	1,364,021	-1%
2003	1,417,126	1,825,442	+29%[3]
2004	1,324,218	1,299,377	-2%
2005	1,779,826	1,685,394	-5%
2006	1,213,985	1,126,701	-7%
2007	1,297,601	N/A	N/A

Source: WSDOT Construction Office

[1] Awarded tons are tracked from an October through September calendar year, providing a better measurement of the work schedule and better planning for the paving industry than the calendar year. Construction projects awarded in the fall typically do not begin work until the next year due to inclement weather conditions.
[2] The projection for 2002 was revised in March 2002 by the Transportation Commission following budget cuts.
[3] The 2003 "Nickel" Transportation Funding Package was passed after the projection was made for 2003. WSDOT subsequently awarded five projects from the Nickel funding package with a combined total of 315,285 tons of HMA.

Crews place Hot Mix Asphalt on the I 5 to International Boundary widening project on SR 543.

Cross Cutting Management Issues

Consultant Utilization

WSDOT uses consultants to handle workloads that the department does not have the resources or expertise to perform with internal resources. WSDOT uses two different types of consultant agreements: On-Call Task Orders and Project-Specific Agreements.

The majority of consultant contracts funds comprise of On-Call Task Orders (i.e., contracts). This could be thought of as hiring consultants who can continually perform new services to WSDOT for a set period of time. Biannually, the agency assesses work-services that have been consistently used, such as preliminary engineering, traffic engineering, real estate appraisals, real estate negotiations, land surveying, traffic engineering, and transportation studies. Based on the estimated requirements, the agency advertises for predetermined categories of work and initiates multiple On-Call Task Order agreements for each category. The WSDOT regions will determine if work can be completed using one of these On-Call Task Order agreements.

When a project presents a special challenge, or requires special expertise, Project Specific Agreements are typically used. These occur when work cannot be performed using one of the On-Call agreements described above. Project specific agreements are usually reserved for unique WSDOT projects such as designing ferries and ferry terminals, or the development of layout plans for an airport.

Consultant Authorizations

From October 1, 2006 to March 31, 2007, the net totals for new consultant authorizations was $86,818,562 and for project specific agreement projects the net total was $5,475,986. Compared with the same reporting period one year ago, new consultant authorizations were $75,775,913 and for project specific agreements the net total was $32,897,815. Although new consultant authorizations are allowed for multiple tasks (design, specifications, environmental assessment), the majority of new authorizations are actually for a group of larger and more visible projects such as the *Alaska Way Viaduct and Seawall replacement* and the *Tacoma/Pierce County HOV Lanes project*. For more information on the these projects, visit WSDOT's Projects web site: http://www.wsdot.wa.gov/projects/.

On-Call Task Order Consultant Agreements

One hundred thirty three (133) consultant authorizations from On-Call Task Order agreements were received for Nickel projects during the period of October 1, 2006 to March 31, 2007. Authorizations totals were $6,380,493 for 50 prime consultant firms and 45 sub-prime consultant firms. Seventy (70) consultant authorizations from On-Call Task Order agreements for TPA projects were received during this period. Authorization totals were $33,586,124 for 36 prime consultant firms and 38 sub-prime consultant firms. The overall statewide On-Call consultant authorizations (excluding Nickel, TPA, and General Engineering Consultants) for the same period were $27,027,350. See page 41 for more information.

General Engineering Consultant Agreements

As discussed in the September 30th, 2006 *Gray Notebook* (p. 39), eight high profile General Engineering Consultant (GEC) projects received consultant authorizations from On-Call Task Order agreements during the period of October 1, 2006 to March 31, 2007. GEC Authorization totals were $19,824,596, which were provided to eight prime consultant firms and 36 sub-consultant firms. The authorized total consisted of $1,168,441 for Nickel, $9,012,060 for TPA and $9,644,095 for PEF projects. See page 41 for more information.

Project Specific Agreements and Supplements

The fifth and sixth quarters of the 2005-07 biennium saw new authorizations for project specific nickel agreements and/or supplements totaling $9,255,332. Seven different prime consultants and four sub-consultants received authorizations from project specific Nickel agreements. New authorizations for project specific TPA agreements and/or supplements were $12,790,752. Three different prime consultants and twelve sub-consultants received authorizations from project specific TPA agreements. All non-Nickel and TPA project specific consultant authorizations totaled $1,940,566. See page 41 for more information.

Consultant Authorizations
For October 1, 2006 - March 31, 2007
Dollars in Millions

Consultant Agreement	Nickel	TPA	PEF	Total
On-Call Task Order Consultant Agreements (including GEC agreements)	$7.6	$42.6	$36.6	$86.8
Project Specific Agreements/ Supplements	$-9.3	$12.8	$1.9	$5.5
Totals	$-1.7	$55.4	$38.5	$92.3

Data Source: WSDOT Consultant Services Office

Cross Cutting Management Issues

Consultant Utilization

Significant Authorizations for On-Call Consultants, October 1, 2006 - March 31, 2007

Dollars in millions

Project	Consultant	Work Description	Total $	Authorization Type
SR 520 Bridge Replacement and HOV Project (Nickel)	Parametrix	Completion of Final Environmental Impact Statement (FEIS) and issue of Record of Decision (ROD).	4.5	New[1]
Mukilteo Multimodal Project (Nickel)	Moffatt & Nichols Engineers	Environmental Impact Statement (EIS) and related work.	0.9	New[1]
Columbia River Crossing Project (TPA)	David Evans and Associates	Draft (DEIS) & Final (FEIS) Environmental Impact Statement, Public Involvement, Design Documentation Package, PS&E, Environmental work.	23.7	New[1]
SR 520 Bridge Replacement and HOV (TPA)	EnviroIssues	Internal and External Communications and Outreach Management.	1.4	New[1]
SR 532- Camano Island to I-5 Corridor (TPA)	Parametrix	Design Documentation Package, PS&E, Environmental work.	2.4	Amend[2]

Data Source: WSDOT Consultant Services Office
[1]New authorizations represent task orders awarded to the listed consultant.
[2]Amend (Amended Task Order) authorizations represent additional work by the listed consultant. In the cases listed above, the task order began in a prior period.

Eight General Engineering Consultant Agreements Authorizations, October 1, 2006 – March 31, 2007

Dollars in millions

Project	Consultant	Amount Authorized This Period
Alaskan Way Viaduct & Seawall Replacement Project	Hatch Mott MacDonald	$0.0
I-90 Snoqualmie Pass East - Hyak to Keechelus Dam	URS Corporation	$5.1
Northwest Region Mt. Baker Area	H.W. Lochner, Inc.	$0.4
Northwest Region Snohomish - King Counties Area Projects	DMJM Harris, Inc	$3.6
SR 167 Extension	Carter & Burgess, Inc.	$0.0
SR 167 Valley Freeway Corridor	Perteet, Inc.	$0.04
SR 520 Bridge Replacement and HOV Project	HDR Engineering, Inc.	$4.5
Tacoma/Pierce County HOV Program	CH2M Hill, Inc.	$6.1

Data Source: WSDOT Consultant Services Office

Significant Authorizations for Project Specific Consultants, October 1, 2006 – March 31, 2007

Dollars in millions

Project	Consultant	Work Description	Total $	Number of Sub Contractors	Amount for Sub Contractors	Authorization Type
Alaska Way Viaduct EIS (Nickel)	Parsons Brinkerhoff Quade & Douglas	Agreement Closeout.	-9.7	0	0	Suppl.[1]
I-5 Mellen Street to Grand Mound (TPA)	David Evans and Associates	Preliminary Engineering and Environmental Documentation.	12	0	0	Suppl.[1]

Data Source: WSDOT Consultant Services Office
[1]Supplements represent additional scope, time and budget relative to the consultant efforts for project specific agreements listed above.

Special Report: Tacoma Narrows Bridge, Quarterly Update

New Bridge Construction

As of March 31, design-builder Tacoma Narrows Constructors (TNC) has completed 87.5% of construction on the SR 16 Tacoma Narrows Bridge project. The project is estimated to achieve final completion in Spring 2008, but the new bridge is expected to open to traffic in July 2007.

During the first quarter of 2007, TNC completed lifting all deck sections, with the last deck section being lifted into place on January 30. The builder continued the process of bolting and welding deck sections together. Nearly all of the bolting has been completed and approximately 80% of the joints have been welded. Crews dismantled and removed gantry cranes, lifting gear, strand jacks and associated controls from the gantries. Crews also removed transshipping winches and side span deck-lifting equipment from the caissons. TNC then installed four cable wrapping machines and began cable wrapping in mid-February. By the end of the quarter, the main suspension cables on the east and west side spans were wrapped. Wire wrapping continues on the main suspension cables in the main span. The first of two expansion joints for the new bridge left Minnesota in March. Each expansion joint weighs about 100 tons and measures 71 feet long by 15 feet wide.

TNC completed the embankment and road approach work at the east anchorage, constructed the bridge approach slab, and began paving operations. Work continued with cleaning and finishing the inside surface of the tower legs. Electrical conduit was also installed, completing approximately 75% of the total conduit to be installed.

Aerial photo of the two Narrows bridges

Tacoma Narrows Bridge Progress

As of March 31, 2007

Design	99.9%
Construction	86.6%
Total[1]	87.5%

Data Source: WSDOT Engineering and Regional Operations Division
[1]Weighted 7% Design progress and 93% Construction progress.

Roadway/Existing Bridge Retrofit Construction

Installation was completed on the 24th Street on-ramp gantry which will support the electronic tolling equipment. Drainage work was completed between the 24th Street on-ramp and the new bridge approach slab. Installation continued on the permanent luminaries just before the westbound SR 16 exit at 24th Street.

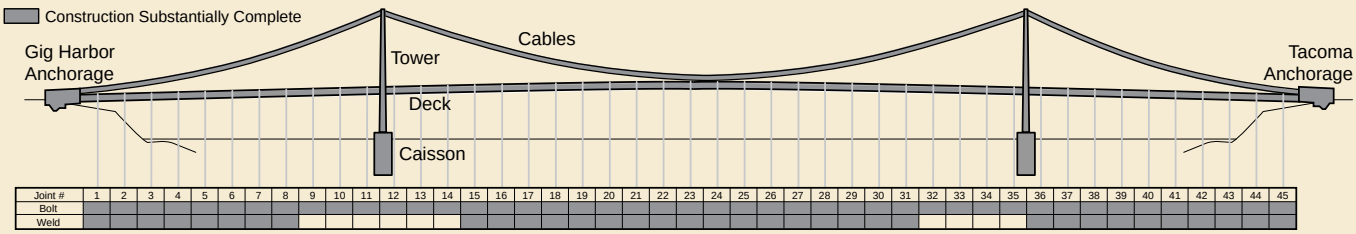
On the east side of the bridge, crews installed a sign cantilever at the approach. Benches were installed along the pedestrian path at the eastbound Jackson Ave. exit. Drainage work was completed between the existing and new anchorages, and installation began on a new permanent fence at the east access road on 10th Street.

Existing bridge work included the installation of new top laterals at Pier #6, and pouring the concrete for the Bent #10 seat extensions in the east anchorage.

Toll Facility, Installation and Operations

Three Citizen Advisory Committee meetings were held during the quarter. WSDOT assisted in compiling recommendations for the Transportation Commission and provided information for toll rate discussion. Washington Administrative Code proposed rules for toll policies were filed and a hearing was held on the proposed rules for toll policies.

Tolling contractor TransCore, along with WSDOT, conducted a peer review of the customer service center. WSDOT reviewed the 24th Street on-ramp design and test plans. Drafting of service level agreements between TransCore and WSDOT Information Technology regarding roles and responsibilities have also started.



Graphic depicts substantially complete bolting and welding of deck joints as of March 31, 2007. Some joints may have minor welding repairs. Once all the welding is complete all the bolts will need a final adjustment.

Special Report: Hood Canal Bridge Project, Quarterly Update

Hood Canal Bridge Project 44% Complete

As of March 31, 2007, the SR 104 Hood Canal Bridge Project was 44% complete. Two important milestones were reached this quarter. On January 8, three existing pontoons were towed to Terminal 91 in Seattle for retrofitting and refurbishing. Less than two months later, on February 26, crews in Seattle completed construction of the first cycle of ten anchors to be installed on the east-half of the bridge. For a detailed look at the progress being made on the Hood Canal Bridge Project, and the most current news, visit www.hoodcanalbridge.com.

East-Half Anchor Construction 57% Complete

During this quarter, the first of two anchor construction cycles was completed. The first half of the quarter involved crews pouring final concrete and preparing the anchors for delivery. On February 26, the ten finished anchors were floated out of dry dock at Todd Pacific Shipyards in Seattle. After connecting tow ropes from tug boats to the 1,000+ ton anchors and completing necessary safety checks, the dry dock began submerging. The anchors floated free an hour later and began a 50 mile journey to Port Gamble Bay near Hood Canal. The anchors will be moored at Port Gamble Bay until this summer when crews will begin submerging them at the bridge site.

Crews started the second cycle of anchor construction one day after the launch of the first. The final ten anchors are scheduled to be completed at the end of June. All 20 new anchors will be placed at the bridge site by September 2007.

Tug boats tow the first ten completed anchors on February 26 from Elliot Bay to Port Gamble Bay for mooring.

East-Half Pontoon Construction 45% Complete

The second of four cycles of pontoon construction is underway. Five pontoons will be completed in this construction cycle, with a total of 14 new pontoons constructed during the project. Each pontoon is in a different stage of construction, with concrete floors complete in all but one of the pontoons. The pontoons are scheduled to be complete and floated out of the graving dock in August 2007, after which they will be towed to Seattle to begin assembly. The three pontoons completed in the first cycle of construction continue to be moored at Seattle's Pier 66.

Pontoons R, S and T Refurbishment 17% Complete

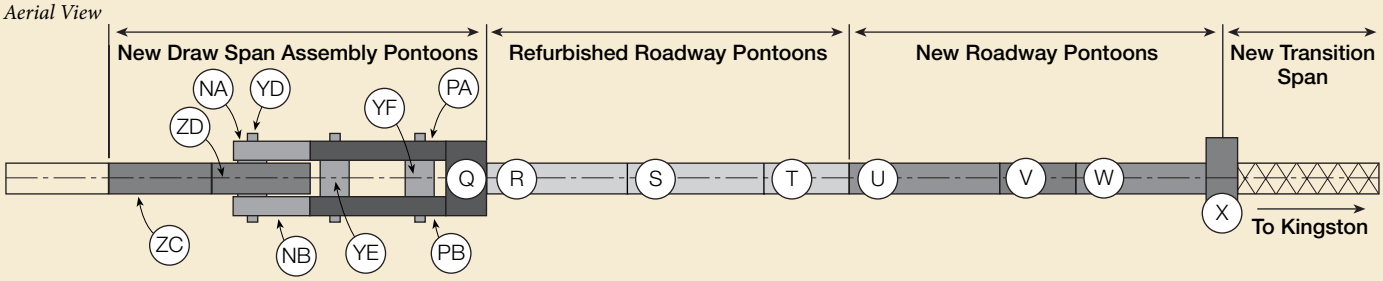
Crews have been removing old road deck and columns from the original west-half pontoons at Terminal 91 since January 2007. The assembled pontoons, named R, S and T, were used temporarily during the west-half replacement project in the 1980's in order to facilitate opening the bridge early while the more complex draw span pontoons were constructed. The temporary use of the pontoons helped drivers by decreasing road closure time. By reusing the pontoons rather than building three new ones, taxpayers will see time and cost savings to the project. The roadway deck and columns will be demolished and rebuilt to conform to the new bridge design. Refurbishment activities on pontoons R, S and T are 17% complete and are scheduled to be concluded by September 2007.

West-Half Leak Detection System

Installation of the west-half leak detection system progressed both inside the pontoon cells and above the deck. Electrical switches have been wired in place and drilling for conduit supports under the road deck began. The installation of the west-half leak detection system is 43% complete.

Schedule Diagram of Hood Canal Bridge Pontoon Construction Cycles

Aerial View



- Built in 1st Cycle (PA, PB, Q). Delivery Date: December 2006.
- To be Built in 3rd Cycle (ZC, ZD, V, X). Scheduled Delivery Date: April 2008.
- Retrofitting (R, S, T). Scheduled Delivery Date: April 2008.
- To be Built in 2nd Cycle (NA, NB, YD, YE, YF). Scheduled Delivery Date: August 2007.
- To be Built in 4th Cycle (U, W). Scheduled Delivery Date: September 2008.

Source: WSDOT Hood Canal Bridge Project Office

WSDOT's Capital Project Delivery Programs

Special Report: Tacoma/Pierce County HOV Program, Quarterly Update

The Tacoma/Pierce County High Occupancy Vehicle (HOV) Program encompasses 22 improvement projects on I-5, SR 16, and SR 167. Adding 79 HOV lane miles and other improvements such as wider shoulders and improved ramps, the projects will ease congestion and increase safety. Five projects are complete, three are under construction, nine are in design, and five projects are as yet unfunded.

Projects Focus on Corridor-wide Delivery

By combining the projects into an integrated program, WSDOT had the opportunity to evaluate the construction plan on a corridor-wide basis. Analysis showed that by modifying the construction packages and construction sequencing, the program could be delivered more efficiently, with work beginning earlier, and coordination on a corridor-wide level helping to eliminate risk potential without making any changes to the original scope of work.

22 HOV projects in Pierce County, on I-5, SR 16, and SR 167 are planned.

SR 16/Union Avenue to Jackson Avenue

The first HOV lane in Pierce County opened as part of the SR 16/Union Avenue to Jackson Avenue project. So far, the project has built four new bridges, widened two existing bridges, built a tunnel and seven miles of HOV lanes – 3.5 miles in each direction. The SR 16 eastbound HOV lane opened in January 2007 and the opening of the westbound HOV lane will coincide with the opening of the new Tacoma Narrows Bridge in Mid-2007.

Other benefits of the project include wider shoulders and lanes, longer on- and off-ramps, additional merging lanes and three miles of multi-use trail from Union Avenue to Pearl Street.

I-5/48th Street to Pacific Avenue

Comprised of two smaller segments--South 48th Street to South M Street, and South M Street to Pacific Avenue--work on this project in the first quarter of 2007 saw two major lane shifts on I-5 through Tacoma, the busiest stretch of highway in Pierce County.

Moving the lanes made it possible for crews to demolish three bridges that span I-5 near the Tacoma Dome, while keeping 200,000 vehicles a day moving and safely away from demolition debris.

Drivers travelling through Tacoma adjusted well to the lane changes – with northbound traffic shifted to the right in January and southbound traffic shifted to the vacated northbound lanes in April. Traffic continues to flow efficiently between the Tacoma Mall and the Tacoma Dome.

An intense public outreach effort helped make the lane shifts successful. Using television newscasts, newspapers, drive-time radio, electronic message signs, highway advisory radio and the Internet, thousands of Puget Sound residents were notified of the traffic revisions and the important work being done to improve Tacoma commutes.

Traffic was shifted to allow crews to demolish three bridges that span I-5 near the Tacoma Dome.

The shifted traffic routes will remain in effect through Fall of 2007, as crews complete the bridge demolition and set the bridge girders for two bigger and better replacement bridges, scheduled to be complete in December.

The entire I-5/48th Street to Pacific Avenue project is 60% complete; bridge-demolition work is approximately 70% complete; grading and paving is 70% complete; and M Street widening is 25% complete. The retaining wall featuring a new artistic design that borders the northbound I-5 lanes is about 70% complete. The project is on track for completion in Spring 2008 and will cost $72.9 million.

Worker Safety: Quarterly Update

WSDOT Workers: Recordable Injuries and Illnesses

OSHA Recordable Injury and Illness[1] Rates: Annualized

Highway, Street, and Bridge Construction Workers

For the third quarter of FY 2007, the annualized injury rate for WSDOT Highway, Street, and Bridge Construction workers was 5.2 per 100 workers. The rate per 100 workers is the same as the previous quarter and 3.0 (38% decrease) less than the third quarter of FY 2006. WSDOTs current OSHA Recordable Rate is lower then the most recent BLS Benchmark (2005) by 1.1 per 100 workers.

Ferry System

The ferry system annualized injury rate for the third quarter of FY 2007 was 7.1 injuries per 100 workers. This is 0.1 more per 100 workers than the previous quarter and 2.6 less than the third quarter FY 2006. The total number of injuries for the ferry system was 27. This is 13 less injuries than the same period in FY 2006 and five less than the previous quarter.

The tables below compare recordable injuries and illnesses for the third quarter of FY 2007 against WSDOT's experience in FY 2006.

Annualized Recordable Highway, Street, and Bridge Construction Worker Injuries & Illnesses: Maintenance & Engineer Workers

Fiscal Year-to-Date
OSHA-Recordable Injury Rate per 100 Workers[1]

	FY 2006[2]	FY 2007
FY Qtr 1	14.3	4.4
FY Qtr 2	9.7	5.2
FY Qtr 3	8.2	5.2
FY Qtr 4	8.3	

2005 BLS Benchmark 6.3 (calendar year)
Data Source: WSDOT Safety Office

Annualized Recordable Inland Water Transportation Worker Injuries & Illnesses Injury Rate: Ferry System Workers

Fiscal Year-to-Date
OSHA-Recordable Injury Rate per 100 Workers[1]

	FY 2006[2]	FY 2007
FY Qtr 1	9.0	5.7
FY Qtr 2	9.3	7.0
FY Qtr 3	9.7	7.1
FY Qtr 4	10.1	

2005 BLS Benchmark 3.9 (calendar year)
Data Source: WSDOT Safety Office

[1]OSHA 'Recordable Injuries and Illnesses" is a standard measure that includes all related deaths and work-related illnesses and injuries which result in death, loss of consciousness, days away from work, days of restricted work, or medical treatment beyond first aid. The U.S. Bureau of Labor Statistics provides the selected 2005 national average benchmark. One worker equals 2,000 hours per year.

[2]WSDOT implemented its new data collection process in January 2006. It is likely that this enhanced focus and process will lead to OSHA-Recordable injury rates which are slightly higher than the 2005 recaptured data. However, WSDOT maintains its goal that all injuries can be prevented (for more information, see the March 31, 2006 *Gray Notebook*, p. 40).

Number of OSHA-Recordable Injuries by WSDOT Worker

The graph below shows injury totals by type for WSDOT maintenance, highway engineering, ferry workers, and administrative staff in the third quarter of FY 2007. The total number of injuries was 81. This is five less injuries than the same period in FY 2006 and 12 less than the previous quarter. The most frequently injured part of the body was the back.

Highway Maintenance Workers

For the third quarter of FY 2007, highway maintenance workers reported 32 injuries, which accounted for 39.5% of all injuries. This was 9 less than the preceding quarter and 6 less than the same period in FY 2006. There were a total of 84 days away from work associated with the 32 injuries. The most frequently injured part of the body was the back.

Highway Engineering Workers

In the third quarter of FY 2007, highway engineering workers reported 18 injuries, which accounted for 22.2% of all injuries this quarter. This was an increase of two from the previous quarter and an increase of 11 from the same period in FY 2006. There were a total of 70 days away from work associated with the 18 injuries. The most frequently injured part of the body was the back.

Ferry System

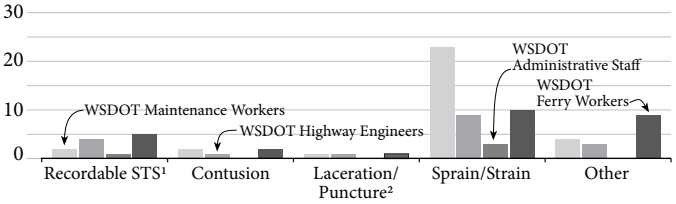
For the third quarter of FY 2007, ferry workers reported 27 injuries, which accounted for 33.3% of all WSDOT injuries for the third quarter. This was a decrease of five compared to the previous quarter and a decrease of 13 from the same period in FY 2006. There were a total of 198 days away from work associated with the 27 injuries. The most frequently injured part of the body was the ear.

Administrative Staff

WSDOT Administrative staff accounted for the remaining 4 injuries sustained in the third quarter of FY 2007, 4.9% of all WSDOT injuries sustained in the third quarter of FY 2007.

Number of Work Injuries by Type

January Through March 2007 (3rd Quarter FY 2007)



Data Source: WSDOT Safety Office and Washington State Ferries.

[1]OSHA-recordable Standard Threshold Shift (STS): A case must be considered recordable if an employee's hearing test reveals that the employee experienced a STS in one or both ears of 10 dB, and the employee's total hearing is reduced by 25 dB or more above audiometric zero (averaged at 2000, 3000, and 4000 Hz) in the same ear(s) as the STS.

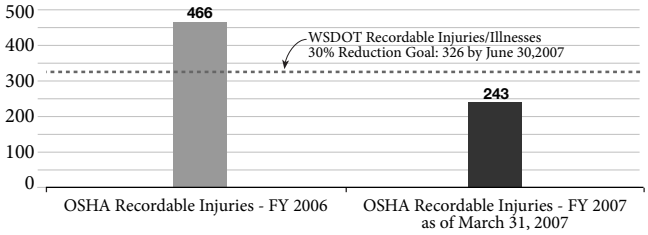
[2]Category title changed to better define incidents.

Worker Safety: Quarterly Update

WSDOT's Safety Initiative

On July 10, 2006, WSDOT held an agency wide 'safety stand down' and rolled out *Safety Is My Job* to all employees. The purpose was to highlight new safety expectations, better safety planning, and heightened safety accountability at WSDOT. The new Executive Order established a goal to reduce all OSHA-recordable injuries and illnesses by 30% (326 injuries) by the end of FY 2007. The departments goal for FY 2007 is not to exceed 326 recordable injuries. As of March 31, 2007 there have been 243 recordable injuries.

Safety Is My Job:
Goal to Reduce All OSHA-Recordable Injuries and Illnesses by 30% by the End of FY 2007



The table below reports the total number of injuries, year-to-date in FY 2007. It provides a regional breakdown of injuries for each quarter, and is separated into three internal management reporting categories: Maintenance, Engineering, and Administrative.

As of the end of the third quarter of FY 2007, a total of 243 OSHA-recordable injuries have occurred. Sprains and strains continue to be the WSDOT's largest injury category. Fifty-six percent of all OSHA-recordable injuries this quarter and fifty-five percent in the first three quarters of FY 2007 were sprains and strains.

WSDOT Continues to Focus on Injury Causes and Meeting Reduction Goals

Sprains and Strains

In order to understand the causes of sprains and strains, WSDOT conducted a comprehensive analysis of the last 5 years of data for these injuries. It was found that approximately half of the sprains and strains were caused by industrial ergonomics while the rest were mainly due to accidents such as slips, trips, and falls. As a result, WSDOT has employed multiple control strategies, including:

- An internal communications blitz and intensified emphasis in reducing musculo-skeletal disorders, which includes sprains and strains.
- A Safety and Health Advisory Sub-committee to promote a participation or a teamwork approach to addressing sprains and strains.
- Individual or group safety suggestion and incentive programs.
- Team training in ergonomics and general safety to gain consensus on improvement measures.
- Line management accountability in ensuring that the control measures are being implemented.

Number of OSHA Recordable Injuries and Illnesses by Quarter: WSDOT Regions and Ferry System[1]

FY 2007 (July 2006 - June 2007) Target Goal: 30% Reduction in OSHA-Recordable Injuries

	Maintenance			Engineering			Administration			FY	30% Reduction	FY 07 YTD
Regions	**Q1**	**Q2**	**Q3**	**Q1[2]**	**Q2**	**Q3**	**Q1**	**Q2**	**Q3**	**06**	**Goal**	**Total**
Northwest	10	9	15	3	3	3	1	0	0	81	57	**45**
North Central	2	6	3	0	0	0	0	1	0	33	23	**12**
Olympic	3	14	3	2	4	3	1	0	0	54	38	**30**
Southwest	1	3	3	1	3	1	0	0	0	30	21	**12**
South Central	9	2	4	4	2	5	0	0	0	33	23	**26**
Eastern	3	6	3	0	1	3	1	0	0	56	39	**17**
Headquarters	2	1	1	1	3	3	2	3	4	23	16	**20**
Subtotal	30	41	32	12	16	18	5	4	4	310	217	**162**
Ferry System	22	32	27	0	0	0	0	0	0	156	109	**81**
WSDOT Total	**52**	**73**	**59**	**12**	**16**	**18**	**5**	**4**	**4**	**466**	**326**	**243**

Data Source: WSDOT Safety Office & Ferry System
[1]This table should be not be used to compare region to region due to a different number of employees in each region.
[2]One engineering incident was erroneously attributed to the Southwest Region. It has now been correctly placed in the Northwest Region.

Worker Safety: Quarterly Update

Hearing Losses

OSHA-Recordable Hearing Losses is another area of injuries and/or illnesses that WSDOT is targeting. Control strategies being more extensively used include:

- Tighter enforcement of WSDOT's Hearing Conservation policy.
- Leveraging use of Pre-Activity Safety Plans in red-flagging high noise work areas and establishing control measures.

WSDOT will continue to implement a systems-based approach to reducing workplace injuries and illnesses. Additionally, it will promote off-work safety to reinforce a culture of safety.

Quarterly OSHA-Recordable Injury and Illness Rates

The tables on the right show quarterly rates per 100 workers (see the gray box below "How WSDOT Calculates Quarterly Injury Rates" for the calculation used to develop these rates). This is not an annualized rate and is used to compare quarter to quarter.

Highway, Street, and Bridge Construction Workers

In the third quarter of FY 2007, the quarterly injury rate for Highway, Street, and Bridge Construction workers is 1.3 injuries and illnesses per 100 workers which is a decrease from the previous quarter rate of 1.5.

Ferry System

In the third quarter of FY 2007, the quarterly injury rate for Inland Water Transportation workers is 1.8 per 100 workers. This number is a decrease from the previous quarter rate of 2.1.

How WSDOT Calculates Quarterly Injury Rates

WSDOT reports quarterly data for injuries and illnesses by totaling all OSHA -Recordable injuries and illnesses reported in a quarter and multiplying by 50,000 (the normal hours worked in a quarter per 100 workers). This number is then divided by all of the man-hours worked. The resulting number represents the quarterly number of injuries and illnesses per 100 workers (see equation below).

Equation:

$$\frac{(\text{\# of injuries}) \times 50{,}000}{(\text{\# of man-hours worked})} = \text{Quarter Rate per 100 Workers}$$

Note: In the September 30, 2006 edition of the *Gray Notebook* the above calculation method was introduced, therefore quarterly rates presented are not comparable to *Gray Notebook* editions published before September 30, 2006.

Recordable Highway, Street, and Bridge Construction Worker Injuries & Illness Injury Rate: Maintenance & Engineer Workers

Quarterly OSHA-Recordable Injury Rate per 100 Workers [1] (Not Annualized)

	FY 2006	FY 2007
FY Qtr 1	3.6	1.1
FY Qtr 2	1.2	1.5
FY Qtr 3	1.3	1.3
FY Qtr 4	2.1	

Data Source: WSDOT Safety Office

[1]OSHA-Recordable Injuries and Illnesses is a standard measure that includes all related deaths and work related illnesses and injuries which result in death, loss of consciousness, days away from work, days of restricted work, or medical treatment beyond first aid. The U.S. Bureau of Labor Statistics provides the selected 2004 national average benchmark. One worker equals 2,000 hours per year.

Recordable Inland Water Transportation Worker Injuries & Illness Injury Rate: Ferry System Workers

Quarterly OSHA-Recordable Injury Rate per 100 Workers [1] (Not Annualized)

	FY 2006	FY 2007
FY Qtr 1	2.2	1.4
FY Qtr 2	2.4	2.1
FY Qtr 3	2.6	1.8
FY Qtr 4	2.8	

Data Source: WSDOT Safety Office

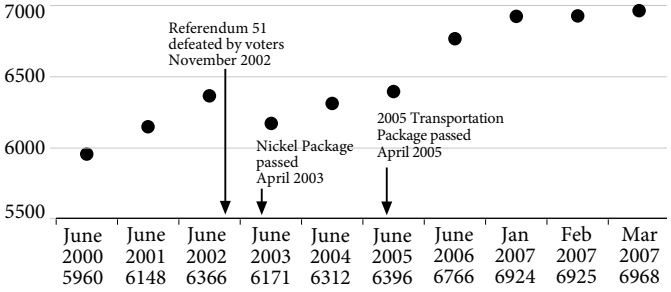
[1]OSHA 'Recordable Injuries and Illnesses is a standard measure that includes all related deaths and work related illnesses and injuries which result in death, loss of consciousness, days away from work, days of restricted work, or medical treatment beyond first aid. The U.S. Bureau of Labor Statistics provides the selected 2005 national average benchmark. One worker equals 2,000 hours per year.

Workforce Level and Training: Quarterly Update

Number of Permanent Full-Time Employees at WSDOT Slightly Increases

One indicator of an agency's workforce size is the total number of permanent full-time employees on staff. This quarter WSDOT employed 6,968 permanent full-time employees, an increase of 0.9% from the prior quarter. This total does not account for permanent part-time, seasonal, or on-call workers. The chart to the right shows the total number of full-time employees at various points since the end of fiscal year 2000, with significant mandates identified. The total number of full-time equivalencies (FTE's) will generally exceed the number of permanent full-time employees due to seasonal and part-time workers being funded from "FTE" allotments.

Number of Permanent Full-Time Employees at WSDOT



Data Source: Dept. of Personnel Data Warehouse, HRMS, WSDOT and the Ferry System Payrol

WSDOT Increases Employees in Compliance with Mandatory Diversity Training

This quarter a total of 1,412 diversity training units were delivered (some workers may have attended more than one class). WSDOT made progress towards compliance with the mandatory Diversity Modules developed in 2002 and saw a significant increase in the total number of trained employees. Each module offered had an increase in compliance during this quarter compared to previous quarters: Disability Awareness (7%), Sexual Harassment/Discrimination (5%), and Valuing Diversity (3%).

Number of "No Shows" for Training Decreasing

There were 159 (9.5% of registered participants) "No Shows" scheduled to attend Diversity Module training this quarter, compared to 202 (13%) last quarter. This represents 27% fewer "No Shows" than the previous quarter. In addition to monthly reporting to the Senior Management Team on the total number of "No Shows" by region, the Chief of Staff was briefed on the issue and given a general status report on the Diversity Training Program.

Diversity Computer Based Training and Booklet Development

The development by WSDOT staff of computer based training and booklets for the three mandatory Diversity Modules is underway. The completion of the project this biennium will build WSDOT's capacity to provide training in hard to reach workforce segments such as seasonal, non-permanent, and on-call employees. Instructor-led courses will continue to be the primary mode of training for the majority of new employees. Additional funding next biennium is needed to develop computer based training that integrates the mandatory Diversity Modules into a single product for permanent employees requiring the Diversity Refresher course starting in July 2007.

Worker Compliance with Mandatory Diversity Training

Training Course	Employees Requiring Training	Basic Training Completed to Date	Employees Needing Basic Training	Employees Needing Refresher Training	Completed Training Reported Quarter	Total in Compli-ance	% in Compli-ance	% Change From Previous Quarter
Disability Awareness	7818	4962	2856	0	699	4962	63%	7%
Ethical Standards	7818	7548	270	1088	361	6460	83%	2%
Security Awareness	7818	6255	1563	0	79	6255	80%	1%
Sexual Harassment/ Discrimination	7818	5594	2224	0	446	5594	72%	5%
Valuing Diversity	7818	4824	2994	0	267	4824	62%	3%
Violence that Affects the Workplace	7818	6285	1533	0	204	6285	80%	1%

Data Source: WSDOT Office of Human Resources, Staff Development
As of March 31, 2007
OEO training was revised into three courses (Disability Awareness, Sexual Harassment/Discrimination, Valuing Diversity) in June 2002, and only these revised courses are currently reported.
Refresher interval for the revised OEO training is five years.

Workforce Level and Training: Quarterly Update

Statutorily Required Training for Maintenance Workers Statewide

WSDOT's goal is to have 90% compliance for statutorily required training for maintenance workers. Regional maintenance and safety trainers are using various e-learning approaches to deliver training and increase compliance rates. These approaches allow maintenance employees to gain required WSDOT workplace training. Additional efforts are underway to convert several statutorily required courses into an e-learning format to augment instructor led training.

Required Maintenance Training by Course

Training Program	Total Training Requirements	Total in Compliance	Percent in Compliance	Change from Last Quarter (%)	Biennium Average
Blood Bourne Pathogens[1]	559	380	68%	-9%	54%
Confined Space Entry	545	455	83%	0%	78%
Electrical Safety Awareness	276	171	62%	5%	57%
Fire Extinguisher[1]	1365	920	67%	5%	54%
Drivers Training Eversafe	1160	1014	87%	1%	85%
First Aid[2]	1457	1211	83%	-2%	83%
Hearing Conservation[1]	1336	797	60%	-17%	76%
Lead Exposure Control[1]	82	54	66%	17%	31%
Lockout/Tag out	566	436	77%	2%	72%
Personal Protective Equipment	1388	1139	82%	-1%	83%
Fall Protection	731	617	84%	0%	84%
Flagging & Traffic Control[2]	1152	1050	91%	0%	91%
Respirator Protection[1]	358	74	21%	2%	16%
Supervisor Return to Work	205	162	79%	-1%	73%
Hazard Communications	1323	1106	84%	0%	84%
Proper Lifting	1431	1033	72%	0%	70%
Railway Work Certification[1]	31	25	81%	-19%	66%
Drug & Alcohol Certification	1221	1104	90%	-2%	90%
Drug Free Workplace	346	306	88%	0%	88%
Forklift	1122	978	87%	0%	89%
Hazardous Materials Awareness[1]	818	626	77%	-1%	73%
Aerial Lift	182	155	85%	-7%	86%
Bucket Truck	380	318	84%	1%	82%
Excavation, Trenching & Shoring	414	350	85%	0%	80%
Emissions Certification[3]	75	25	33%	-2%	55%
Total	**18523**	**14506**	**78%**		**77%**

Data Source: WSDOT Office of Human Resources, Staff Development
[1]Refresher Training Required Annually
[2]Refresher Training Required Every Three Years
[3]Refresher Training Required Every Five Years

WSDOT tracks compliance for statutorily required training programs for its maintenance workers by individual region and its headquarters in Olympia.

Training compliance rates tend to raise and fall due to the cyclic nature of the work environment. Winter has historically presented a training challenge; the workforce is often fully engaged in seasonal maintenance efforts, which affords fewer opportunities for compliance training. In the coming quarter, compliance rates are expected to rise; Spring often presents a greater opportunity for training.

Required Maintenance Training by Region

Region	Percent in Compliance	Change from Last Quarter (%)	Biennium Average
Northwest	69%	-4%	70%
North Central	82%	1%	78%
Olympic	73%	-1%	70%
Southwest	88%	-3%	91%
South Central	82%	3%	79%
Eastern Region	95%	0%	90%
Headquarters - Olympia	80%	28%	50%

Data Source: WSDOT Office of Human Resources, Staff Development

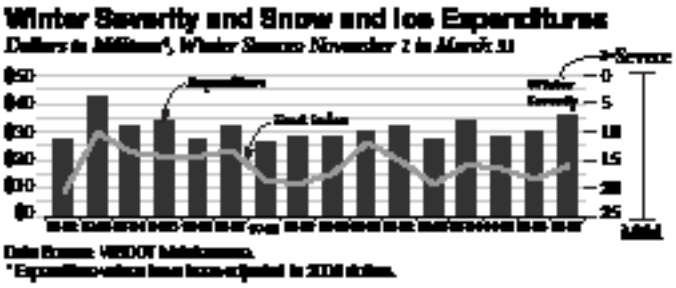
Highway Maintenance: Annual Update

2006-2007 Post Winter Report

Severe weather struck early and hard in Washington during the winter of 2006-2007. Ice, snow, rain, and wind storms commenced in late October and continued to flog Washington through mid-January. February and March brought some relief with less eventful weather.

Weather Severity and Snow and Ice Expenditures

Snow and ice control expenditures are related to the severity of the winter. While this past winter was characterized by some unique weather events, the frost index shows that across the state, Washington ended the season with an average winter. The frost index measures winter severity based on daily temperature information gathered from 29 weather stations around Washington State. A lower numerical rating means more sub-freezing temperatures, and with that, likely more snow and ice. A higher numerical rating means less sub-freezing temperatures. However, this past winter, rising costs of deicer agents, their increased use to provide better road conditions, and additional manpower and equipment assigned to the mountain passes pushed winter maintenance costs higher compared to the 'average' winter severity rating.



The result was a total expenditure by WSDOT for snow and ice control in 2006-2007 of approximately $35.5 million, an increase of about 5.7 million from 2005-2006 ($29.8 million spent). The 2006-2007 expenditure is approximately 23% of the annualized portion on the biennial maintenance budget and represents a cost of $7.50 per registered vehicle in Washington State.

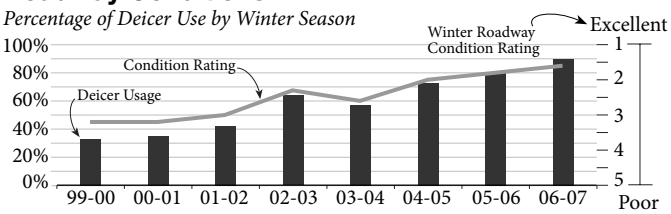
Use and Survey of Deicer Applications

One of the best strategies to keep roadways clear and safe is to prevent potential snow and ice from accumulating and bonding to the pavement. WSDOT accomplishes this by applying deicing agents. Liquid or solid deicer chemicals stop ice crystals from bonding with the road surface, thereby limiting the occurrence of frost, black ice and compact snow. While deicer agents are not a cure-all for hazardous winter road conditions, these agents are an increasingly important addition to plow-and-sand techniques traditionally used by highway maintenance crews.

Through March 31st, maintenance crews recorded 30,065 road treatments to help improve winter road conditions statewide. Maintenance crews used deicers during 26,935 (90%) of these treatments, and sand on the remaining 3,130 (10%) treatments. Although more expensive, deicer is used more frequently than sand because of the better road conditions that result from it's use. Better road conditions lead to improved safety, potentially fewer road closures, and a reduced need for studded tires. Over the last few years, increasing use of deicers and improvements in application techniques have helped contribute to consistent improvement in winter roadway conditions.

Statewide Deicer Use and Winter Roadway Conditions

Percentage of Deicer Use by Winter Season



Data Source: WSDOT Maintenance.

Random Field Surveys Assess Road Conditions

WSDOT measures its snow and ice control performance by assessing the travel conditions at random locations throughout the state highway system during winter. Through weekly field surveys at these locations, road conditions are evaluated and rated on a scale of one (road conditions with best traction) to five (road conditions with least traction). Over the last few years, increased deicer use and improved techniques have correlated to a higher level of service for snow and ice control.

Snow and Ice Deicer Agents Shortages

WSDOT prepares for winter material needs by filling most or all of its storage facilities with 41,000 tons of snow and deicer chemicals during the summer months. WSDOT also makes projections for material needs, and requests vendors to stockpile additional materials at large, centrally located stockpile sites across the state in sufficient quantities to meet the state's winter maintenance needs.

With the early and severe winter storms hitting the state from late October through December, WSDOT began to run low on deicer supplies in early January. Other states with large snow

2006-2007 Post Winter Report

removal needs (the "snowbelt" states) were also experiencing the same supply shortages due to regional winter severity. WSDOT's contract supplier continued to produce deicer agents 24 hours a day, seven days a week, and still could not keep up with the states' demands. At one point this past winter, WSDOT had more than 7,000 tons of material on order but was receiving weekly shipments of less than 1,000 tons. WSDOT was able to procure approximately 4,000 tons of snow and deicer material from non-contract suppliers under emergency purchase provisions. Existing supplies within the state were managed frugally to insure that materials were available to the areas of greatest need. Critical shortages required regions to shift material to insure adequate supplies were available to all areas.

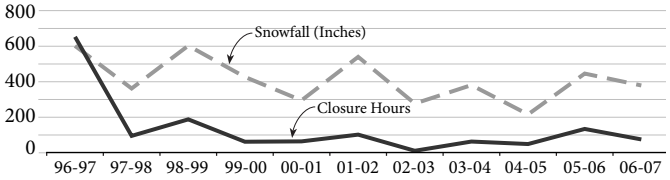
After mid-January, the state experienced a relatively mild winter, which allowed WSDOT some much needed time to get the additional materials to the locations where they were needed most. February storms remained mostly in the mountains and in northeastern Washington, which helped to localize and reduce material distribution needs. With all of the regions and areas working together, WSDOT was able to stretch its use of remaining supplies enough to get through the remainder of winter. WSDOT will utilize what it has learned to improve performance in the next winter should similar conditions occur.

Closures on East and West-Bound Routes on Snoqualmie Pass Decrease

This year, Snoqualmie Pass experienced fewer closures compared to the 2005-2006 season. This performance is important because the pass is a critical route for vehicle and freight cross-state travel. Snoqualmie Pass presents WSDOT maintenance crews with imposing logistical challenges during the winter driving season. Its elevation is high enough to assure significant snowfall amounts (more then 300 inches every winter season), but low enough that the predominant snow composition is the troublesome heavier and moisture-rich (wet) snow. Avoiding or minimizing winter closures reduces inconvenience and cost faced by travelers and businesses. The chart on the following page presents a record of closures and snowfall affecting Snoqualmie Pass over the last eleven years.

As of April 1, 2007 the official end of the winter driving season, Snoqualmie Pass had accumulated 375 inches of snowfall, which is on par with the recorded five year average. In the 2006-

Snoqualmie Pass Winter Closure Hours
Interstate 90 Winter Seasons, 1996 to 2007
Accumulated Annual Hours and Inches of Snowfall



2007 winter season, Snoqualmie Pass was closed for 75 hours, compared to 134 hours in the 2005-2006 winter season. For more information about closures and how they affect freight transportation, see page 60.

New Program Added to Mountain Pass Winter Operations

In 2006, the Legislature authorized a program where private firms registered with WSDOT could offer affordable tire chain installation services for motorists on Stevens and Snoqualmie passes. For those motorists who do not know how to properly install tire chains, professional chain installation will improve safety and help keep traffic moving through chain-up areas faster. This winter, one company serviced Stevens Pass and three companies operated at Snoqualmie Pass. One of the companies installing chains at Snoqualmie Pass reported installation of chains on 122 cars and fourteen trucks during eight days they set up workstations.

The program is an example of a low cost, high benefit program that may improve safety and traffic flow conditions. Although the number of motorists purchasing these services was not dramatically high, the services appeared to be very much needed and appreciated by those who utilized them. This initial season of chain installation services will be evaluated and revisions will be made in the program as needed, for the next winter season.

Assessing Performance and Improving Planning

Upon the conclusion of the 2006-2007 winter season, WSDOT begin preparations for the next winter. WSDOT evaluates its maintenance operations in order to improve for future winters. WSDOT use's these evaluations to refine, update and improve future snow and ice plans.

Highway Maintenance: Annual Update

2006-2007 Post Winter Report

Winter Seminars Conducted Year Round

Meetings and conferences with maintenance partners in the Northwest and across the nation are ongoing. These partners include the Pacific Northwest Snowfighters (PNS, a partnership of four Northwest states and the Province of British Columbia), the Washington, Idaho and Montana tri-state chapter of the American Association of State Highway Transportation Officials (AASHTO), American Public Works Association (APWA) North American Snow Conference, Eastern Snow Conference (ESC) and the Peer Exchange. In these collaborative sessions WSDOT shares experiences in snow and ice operations and evaluates how other transportation organizations are managing and delivering their snow and ice programs. These sessions present WSDOT with opportunities to evaluate, and later research, newly available snow and ice equipment and related technologies to determine if any of these products can improve future operations, data collection and efficiency of material applications.

This summer, WSDOT will bring in nationally recognized experts in snow and ice operations to train WSDOT managers, supervisors and technicians on new technologies and techniques that will be available for the 2007-2008 season to improve winter operations. WSDOT also plans on updating and extending statewide contracts for weather forecasting and maintenance materials based on its assessment of the preceding winter.

WSDOT Utilizes Winter Maintenance Programs in the Lowlands

For three days, January 9-11, 2007, WSDOT maintenance staff across western Washington responded to severe snow, ice and cold temperatures in the lowlands by providing emergency maintenance services. Emphasis was placed on making sure that crews and supplies were ready and drivers had accurate information, to avoid frustrating commute situations as had happened on November 27, 2006. During this particular January event, WSDOT had 227 trucks on the road, with some arriving from as far away as Wenatchee. Over 388,000 gallons of liquid deicer were used and 613 dump-truck loads of solid deicer also were put down.

Supplementing winter road maintenance activities, WSDOT's traveler information web site played an important role in reducing commute problems during the storm. Combining real-time traffic flows for the Puget Sound region as well as up-to-date

A Perfect Storm: WSDOT Learns From Its Mistakes

WSDOT's Winter Maintenance programs have continued to develop over time in order to improve road conditions when severe winter weather strikes, however, on November 27th, 2006 a series of winter weather conditions hit the central Puget Sound region that ended up temporarily paralyzing drivers on highways and local roads in some of the worst conditions possible. The situation brought forth an opportunity to evaluate Winter maintenance performance and where improvement was needed.

WSDOT utilizes a private weather forecasting organization throughout the year in order to prepare for severe inclement weather. Predictions called for one inch of snow, followed by rain/snow mix. WSDOT usually uses a sand mixture to improve traction when conditions include snow and rain mixes. Unfortunately, below freezing (32°F) temperatures and four additional inches of snow arrived. The storm hit central Puget Sound beginning at 4:00 pm, the traditional start of rush hour.

The last complication came after 10:00 pm, when a Monday Night Football game ended at Qwest Field in Seattle. More then 50,000 people immediately entered the freeway system, and were quickly isolated in congestion and decreasing temperatures. Some ended up spending cold evenings in their cars before weather conditions let up enough for WSDOT and King County maintenance vehicles to improve conditions.

After the storm WSDOT publicly addressed its maintenance performance and indicated where it could improve. Although all plows were operational and sand and deicer were well stocked, WSDOT learned that these tools are only effective when storm conditions are analyzed correctly. WSDOT must also accurately communicate to drivers about commutes, driving conditions and preparedness recommendations. Such changes were implemented in storms that arrived later in the winter season, with better performance results.

On November 27 2006, a snow and ice storm paralyzed central Puget Sound. WSDOT's maintenance efforts fell short, but gave the department an opportunity to learn and improve performance.

2006-2007 Post Winter Report

weather conditions, travelers were able to make informed commute decisions during the storm. On Wednesday, January 10, the WSDOT Web site had 15.2 million page views, outpacing the previous record of 14 million page views on November 26, 2006. For more information about WSDOT travel information services see the December 31, 2006 *Gray Notebook*, page 77.

Record Rainfall Causes Severe Flooding in Western Washington

In addition to snow and ice highway maintenance, WSDOT has additional emergency winter maintenance activities. These operations unofficially began with the first major rain and wind storm to hit the state on November 6, 2006. Heavy, intense rains required WSDOT to begin emergency operations to manage the deluge of rain and high water levels creating havoc for drivers across the state.

WSDOT staff in the state Emergency Operations Center (EOC) worked for four days following the November 6th storm, coordinating WSDOT maintenance activities, answering requests for resources and personnel from the counties' trouble spots. The floods caused more than $9 million in damage to the state's road systems. In addition to dispatching maintenance and Incident Response (IR) crews to roadside emergencies, the WSDOT aviation division coordinated airborne search and rescue. Seventeen people stranded by the dramatic weather events were later rescued by the Washington Air National Guard, US Coast Guard or by US Navy helicopters with assistance by the WSDOT aviation division and the state EOC. In the end, there were 20 winter-weather related closures on sections of state highways in western Washington in the 2006-2007 season.

Erosion on SR 123 was caused by severe storms in early November. The highway is a popular route to Mt. Rainier National Park and is expected to re-open later in 2007.

WSDOT Maintenance Responds to the Record Breaking Hanukkah Eve Wind Storm

In mid December, Washington experienced the strongest wind storm since the Inauguration Day storm on January 20, 1993. Winds of up to 90 MPH on the coast and 70 MPH in the interior blew down thousands of trees and knocked out power to nearly 1.5 million households. The highest recorded wind during the storm was 113 MPH at Chinook Pass. As a result of severe damages, Governor Gregoire invoked a Proclamation of Emergency for all 39 counties in Washington State.

During the storm, there were over 90 reported state highway closures along with bridge closures for most major bridges in Puget Sound. The severity of the wind storm required the first-ever closure of the Tacoma Narrows bridge. A proactive approach to closing the floating bridges relieved potentially damaging pressures to the structures. However, with the efforts of WSDOT staff in the field, all the road and bridge closures were short term and only minimal damage was sustained. WSDOT worked through the storm clearing debris, closing hazardous roads, and working with local communities to keep transportation systems working as effectively as possible.

SR 520 Floating Bridge on Lake Washington was pummeled by high winds during the Hanukkah Eve storm in December 2006.

WSDOT Assists Counties and Cities with Winter Maintenance Activities.

The 2006-2007 winter season presented difficulties not only for WSDOT, but for local jurisdictions and private agencies as well. The effects of severe snow, ice and heavy rains required using both pre-developed reimbursable agreements for services rendered and allowing for agreements developed 'just-in-time' in order to assist those agencies and jurisdictions that requested support during the winter season.

WSDOT initiated several pre-winter meetings with local jurisdictions to develop good working relationships and identify specific needs for each organization ahead of time. These meetings included discussions on new equipment, technology, products, and maintenance policies for the season. Additional training was provided to county staff on their equipment and WSDOT's made available to counties state contract prices for fuel, sand, and deicers.

Highway Maintenance: Annual Update

2006-2007 Post Winter Report

Throughout the winter, WSDOT provided standard snow removal activities for local jurisdictions that either lacked the equipment or personnel. We supported several communities with both solid and liquid deicer when their stocks ran out. These actions supported keeping roadways accessible and in one instance also enabled the Bellingham airport to stay open when ice formed over the runway. During the severe flooding in November 2006, WSDOT provided sand and sandbags to local communities. WSDOT also worked with counties to open roads that were washed-out by flooding and erosion.

WSDOT also lent assistance to communities after the Hanukkah Eve wind storm last December. WSDOT cleared trees and provided qualified flaggers to keep a safe working environment for utilities crews working to restore power to the hundreds of thousands without power and provide critical access routes for emergency responders.

Downed trees were one of many challenges WSDOT worked with during its regular and emergency winter maintenance activities for 2006-2007

Rare Snow Doughnuts Photographed by WSDOT Attracted Attention at Both Home and Abroad

This winter, WSDOT employee Mike Stanford photographed a rare natural phenomenon: Snow Doughnuts. Snow Doughnuts are the result of an avalanche that takes advantage of very specific conditions. A large amount of fresh, dense snow must fall over a thick layer of harden snow in order for the shapes to form. If it's too light, the doughnut will fall apart when it begins to roll down a slope. If it doesn't have enough momentum, the centrifugal force doesn't occur and the doughnut never takes shape. However, in this case a falling branch or clump of snow found the right conditions and resulted in a 24 inch wide Snow Doughnut. Making these shapes even rarer, they can only be found in the early morning, before the mid-day sunshine will melt the Snow Doughnuts.

After circulating around WSDOT offices statewide, photos of the Snow Doughnuts made their public debut in a *Seattle Times* article on March 17, 2007. On March 27, the Snow Doughnuts photos made their international debut on page 18 of Great Britain's *Sun* newspaper tabloid. However, the images were used to illustrate the "chilly reception" England's national soccer team captain received at Wembley Stadium after a slow seasonal start, rather then to elaborate on the Snow Doughnut's intrinsic beauty.

Asset Management: Safety Rest Areas Annual Update

Program Overview

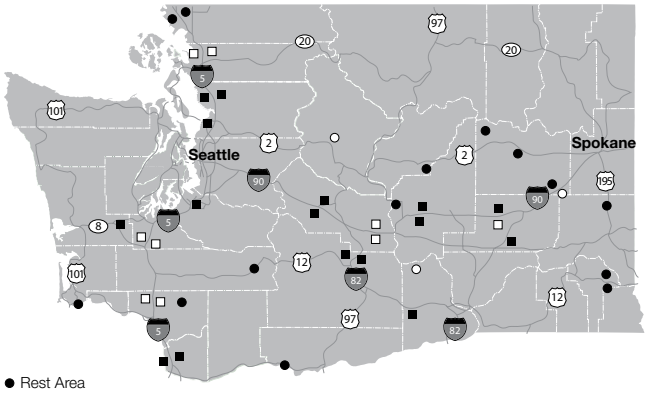
At Washington's safety rest areas, travelers can rest and refresh themselves in order make their trips safe and pleasant. This annual update provides information on:

- Visitor Use
- Level of Services
- Facilities' Conditions
- Preservation and Improvement Program
- Customer Satisfaction Feedback and Surveys

21.5 Million Safety Rest Area Visitors in 2006

Since the last *Gray Notebook* report in March 31, 2006, WSDOT has calculated, based on water usage, that 21.5 million people visited Washington safety rest areas in 2006. This is an increase of approximately 200,000 visitors statewide. The Toutle River safety rest areas, located north of Kelso on I-5 in Cowlitz County, continues to be the most visited sites, with an estimated 3.3 million visitors in 2006. The Indian John Hill safety rest areas on I-90 near Cle Elum are also extremely important safety stops for travelers, with 2.0 million visitors. Scatter Creek and Maytown, twin safety rest areas just south of Olympia on I-5, are also very busy, with a combined total of 1.8 million visitors in 2006

Safety Rest Area Locations



Safety Rest Area Visitor Data

Visitors In Thousands

Interstate				Non-Interstate			
Safety Rest Area	**County**	**2005 Annual Visitors**	**2006 Annual Visitors**	**Safety Rest Area**	**County**	**2005 Annual Visitors**	**2006 Annual Visitors**
Gee Creek	Clark	1,057	1,380	Nason Creek	Chelan	439	442
Toutle River	Cowlitz	3,624	3,298	Telford	Lincoln	275	145
Scatter Creek NB	Thurston	1,010	1,016	Elma EB	Grays Harbor	401	421
Maytown SB	Thurston	828	808	Bevin Lake	Lewis	146	177
SeaTac NB	King	940	1,026	Alopwa Summit EB	Garfield	N/A	N/A
Silver Lake SB	Snohomish	534	516	Chamberlain Lake	Klickitat	134	78
Smokey Point	Snohomish	1,017	1,052	*Blue Lake	Grant	19	15
Bow Hill	Skagit	1,863	1,898	Keller Ferry	Lincoln	N/A	N/A
Custer	Whatcom	746	663	Vernita	Benton	129	102
Selah Creek	Yakima	577	725	Hatton Coulee	Adams	62	102
Prosser	Benton	715	575	Quincy Valley	Grant	110	142
Indian John Hill	Kittitas	1,772	2,020	Horn School	Whitman	125	164
Ryegrass	Kittitas	797	759	Dismal Nitch	Pacific	183	89
Winchester	Grant	492	438	*Forest Learning Center	Cowlitz	131	173
Schrag WB	Adams	1,205	1,789				
Sprague Lake WB	Lincoln	1,513	1,452				
Interstate Totals		**18,689**	**19,415**	**Non-Interstate Totals**		**2,156**	**2,050**

Data Source: WSDOT Maintenance & Operations Division
1 Water use data (used in the calculation of number of visitors) was not available for all safety rest areas for every month due equipment malfunction or other record keeping error. In these cases, WSDOT extrapolated water use figures from historical data. Actual gallons per restroom user vary by site due to type/age of fixture and flow setting.
2 These rest areas have two facilities, one on each side of the road. For this table, the annual use numbers have been combined and the pull rate averaged for the two sites.
3 These rest areas have seasonal closures.

Asset Management: Safety Rest Areas Annual Update

Safety Rest Area Facility Conditions

Safety Rest Area Service Rating Holds Steady at "B"

The Maintenance Accountability Process (MAP) measures outcomes of highway maintenance activities, including those at safety rest areas. For more information on how the MAP process is used in planning, budgeting, and service delivery goals, see the December 31, 2006 *Gray Notebook* (p. 72).

As part of the MAP process, WSDOT inspects all safety rest areas semi-annually to determine the Level of Service that WSDOT achieved. Level of Service ratings are based primarily on operational aspects of the safety rest areas, and are only based in small part on facilities condition. (For more information on the condition of Safety Rest Areas facilities, see page 58). Based on the MAP criteria, WSDOT has maintained interstate safety rest areas at a rating of "good condition" (B rating) since 1999. A safety rest area is in good condition if all features (such as soap dispensers or RV dump stations) are in working order, landscaping is trimmed, and only a small amount of litter, weeds, or minor defects in sidewalks or parking areas may be present.

From 2005 to 2006, the rest areas on I-90 improved to a B Level of Service from a B-. As part of the agency's drought response plan (see September 30th 2005 *Gray Notebook*, p. 76), lawn watering was restricted. This allowed the lawns at these rest areas to brown and impacted the LOS ratings for the sites in 2005.

Safety Rest Area Condition Report Currently Underway

In 2005, WSDOT performed the second round of building and site condition assessments to determine the facilities' deficiencies. The results of the condition assessment revealed eleven safety rest areas were rated in Good condition, two safety rest areas rated Fair-High, nine safety rest areas rated Fair-Mid, 18 Safety Rest Areas rated Fair-Low, and two safety rest areas rated Poor. Thirteen facilities moved from a Fair-Middle rating to a Fair-Low. This significant difference reflects refinements of the assessment process as well as deterioration in the facilities.

The biennial process helps with prioritization of renovation and replacement projects. Prior to the 2005 report, the assessment was annual; WSDOT moved to a biennial assessment process to better align with the department's budget development process. The rest area condition assessment is currently underway and will be reported in the March 2008 *Gray Notebook*.

Safety Rest Area Conditions Rating Scale

Good: Facility is new construction and/or meets current standards.

Fair-High: Facility meets current standards and/or is in adequate condition with minimal component deficiencies

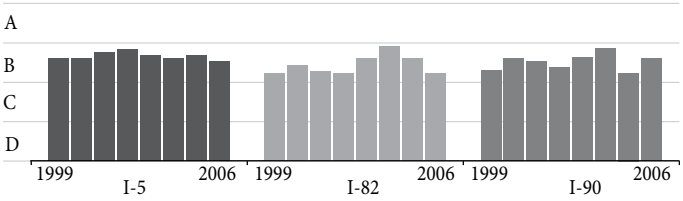
Fair-Mid: Facility is functional, and is in adequate condition with minor component deficiencies.

Fair-Low: Facility has multiple system deficiencies.

Poor: Facility is at or beyond its service life, with multiple major deficiencies

Rest Area Service Level Trends for Interstate Rest Areas on I-5, I-82 and I-90

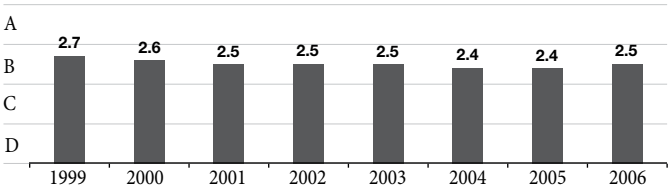
Service Level



Data Source: WSDOT Maintenance and Operations Division.

Rest Area Service Level History for All Washington State Rest Areas, 1999-2006

Service Level



Data Source: WSDOT Maintenance and Operations Division
Note: B Level of Service range is 2.0 to 2.99

Costs for Safety Rest Areas Average 30 Cents per Visitor in 2006

In 2006, the cost to maintain, operate, and preserve Washington State safety rest area facilities at the current level of service was approximately $0.30 per visitor. For the 2003-05 biennium (actual) and 2005-07 biennium (planned) maintenance, operation, and preservation costs at Safety Rest Areas average about $6.5M per year. With 21,456,000 visitors to Washington State Safety Rest Areas in 2006, this averages about $0.30 per visitor in 2006. By contrast, according to figures from the Federal Highway Administration, the cost to society per each fatal collision is $3.9 million, and $325,000 per each disabling injury collision

Asset Management: Safety Rest Areas Annual Update

Customer Satisfaction and Safety

October 2006 Customer Satisfaction Survey

WSDOT measures the Safety Rest Areas program effectiveness through user surveys, information submitted by users on comment cards, and through site and facility condition assessments.

During the summer of 2006, WSDOT surveyed visitors of Washington's safety rest areas to compare demographics and user satisfaction with information gathered in 1997. Using the same six questions as in 1997, for 2006 a total of 5,011 visitors participated at 31 of the 42 most visited safety rest areas. Information was gathered on the visitors' age, gender, point of origin, destination, purpose of trip, satisfaction with the facility, improvements customers would like to have, and importance of traveler information.

Results of the survey revealed 95% of customers rated the facilities as either very good or good. This is a 4% improvement over the 1997 results. When asked what improvements customers would like to see, 62% said none, 8% said cleaner facilities, 5% said paper towels, and 25% did not respond. Traveler information appears less important to customers, 58% indicated it was not important, 12% indicated it was either very important or important, 6% indicated it was only somewhat important, and 24% did not respond to the question.

Safety Rest Areas Comment Card Program Update

WSDOT reviewed over 600 comment cards on Safety Rest Areas received from November 2005 through July 2006. Cards were placed in boxes at the rest areas or mailed to WSDOT.

Over half the returns indicated "good" to "excellent" reviews noting site conditions, restroom cleanliness, staff evaluations, the "free coffee" program and other attributes. About a quarter indicated "okay" and characteristically suggested needs for more vending machines, more rest rooms, additional baby changing tables and more "free coffee" (i.e., longer hours.) The balance of "dissatisfied" returns tended to point to cleanliness issues, pet area problems and unhappiness with rest area closures.

WiFi at Safety Rest Areas

WiFi came to 28 locations in August 2006 through a private vendor offering computer-equipped travelers free access to WSDOT's traveler information web site services and internet access for a fee. In the first months of service each of the 28 Wi-Fi enabled facilities are being utilized. During the first four months of 2007, visitors logged onto the Internet using state rest area WiFi access for a total of 1150 separate sessions. The heaviest use of the WiFi access was at the Sea-Tac rest area on I-5 near Tacoma and the Gee Creek rest area in Clark County just north of Vancouver.

For WSDOT, this is an entrepreneurial linkage that provides a convenient new way for travelers to check road conditions, traffic cameras and highway traffic, and construction progress alerts. The value of a stop at a safety rest area is increased when travelers can make a connection to their own information highway through an internet service provider. WSDOT also obtained internet bandwidth that eventually can be used as a safety rest area security cameras and to supply electronic messaging covering topics from traffic conditions to Amber Alerts. The internet firm with whom WSDOT entered this program was Parsons Transportation Group.

Security at Safety Rest Areas

From customer cards and other feedback, safety and security concerns at the safety rest areas are especially important on I-5. Loitering, solicitation, possible drug activity and vandalism are all noted. WSDOT and the Washington State Patrol must work together, especially in the summer months, to address these problems. A plan is being developed to record safety and security problems at all 42 safety rest areas. Beginning July 1, 2007 all rest areas will be measured daily for incidents. WSDOT is also planning for installation of security cameras at 2-3 safety rest area's (those with the greatest number of problems) in the 2007-2009 biennium. A security hazard evaluation is being prepared for all the rest areas to help guide a pilot program, expected to commence in late summer 2007, to achieve a reduction in unwanted activities. Security cameras linked to Washington State Patrol dispatch center and other measures are expected to provide for a safer environment for rest area visitors.

Security at Facilities

Smokey Point and Silver Lake Facilities

WSDOT hired a private security firm to patrol the three facilities at random hours day and night. This has resulted in a decrease in vandalism and illicit activities.

Other sites

The joint evaluations also resulted in numerous improvements at other rest area facilities including improved lighting, landscaping and a heightened awareness of potential security hazards through the training of all rest area attendants by a state patrol personal security officer

Asset Management: Safety Rest Areas Annual Update

Safety Rest Area Preservation and Improvements

Safety Rest Area Prioritization

WSDOT conducts a biennial assessment of condition at the rest areas and is attempting to prioritize needed projects according to the following ten year programs goal.

Rest Areas Preservation Program

Major Rehabilitation

Major rehabilitation projects involve major reconstruction or the replacement of systems or components that have reached the end of their useful life. In the last report, I-90 Ryegrass Safety Rest Area was undergoing rehabilitation of its water system. The project is now complete and fully operational.

SR 401 Dismal Nitch Safety Rest Area – Water System Rehabilitation

This project, expected to be completed during June 2007, will provide a new water system to provide potable water throughout the year. This rest area in the past was closed during winter months due to inadequate water supplies.

I-90 Indian John Hill – Water System Rehabilitation

Water line breaks have been an increasing problem in recent years. The fix is now in design. Repairs should be constructed in the 2007-09 biennium.

I-5 Toutle River – Water System Rehabilitation

An additional water source is needed because the rest area has been running out of water during peak use periods. The new source is now being developed and will be constructed during the 2007-09 biennium.

Minor Capital and Emergent Needs

Below are examples of minor Safety Rest Area projects to be completed by June 2007. Generally, these projects are less than $50,000 in value and are performed by WSDOT crews.

- *I-90 Sprague Lake Safety Rest Area – Minor Sidewalk repairs*
- *SR-2 Nason Creek Safety Rest Area – Minor Sidewalk repairs*
- *Statewide Well Head improvements – Minor Water System Repairs*

Rest Areas Improvement Program

Investments in new Safety Rest Area facilities are always made with a view toward the needs of drivers for a break that will protect against inattention or drowsiness on the road - major risk factors in highway accidents. Ideally, WSDOT shares the planning and costs of new Safety Rest Area facilities with local communities. This is an update on the three new Safety Rest Areas first discussed in the March 31st, 2005 *Gray Notebook* (p. 41).

Safety Rest Area Preservation Program Goals

Program Elements	Priority	Goal for Spending
Utility (Sewer, Water, Electrical) Systems		**40%**
Replace, refurbish, and rehabilitate systems with failures and to meet regulatory requirements.	A	
Replace, refurbish, and rehabilitate systems to eliminate potential failures, extend service life, and minimize future maintenance and operational costs.	B	
Buildings		**50%**
Replace, refurbish, and rehabilitate building components to meet regulatory requirements.	A	
Refurbish/rehabilitate building components to extend the service life based on renovation, maintenance, and operational costs, and replacements value.	B	
Replace existing buildings that have reached their economic service life based on renovation, maintenance, and operation costs, and replacement value.	C	
Site		**10%**
Replace, refurbish, and rehabilitate site components and systems (parking, lighting, landscape, and sidewalk) to meet regulatory requirements	A	
Refurbish/rehabilitate site to meet peak demand, improve site security and safety, and minimize future maintenance and operational costs.	B	

Data Source: WSDOT Maintenance & Operations Division, Facilities Office

U.S. 2 Iron Goat Interpretive Site – New Facility

This project was presented in the 2006 *Gray Notebook* and is now completed and operational. This facility provides rest rooms, access to trails, and interpretative information at this important historical site. This new facility was funded with a National Scenic Byway Grant, state funds, a private donation, and volunteer labor.

Asset Management: Safety Rest Areas Annual Update

Safety Rest Area Preservation and Improvements

U.S. 101 NE Peninsula Safety Rest Area – New Facility
A construction bid for a new Safety Rest Area facility near the City of Sequim is anticipated to be advertised in Fall 2008, so that the new facility can be open to the public in Spring 2010. This project will be designed in the 2007-09 biennium and is funded with federal and state funds. The facility will provide year-round access to public restrooms, picnic and pet areas, free coffee, a recreational vehicle dump station, and interpretation of historical and natural features.

SR 7 Elbe Safety Rest Area – New Facility
A site for the new Safety Rest Area facility is anticipated to be purchased in the 2007-09 biennium. When complete, this rest area will provide year-round access to public restrooms, picnic and pet areas, and interpretation of historical and natural features.

Commercial Truck Parking Study Results in WSDOT Applying for Grant

WSDOT conducted a Commercial Truck Parking Study in 2005 (see the March 31, 2006 p. 51) to identify locations on I-90, 1-5 and 1-82. Five safety rest areas have truck parking demand that consistently exceed capacity:

- I-5 NB - Scatter Creek
- I-5 SB - Maytown
- I-5 NB - Gee Creek
- I-5 NB - Smokey Point
- I-90 WB - Sprague Lake

Truck parking shortages contribute to driver fatigue and illegal parking on highway ramps and along shoulders both of which can cause severe accidents. WSDOT is developing projects to add truck parking at the five safety rest areas. A proposal to add 28 spaces at the northbound Smoky Point Rest Areas site on I-5 together with a camera system to monitor parking use

Washington State Safety Rest Areas 101

WSDOT's safety rest area program began in 1967, and most of Washington's safety rest areas were built under a federal program in the late 1960's. Currently, WSDOT owns, operates, and maintains 42 safety rest areas (27 on interstate highways and 15 on non-interstate highways). Safety rest area facilities encompass 555.5 acres, 83 buildings, 29 on-site public drinking water systems, 36 on-site sewage treatment/pretreatment systems, and 19 recreational vehicle dump stations. All facilities are ADA accessible and have permanent restroom buildings, separate truck/RV and passenger car parking, and picnic areas.

For more information on inattentive and sleepy drivers, visit www.wsdot.wa.gov/planning/wtp/datalibrary/Safety/InattentiveandSleepy.htm

Trucks, Goods, and Freight: Annual Update

Viable truck, goods, and freight performance data is very limited due to its proprietary nature. This issue is a national challenge. Transportation agencies throughout the United States are beginning to respond to the need for performance measures, and develop data collection methods. The purpose of freight performance measures is to help WSDOT understand whether or not public investments and strategies deliver the level of performance desired by the state's freight customers.

The following data serves as indicators for freight movement while WSDOT continues to develop specific performance measures.

This Freight Update Includes:

Topic	Page
Commercial Trucking	60
Waterborne Freight	61
Freight Rail	62
Air Cargo	62
Freight Customer Surveys	63

Freight Continues to Grow in Washington State

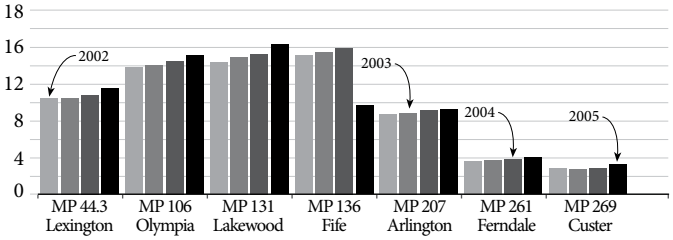
Washington businesses and households depend on the reliable movement of goods using trucks, ships, rail, and air transportation. Across all modes and systems, freight tonnage is growing, which reflects positive economic growth and development for Washington. Based on the most recent data released by FHWA, in 2002, over 477 million tons of freight worth more than $371 billion was moved to, from and within Washington State using all modes. By 2035, this is expected to increase to 975 million tons of freight worth over $1,239 billion. Trucks carried most of the freight, both by tonnage (59%) and value (64%), in 2002.

Truck Volume Increase On Washington Highways

Truck volumes in Washington show steady increases. The charts to the right show average daily truck traffic at specific mileposts on I-5, I-90, SR 18, and U.S. 97 indicating volume increases. Collecting data on truck volumes by milepost creates a unique profile, because it shows those locations with the greatest activity, as well as growth trends.

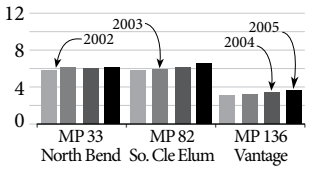
At all locations where truck data is collected, there was growth in the number of trucks per day. On I-5 near Olympia, annual daily truck traffic increased 2% from 14,518 trucks per day in 2004 to 14,755 trucks per day in 2005. On U.S. 97 near Wenatchee, the number of trucks increased 8%, from 896 trucks per day in 2004 to 968 trucks per day in 2005. On SR 18 near Auburn, the number of trucks increased 9% from about 6,146 trucks per day in 2004 to 6,697 trucks per day in 2005.

I 5 Average Daily Number of Trucks by Milepost* 2002-2005
(South to North)
Numbers in Thousands



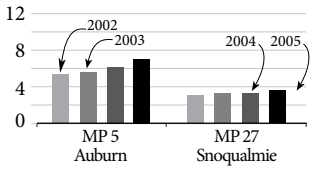
Data Source: WSDOT Transportation Data Office
*Based on where trend data is available

I 90 Average Daily Number of Trucks by Milepost 2002-2005
(East to West)
Numbers in Thousands



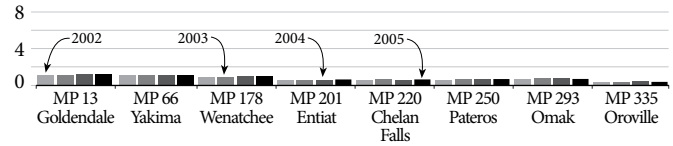
Data Source: WSDOT Transportation Data Office

SR 18 Average Daily Number of Trucks by Milepost 2002-2005
(South to North)
Numbers in Thousands



Data Source: WSDOT Transportation Data Office

U.S. 97 Average Daily Number of Trucks by Milepost 2002-2005
(South to North)
Numbers in Thousands



Data Source: WSDOT Transportation Data Office

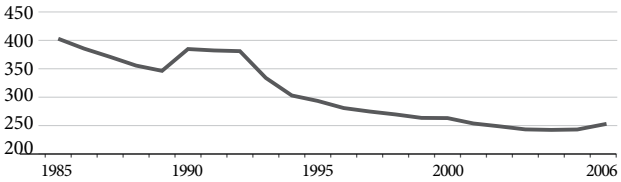
Commercial Trucks Registered in Washington State

Commercial trucks operating in Washington State must register and pay state taxes. The number of commercial trucks registered in Washington State has increased 1% in the last year, from

Trucks, Goods, and Freight: Annual Update

243,124 in 2005 to 245,177 in 2006. The number of trucks registered for commercial use in Washington has generally decreased from 402,875 in 1985. This decrease leveled off in 2001.

Commercial Trucks Registered in Washington
All Weight Classes: (Years 1985 to 2006)
Vehicles in Thousands

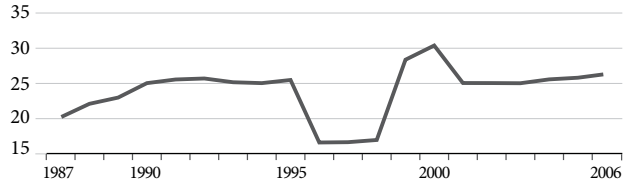


Data Source: WSDOT Economic Analysis

Trucks in interstate commerce must also register and pay state taxes based on weight and travel mileage. Between 2005 and 2006, there was an increase of 185 trucks registered in Washington, from 25,812 to 25,997. The number of interstate trucks prorated to Washington shows an increase of 29% from 1987 to 2006, increasing from an estimated 20,197 trucks to 25,997 in the 19 year period.

The number of trucks registered for use provides a limited view of trucking activity in the state. It does not reflect changes in the use and miles traveled for each individual truck.

Trucks in Interstate Use Prorated to Washington State
All Weight Classes (Years 1987 to 2006)
Vehicles in Thousands

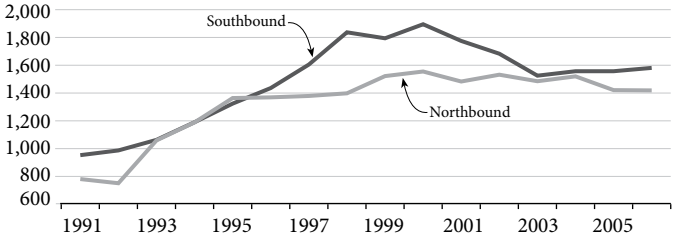


Data Source: WSDOT Economic Analysis

Continued Recovery of Trucks Crossing at Border

At Western Washington border crossings, which handle over 84% of all cross border trade along Washington's northern border, total truck traffic has doubled since 1990. (See the graph below.) Complete data is available for northbound and southbound trucks at these three border crossings. The number of trucks crossing at these points increased slightly (1%) from a combined average of 2978 south and northbound trucks in 2005 to an average of 2999 trucks in 2006, and volumes are gradually returning to pre-2001 growth patterns.

Western Washington Truck Border Traffic
(Blaine, Lynden and Sumas Crossings)
Average Daily Number of Trucks



Data Source: U.S. Customs and Border Protection and Statistics Canada. Data compiled by Whatcom Council of Governments (2006)

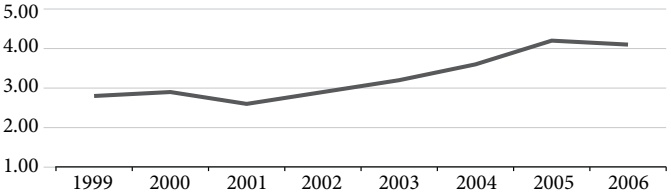
Freight Through Washington's Seaports Remains Steady

Seaport activity in Washington saw a slight decrease from 2005 to 2006; however, the overall trend is an increase in waterborne trade, with 2006 remaining second only to 2005 in volume of containers handled.

Port activity continues to be especially strong for international goods imported in containers from the Pacific Rim. Most of these containers move east by rail to large consumer markets in the Midwest and US East Coast.

The Central Puget Sound seaports; the Port of Seattle and Port of Tacoma, serve as gateways for imports, handling 99.9% of the state's international container traffic. These two ports combined handled a total of 4.1 million TEU's (twenty-foot equivalent units: *international and domestic*) in 2006. Volumes were 2% lower in 2006 than in 2005, but the 9% average annual growth rate from 2002 to 2006 confirms an ongoing growth trend. The volume of international containers handled at Washington's seaports is projected to triple from 2002 to 2025. At current growth rates, the state may reach this volume even sooner.

Waterborne Container Traffic
Port of Seattle Harbor and Port of Tacoma
Number of Containers TEU's (Twenty-Foot Equivalent Units) in Millions (Full and Empty, International and Domestic)



Data Source: U.S. Waterborne Foreign Container Trade by U.S. Custom Ports, 1997-2005. U.S. Department of Transportation Maritime Administration (MARAD)

Trucks, Goods, and Freight: Annual Update

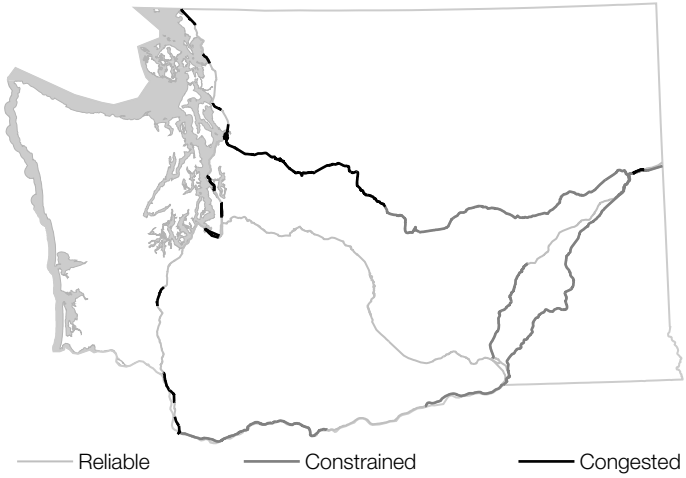
Freight Rail Is Projected to Continue Growing

Highlights from the Washington Rail Capacity Study show that rail traffic continues to grow across the state. In 2004, Washington's freight railroads moved more than 81 million domestic tons of freight, up from 63 million in 1996. Washington's rail freight traffic consisted of 680,202 carloads and 1,500,880 intermodal units (trailers and containers) in 2004. Farm products are the most significant commodity handled on Washington's rail network from a tonnage standpoint, amounting to almost 24 million short tons in 2004. More than 90 percent of this traffic terminated at Washington ports for export to overseas destinations.

Washington's freight railroads are projected to continue growing over the next 20 years. Between 2004 and 2025, overall traffic is expected to increase at a 2.2% annual compound rate for tonnage, from 81.5 million in 2004 to 129.5 million in 2025. The strongest growth is expected to take place in outbound intermodal volumes, driven by Asian imports, these will average 4.8% growth annually.

As shown in the map below, Washington State's mainline rail system is already reaching capacity limits. The map below compares the average number of trains operated on each line to the practical capacity of the line.

Washington State Rail Capacity



Data Source: Washington State Transportation Commission, *Washington State Rail Capacity and System Needs Study*

Study of Rail Capacity in Washington State Completed

During 2006, the Washington State Transportation Commission in cooperation with the Washington State Department of Transportation produced the Washington State Rail Capacity & System Needs Study. This important document will have an impact on rail investment methodology within the state for many years. It has also enabled the state to gain a greater understanding of past traffic flow patterns and future forecast and projects. Of special significance are details regarding the changing face of the rail transportation industry and how we may meet the needs of the state going forward.

The Washington Rail Capacity and System Needs Study was requested by the Washington State Legislature to:

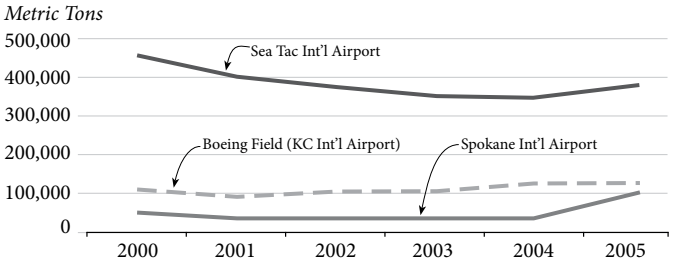
- Assess rail needs in the State;62
- Determine the State's interest in the rail system;
- Develop policies to govern the State's participation in the rail system; and
- Develop a plan for managing the rail lines, railcars, and service rights owned by the State.

More information and a copy of the report can be found online at http://www.wstc.wa.gov/Rail/default.htm.

Slow Recovery of Air Cargo Volumes Continues

In 2005, air cargo tonnage handled at Washington airports totaled 601,435 annual tons. Between 2004 and 2005, air cargo tonnage increased 18% percent from 508,000 tons to 601,435 tons, marking the second consecutive year of growth in air cargo since 1999. The majority of air cargo tonnage is handled at a select few airports in Washington State. About 83% of all air cargo tonnage is handled between the Seattle-Tacoma International Airport and the King County/Boeing Field International Airport. Spokane International Airport, the third largest airport for air cargo tonnage, handled 16% of air cargo tonnage in 2005.

Air Cargo Volumes at Primary Air Cargo Airports in Washington



Data Source: *Regional Air Cargo Strategy*. Puget Sound Regional Council.

Trucks, Goods, and Freight: Annual Update

Nickel, TPA, and Other Projects With Freight Benefits

The 2005 Transportation Partnership Account (TPA) contained several projects with specific freight benefits. In addition to general TPA projects with indirect freight benefits, the Legislature provided $541.1 million for 35 projects with specific benefits for freight mobility and economics. The Legislature also created the Freight Mobility Account, funded from various licenses, permits and fees, to specifically fund projects with benefits. For the 2005-07 biennium, $12.0 million was provided to this account.

The 2003 Transportation Funding Package (Nickel Fund) also contains projects that are considered to have freight benefits because they are in an area that has a high volume of truck traffic, are near a port or international border, or make it easier for large or heavy trucks to maneuver more safely and efficiently.

For lists of specific Nickel and TPA freight-related projects for trucks, rail or ferries, please see WSDOT Freight Programs at www.wsdot.wa.gov/freight/default.htm

WSDOT Freight Survey of High-Volume Shippers and Carriers: Supply Chain Requirements and Performance 2004 and 2007

In January 2007, WSDOT conducted a statewide survey to understand how well the state transportation system is working for companies that rely heavily on shipping and/or receiving goods via truck, rail, sea, or air. A total of 450 randomly selected businesses were surveyed. A range of different industries were selected, all of which are directly or indirectly involved in making or receiving regular shipments of freight using the state transportation system. This survey was first conducted in 2004, and the addition of 2007 data provides the first set of trend information.

The following preliminary trend information is available from the surveys. Industry segments are only included if they can be reliably compared to the 2004 survey.

Manufacturers and agriculture companies were asked to estimate what percentage of their cost of goods sold (COGS) constituted both their transportation and their total logistics cost. The two charts below show these shares for 2004 and 2007. Higher costs in general and unpredictability in shipping can impact profits, create management problems, and jeopardize the future sustainability of the company and related jobs. Trends showing an increase in the percent of COGS represented by total logistics and transportation costs indicates rising costs and lower performance of the freight system.

For all segments, the industry average total logistics cost as a percent of COGS increased from 2004 to 2007. The lowest increase appears to have been for manufacturers in Central and South Puget Sound. The industry average total transportation cost as a percent of COGS increased from 2004 to 2007 for all segments except for manufacturers in Eastside/ Central Puget Sound (13% decrease). The most significant increase appears to have been for manufacturers in Spokane (100% increase). The highest logistics and transportation cost as a percent of COGS in 2007 appears to be incurred by agriculture firms in Southeast Washington (24% and 14% of COGS) and manufacturers in Northwest Washington (22% and 17% of COGS).

Industry Average Percent of Cost of Goods for Total Logistics Cost

Segment	2004	2007	% Change
Southeast Washington Agriculture	12.33%	23.60%	91%
Spokane Manufacturers	11.24%	20.00%	78%
Southwest Washington/ Vancouver Manufacturers	12.68%	20.90%	65%
Eastside/Central Puget Sound Manufacturers	11.72%	11.87%	1%
South Puget Sound Manufacturers	15.96%	18.00%	13%
Northwest Washington Manufacturers	11.85%	22.20%	87%

Data Source: Hebert Research, Inc.

Industry Average Percent of Cost of Goods for Transportation Costs

Segment	2004	2007	% Change
Southeast Washington Agriculture	8.36%	14.40%	72%
Spokane Manufacturers	6.40%	12.80%	100%
Southwest Washington/ Vancouver Manufacturers	11.89%	13.50%	14%
Eastside/Central Puget Sound Manufacturers	8.48%	7.40%	-13%
South Puget Sound Manufacturers	14.12%	14.20%	1%
Northwest Washington Manufacturers	8.92%	16.60%	86%

Data Source: Hebert Research, Inc.

Trucks, Goods, and Freight: Annual Update

Company Satisfaction Ratings

Companies were also asked how satisfied they were with the current performance of the freight system. The chart above shows the mean industry satisfaction ratings (ranging from 0 the at lowest to 10 at the highest) for 2004 and 2007. On average, the satisfaction of companies with their current level of shipping/freight performance was generally moderate to high (ranging from 6.75 to 8.79 in 2007). Satisfaction ratings were lowest for agricultural firms in central and southeast Washington, and highest for manufacturers in Spokane and southwest Washington. In general, average satisfaction increased from 2004 to 2007 for all segments except agricultural firms in central and southeast Washington, and manufacturers in south Puget Sound.

Additional analysis and confirmation of these initial findings will be available by the end of June 2007 on the report's website at http://www.wsdot.wa.gov/freight.

Mean Industry Satisfaction Ratings: Current Freight System Performance
(10= Highest Satisfaction; 0= Lowest Satisfaction)

Segment	2004	2007	% Change
Southeast Washington Agriculture	7.43	7.05	-5%
Central Washington Agriculture	7.72	6.75	-13%
Spokane Manufacturers	8.33	8.79	6%
Spokane Trucking	7.38	8.06	9%
Southwest Washington/ Vancouver Manufacturers	8.23	8.66	5%
Southwest Washington/ Vancouver Trucking	7.43	8.47	14%
Eastside/Central Puget Sound Manufacturers	7.73	7.77	1%
South Puget Sound Manufacturers	7.58	7.11	-6%
Puget Sound Trucking	6.89	7.27	6%
Northwest Washington Manufacturers	7.94	8.29	4%

Data Source: Hebert Research, Inc.

Aviation: Annual Update

Flight provides a critical link between the local, state and national transportation systems. With 139 public-use airports, the state's aviation system efficiently connects people to goods and services across municipal, state and international boundaries. WSDOT is responsible for preserving the aviation system through airport aid grants, land-use planning, air search and rescue and maintaining 16 backcountry emergency airports. The following key aviation program components are included in this annual update:

- Airport Pavement Management System
- Pavement Condition Rating
- Local Airport Aid Grant Program
- Aircraft Registrations
- Airport Land Use Compatibility Assistance

Airport Pavement Management System

To monitor and manage pavement conditions, WSDOT maintains a statewide airport pavement management system (APMS) which assesses the relative condition of pavements for selected Washington airports in the Washington State Airport System Plan and the Federal Aviation Administration's (FAA) National Plan of Integrated Airport Systems. The APMS is a tool to provide Washington, airports, and the FAA with pavement and analytic information to identify pavement-related needs, to optimize the selection of projects and treatments over a multi-year period, and to evaluate long-term impacts of decisions made regarding the Washington airport pavement infrastructure.

23% of Washington's Airport Pavement Infrastructure is in Despair

WSDOT recently completed a system-wide study of pavement to assess the existing condition of runways, taxiways and aprons. Ninety-Six of Washington's 139 public-use airports were included in the analysis. The 96 airports selected, comprising of 113 million square feet, are paved, public use airports located across the state. Some privately owned public use airports and airports that were not paved did not participate in the study. Also excluded were Sea-Tac, Tri-Cities, Spokane and Bellingham airports; which conduct their own pavement studies. The study also estimated funding needs to maintain the system at an acceptable level.

As of 2005, 23% of Washington State's 113 million square feet of pavement infrastructure had deteriorated to a point where costly rehabilitation or even reconstruction was needed (see table to the right). The usable life of the remaining pavement can be prolonged with preventive maintenance actions such as crack sealing, joint sealing, and surface treatments. The cutoff level between a pavement that can be sustained through maintenance and one that will need major rehabilitation varies depending on the type of distress present and the rate of deterioration. However, in general, pavements will require major rehabilitation when they reach between a 60 to 70 Pavement Condition Index (PCI) rating.. The table below presents pavements condition ratings as of 2005.

WSDOT Addresses Future State Aviation Needs

Currently WSDOT is conducting two studies addressing state aviation needs and priorities: the Long-Term Air Transportation Study (LATS) and WSDOT Managed Airports (WMA) System Evaluation and Strategic Plan.

LATS is a three phase study mandated by the Legislature to determine what WSDOT has, what is needed, and how needs are met regarding statewide aviation capacity. Phase I – an inventory of existing statewide aviation facilities and services – was completed in September 2006. Phase II involves long-range activity forecasts, an air cargo assessment, commercial service market analysis, and a high-speed passenger rail evaluation. Phase II findings will be released July 1, 2007. LATS will conclude in Phase III, when a ten member, Governor-appointed planning council is formed to make recommendations on how best to meet statewide aviation capacity needs. Final recommendations from the planning council are due in July 2009.

The WMA study is designed to examine the Aviation Department's role in operating the 16 backcountry airports, as well as the role each airport serves in the statewide aviation system. The WMA will help WSDOT understand the comparative benefit of investing in these airports versus others in the statewide system. The results of the studies will be reported future aviation updates.

Airport Pavement Condition Rating[1] by Type

2002-2005

Average Pavement Condition Index (PCI) Rating (out of 100), Target = 78

Pavement Type	2002	2005	Change
Overall System	73.12	77.39	+4.27
Runways	76.09	80.22	+4.13
Taxiways	72.34	77.17	+4.83
Aprons	71.07	74.58	+3.51

Data Source: WSDOT Aviation

[1]Updated on a three year cycle

Aviation:
Annual Update

The rating analysis is completed on a three year cycle. An analysis of pavement conditions revealed a total need of over $388 million through 2012. Of that, almost $194 million is for non-primary airports, which are airports with 10,000 or fewer passenger boardings per year. If current federal and state funding levels for non-primary airports remain constant, approximately $31.5 million will be invested in the non-primary pavement system through 2012. This leaves a backlog of almost $163 million in pavement projects.

Like the roof of a house, it is more cost effective to keep pavement in good condition rather than allowing it to deteriorate to the point where not only the top layer, but also the underlying structure must be repaired or replaced.

Airport Pavement Improvement Projects

Since 2002 WSDOT has made pavement maintenance a priority by dedicating efforts toward educating airport sponsors and decision makers in planning for future paving needs. WSDOT targets 65% of its funds through the Local Airport Aid Grant Program to pavement maintenance and rehabilitation projects. In 2006 WSDOT completed nine pavement projects (see the table below).

Pavement preservation and improvements will continue to be a priority in the Local Airport Aid Grant Program, airport planning, and education of airport sponsors. The table on the bottom of this page shows pavement projects slated for the 2007 construction season funded in part with WSDOT Local Airport Aid Grants.

2006 Completed Airport Pavement Projects

WSDOT's Local Airport Aid Grant Program 2005–07 Biennium

Airport	Project Description	Total Cost[1] *$ In Thousands*	Completion Status
Arlington Municipal Airport: City of Arlington	Runway Fog Seal	96,159	√
Chehalis-Centralia Airport: Chehalis-Centralia Airport Board	Taxilane Construction & Reconstruction	860,585	√
Deer Park Municipal Airport: City of Deer Park	Runway & Taxiways Fog Seal	163,000	√
Lind Airport: Town of Lind	Runway & Apron Reconstruction	330,054	√
Othello Airport: Port of Othello	Taxilane Construction	624,326	√
Pullman-Moscow Regional Airport: City of Pullman	Runway Crack Seal & Fog Seal	380,456	√
Sanderson Field: Port of Shelton	Apron Rehabilitation	426,929	√
Vista Field: Port of Kennewick	Runway Crack Seal & Slurry Seal	190,027	√
Willapa Harbor Airport: Port of Willapa Harbor	Overlay & Widen Taxiway & Connectors	265,000	√

Data Source: WSDOT Aviation
[1]Consists of WSDOT, Local and Federal Funds

2007 Anticipated Airport Pavement Projects

WSDOT's Local Airport Aid Grant Program 2007–09 Biennium

Airport	Project Description	Anticipated Completion
Anacortes Airport: Port of Anacortes	Taxiway, Taxilane & Apron Fog Seal	Dec-2007
Arlington Municipal Airport: City of Arlington	Taxiway & Apron Overlay, Construction & Reconstruction	Dec-2007
Bowers Field: Kittitas County	Taxilane & Apron Rehabilitation & Reconstruction	Dec-2007
Deer Park Municipal Airport: City of Deer Park	Taxilane & Apron Crack Seal	Jun-2007
Ephrata Municipal Airport: Grant County Port District No. 9	Glider Runway Crack Seal	May-2007
Ephrata Municipal Airport: Grant County Port District No. 9	Runway Reconstruction & Taxiway Connector Construction	Oct-2007
Jefferson County International Airport: Port of Port Townsend	Taxilane Construction	Sep-2007
Kelso-Longview Regional Airport: City of Kelso	Taxilane Construction	Sep-2007
Moses Lake Municipal Airport: City of Moses Lake	Runway, Taxiway, Taxilane & Apron Crack Seal	May-2007
Omak Municipal Airport: City of Omak	Taxiway & Apron Crack Seal	Dec-2007
Port of Whitman Business Air Center: Port of Whitman County	Taxiway Reconstruction	Dec-2007

Data Source: WSDOT Aviation

Aviation:
Annual Update

Local Airport Aid Grant Program

Each year WSDOT provides crucial financial assistance to many of the state's 139 public airports through its Local Airport Aid Grant Program. The program is funded by an 11-cent per gallon tax on aviation fuel. Any municipality, port district, or federally recognized tribe that owns an open, public use airport can apply for grants. The maximum amount WSDOT can award to an individual sponsor in a single grant is $250,000. WSDOT requires a local match of at least 5%. Under the Local Airport Aid Grant criteria, requesting airport sponsors must define projects that are specific to pavement, safety, maintenance, security, or planning.

Number of Local Airport Aid Grants Awarded

By Year

	2005	2006	2007[1]
Airports Awarded Grants	21	31	14
Number of Projects	24	39	19

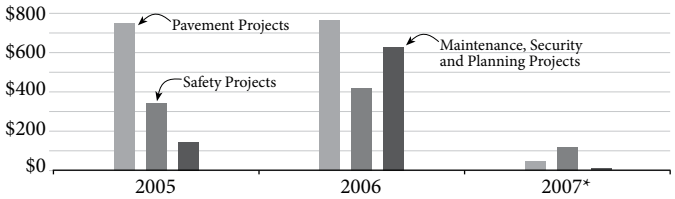
Data Source: WSDOT Aviation Program
[1]To Date (As of March 31, 2007)

In the 2005-07 biennium, WSDOT awarded over $3.2 million in state grants to 66 general aviation airports in Washington for 82 projects. The grants were distributed across the state, with most of the money directed toward airport pavement and safety projects. WSDOT's program also leveraged over $19.4 million in federal funds for general aviation airports that are part of the National Plan of Integrated Airport Systems (NPIAS). See the table below for more detail.

Local Aid Grant Projects by Type

Based on Total Awards for Program

Dollars in Thousands



Data Source: WSDOT Aviation
* Based on awards to date.

2005-2007 Local Airport Aid Grant Program

Type of Projects	Number of Projects	Local Funds	State Airport Aid Funds	Federal Funds	Percent of Total	Project Total
Pavement	27	$1,175,919	$1,565,472	$10,512,265	68010	$13,257,156
Safety	23	$267,913	$870,264	$3,562,809	24.16%	$4,704,471
Maintenance, Planning & Other	28	$328,471	$782,098	$384,712	7.68%	$1,495,281
Runway Safety	4	$240	$10,000	$0	0.06%	$11,320
Total	**82**	**$1,772,543**	**$3,227,834**	**$14,459,786**	**100%**	**$19,468,228**

Data Source: WSDOT Aviation

Aircraft Registration Program

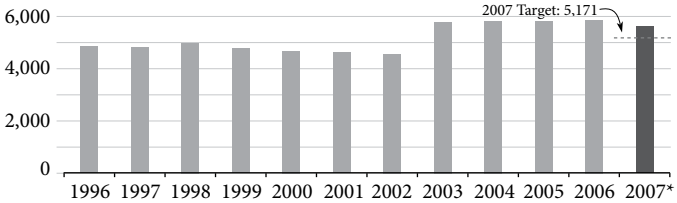
State law requires that all airworthy general aviation aircraft be registered with WSDOT. Registration fees directly support airport preservation, maintenance and improvement programs, as well as search and rescue operations.

More Aircraft Registrations but Increased Exemptions in 2006

WSDOT's goal in 2006 was to increase registration from 2005 by 5%, for a total of 6093 registrations. For 2006, 5,865 aircraft were registered. While there was an increase from 2005, the 5% goal was not met. This was due to the large amount of exemptions WSDOT received in 2006. There were over 800 aircraft filed as exempt. Exempt aircraft are not required to register with the state.

Most all general aviation aircraft that are based or fly regularly in Washington State are required to be registered. Exemptions apply to aircraft that are not airworthy, sold, experimental, or government aircraft. Additionally, aircraft that are flying for interstate or foreign commerce, are under the laws of another country, or are registered in another state, are not required to be registered with WSDOT. A complete list of exemptions is available at: http://www.wsdot.wa.gov/aviation/Registration/Program.htm

Number of Aircraft Registrations 1996 - 2007



Data Source: WSDOT Aviation
*Number reflects registration-collected year to date.

2007 Registration Goal Already Met

When WSDOT began the 2007 aircraft registration year, there were approximately 5,745 active aircraft that needed to be registered. WSDOT determines the number of active aircraft for

registration by taking the total number of aircraft registered the prior year and subtracting aircrafts that have since become exempt (i.e. sold, unairworthy, moved out of state, etc.). It is WSDOT's goal to register at least 90% of active aircraft for 2007. This means WSDOT Aviation has to register at least 5,171 aircraft in 2007 to meet that 90% goal. Currently 5,613 aircraft have been registered to date, therefore the FY 2007 goal has been exceeded.

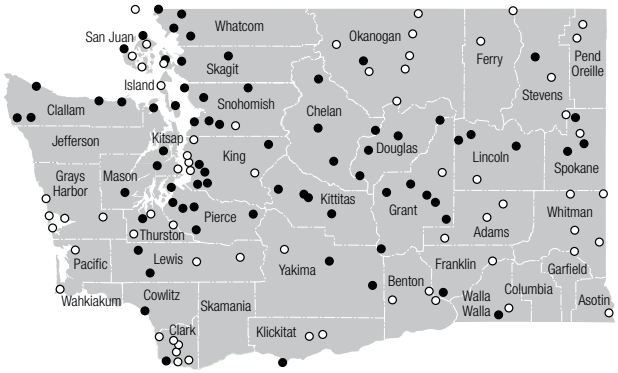
Airport Land Use Compatibility Program

Most Washington airports were originally located in remote areas or areas located several miles from an urban centers. These once remote airports are now experiencing increasing pressure from population growth and the expansion of metropolitan areas. Airport operations generate noise, light, glare, fumes, odors and low-flying aircraft activity within a mile of the runway. Incompatible development is a risk to safety, health, and of increased noise levels. Such situations often breed neighborhood opposition and create conflicts that may ultimately disrupt airport operations, impede airport expansion, and hamper economic development opportunities. In some communities, such situations even lead to airport closures. This disruptive process compromises the ability of the state aviation system to meet future air transportation needs.

In 1996, the Legislature passed amendments to the Growth Management Act (GMA) to require local governments to protect public-use airports as Essential Public Facilities and critical components of the state transportation system. The law requires all towns, cities, and counties to adopt comprehensive plan policies and to implement regulations to discourage incompatible land development adjacent to public use airports. The law also directs WSDOT to provide local communities with assistance to comply with the law.

2006 Airport Land Use Compatibility Program

Public-use airports supported by towns, cities and counties working to adopt and maintain land use protections through comprehensive plan policies and implementing regulations.



● Airport Land Use Compatibility in Progress
○ No Airport Land Use Compatibility Program in Place

The objectives of WSDOT's Airport Land Use Compatibility Program are to follow the 1996 GMA amendments to:

- Preserve transportation infrastructure;
- Promote quality of life;
- Plan for future needs;

These efforts are resulting in proactive land use/protection protection programs for 65 of Washington State's 139 public-use airports. Statewide, 42 towns and cities and 21 counties have adopted, or are currently working with WSDOT to adopt, comprehensive plan policies and development regulations.

Technical Assistance Program Outreach

WSDOT staff provide local communities with assistance in drafting appropriate comprehensive plan goals, policies, and regulations consistent with the requirements of the GMA. Full adoption of comprehensive policies and regulations follows a public process that can take from six months to as much as three years, depending on the jurisdiction.

Assistance includes providing background information and other resources, reviewing working drafts, and providing formal comment. Milestones in the process include the release of a draft (usually for review by the planning commission, city council or county commission, and public comment) followed by adoption of a final document. This effort has resulted in increasing the number and types of milestones reached by the program from 2003 to 2006 (see table below).

For the 2005-07 biennium, accomplishments to date demonstrate the effectiveness of WSDOT's outreach strategy. Through a series of 21 meetings and workshops, staff initiated land use compatibility planning in numerous communities throughout the state. The results are becoming increasingly apparent as 28 communities submitted draft policies and regulations, and 19 adopted final versions between Summer 2005 and Spring 2007.

Airport Land Use Compatibility Technical Assistance Program Milestones

Number of Jurisdictions per Year with Milestones Achieved

	2003	2004	2005	2006
Program Introduction Meeting/Workshop	5	1	2	19
Draft Comprehensive Plan Policies	6	3	3	13
Adopted Comprehensive Plan Policies	5	3	2	8
Draft Development Regulations	3	4	4	8
Adopted Development Regulations	3	4	2	4

Data Source: WSDOT Aviation

Incident Response: Quarterly Update

WSDOT's Incident Response Program consists of several components and services designed to quickly clear traffic incidents and reduce congestion. IR service patrols handle a variety of activities ranging from changing a flat tire to coordinating traffic control and clean-up efforts with other state and local agencies following major incidents such as serious collisions, winter storms, and natural disasters. The WSDOT Incident Response Program works in partnership with the Washington State Patrol, other public safety agencies, and third party incident responders.

Number of Responses and Average Response Time Both Down 9% From Last Quarter

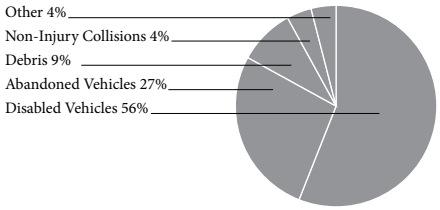
In the first quarter of 2007, the WSDOT Incident Response Team responded to 13,429 traffic incidents. This is a 3% decrease from the same quarter in 2006, and a 9% decease from last quarter (the fourth quarter of 2006). There was also a 9% decrease in average clearance time from the previous quarter, from 17.9 minutes to 16.3 minutes. This is consistent with the quarterly trend of average clearance time taking around 17 minutes. For the quarter, 8,066 (63%) of the total incidents cleared by the incident response team were resolved in under 15 minutes, 4,489 (35%) were resolved in 15 to 90 minutes, and 177 (1.4%) took longer than 90 minutes. These percentages are consistent with longer term trends.

Average Clearance Times For Fatality Collisions Down

This quarter, WSDOT responded to 30 fatality collisions and assisted Washington State Patrol (WSP) with the clearance of those collisions in an average of 220 minutes. This represents two fewer collisions involving fatalities from the previous quarter, but an increase of 12% over last quarter's average fatality clearance time of 197 minutes. Compared to the same quarter in 2006, WSDOT responded to three more fatality incidents (up from 27), and responded more quickly, down to 220 minutes in first quarter 2007 from a year-ago average of 287 minutes clearance time in first quarter 2006.

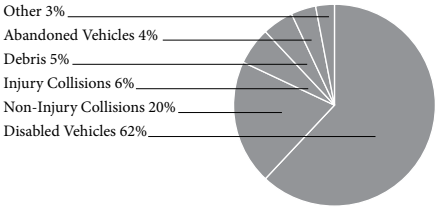
Incidents Lasting Less Than 15 Minutes (8,066)

Injury Collisions were less than 1% (not shown). There were 3 Fires and 2 Hazardous Materials involved incidents in addition to or as a result of above incidents.



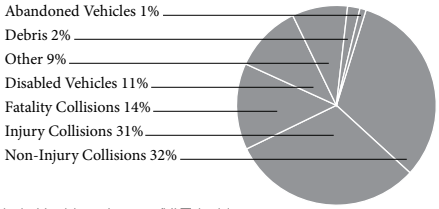
Incidents Lasting 15 to 90 Minutes (4,489)

Fatality collisions were less than 1% (not shown) There were 28 Fires and 13 Hazardous Materials involved incidents in addition to or as a result



Incidents Lasting 90 Minutes and Longer (177)

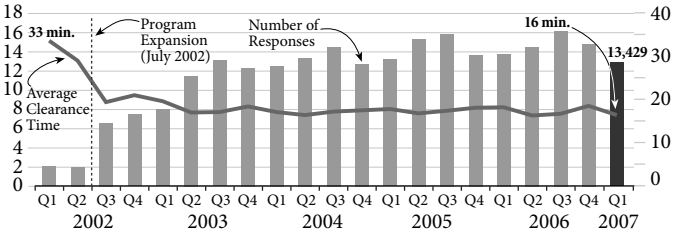
There were 1 Fire and 9 Hazardous Materials involved incidents in addition to or as a result of above incidents.



Note: These pie charts do not include Unable to Locate (ULT) incidents.

Number of Responses and Overall Average Clearance Time

January 2002 - March 2007
Number in Thousands

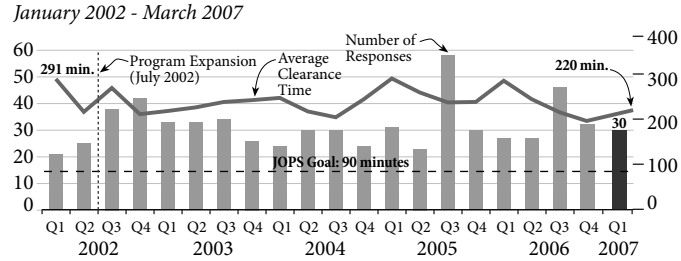


Data Source: WSDOT Incident Response Tracking System.

Note: Program-wide data is available since January 2002. Prior to Q3 of 2003, number of responses by IRT are shown. From Q3-2003, responses by Registered Tow Truck Operators and WSP Cadets have been reported in the total. Average Clearance Time does not include "Unable-to-Locate" responses into calculation.
Clearance Time (for this measure only) is the time between first recordable awareness of an incident and the time WSDOT leaves the scene.

IR Responses to Fatality Collisions

January 2002 - March 2007



Data Source: WSDOT Incident Response Tracking System (WITS).

Incident Response: Quarterly Update

Incidents Lasting 90 Minutes or Longer

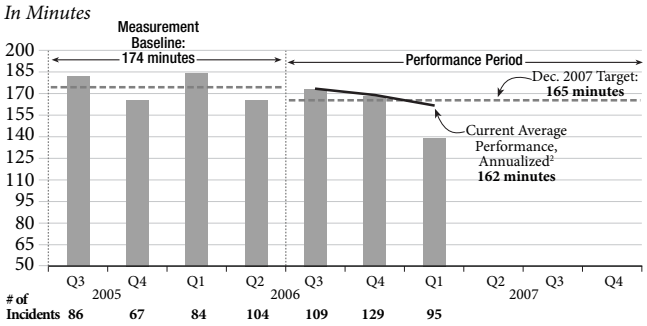
Cabinet Strategic Action Plan Goal for Incident Response

The Incident Response Program places a special emphasis on trying to help reduce the number of incidents that take more than 90 minutes to clear. Through her Cabinet Strategic Action Plan, Governor Gregoire has set a target to reduce the average duration of over-90-minute incidents by 5%. This goal covers nine key highway segments in the Puget Sound region, in Vancouver, and at the Canadian border (see September 30,2006 *Gray Notebook* for more information).

The data used to calculate these performance measures result from a joint WSDOT and WSP effort. The baseline is based on incidents lasting 90 minutes or longer from July 1, 2005 to June 30, 2006. The average duration of incidents lasting over 90 minutes during that period of time was 174 minutes, and the Cabinet Strategic Action Plan goal is to reduce the average duration to 165 minutes for each incident. The data includes all over-90-minute blocking incidents on the nine key segments, regardless of whether an incident resulted from a collision or not, and includes highway ramps and interchanges. Duration of clearance time for this measurement is from the start of the incident until all lanes have been reopened to traffic.

This is an exception to the WSDOT standard, which states that an incident was completed when the last responder had left the scene. Incidents are considered completely cleared when all response vehicles (e.g., patrol cars, incident response trucks) have left the scene of the incident, which occurs after all lanes have been cleared. Due to data limitations, this measure tracks the duration of clearance time between detection of the incident and all lanes clear for traffic.

Cabinet Strategic Plan Goal: Reducing Average Duration (Clearance Time) of Incidents Lasting 90 Minutes or Longer On Nine Key Highway Segments[1]



Source: Washington Department of Transportation Traffic Office and Washington State Patrol
Baseline Data Source: 2005--WSDOT Incident Response Tracking System; 2006--WSP-Computer Aided Dispatch System.
[1]*Selected Key Highway Segments*--I-5 (Oregon to Canadian Border), I-90 to North Bend, I-405, SR 18 to I-90, SR 16 to Purdy, SR 167, SR 520, SR 512, and I-205.
Clearance Time (for this measure only) is the time between first recordable awareness of an incident and all lanes open.
[2]Current Average Performance, annualized is the average quarterly duration of incidents lasting over 90 minutes for the performance tracking period for this measure

In first quarter 2007, the average clearance time for incidents lasting over 90 minute was 139 minutes, which represents a decrease of 16% over any quarter since third quarter 2005. The annualized average duration of these incidents is 162 minutes, a 7.5% reduction over the baseline average to date.

WSDOT and WSP believe that this drop is due to a combination of two main factors: type of incidents occurring on the nine key routes and the fact that no extraordinary (6+ hours) incident occurred during the quarter. The data shows a proportional decrease in percentage of injury collisions since fourth quarter 2006. The number of injury collisions blocking the roadway for incidents 90 minutes or longer by quarter remained fairly consistent in 2006, averaging about 41 injury collisions; however, the actual percent of the quarter totals declined steadily over those quarters. In first quarter 2007, only 33% of the incidents were injury collisions. An analysis of the data finds a high positive correlation (.7) between the quarterly number of total injury collisions and the quarterly number of blocking incidents lasting over 90 minutes.

With the proportional decrease in injury collisions, and the increase in non-injury collisions and disabled vehicles blocking the roadway, it appears that the severity of these incidents is lower, and this is the chief factor accounting for the better clearance times in first quarter 2007. Secondly, the program experienced no extraordinary (6+ hour) incidents during the quarter.

Number of Over-90-Minute Blocking Incidents on Nine Key Corridors by Type

	2005[1]	2006	2007
Injury Collision	33%	39%	35%
Non-Injury Collision	29%	24%	28%
Fatal Collision	16%	10%	7%
Disabled Vehicle Blocking	8%	7%	14%
Traffic Hazard Blocking	5%	3%	7%
Other[2]	10%	17%	9%

Source: WSDOT Traffic Office and WSP
[1]2005 data represents only WSDOT data. This is a smaller subset of the over-90-minute incidents and is not representative of the complete program, which would include incidents that WSP responded to but not WSDOT. WSP data is not available for 2005 because of a changeover to a new database system. Numbers do not add perfectly to 100% due to rounding.
[2]Other includes all other incidents types, such as hit and run collisions, criminal activities, abandoned vehicles, property damage, and fires.

Incident Response: Quarterly Update

Incidents Lasting 90 Minutes or Longer

Extraordinarily Long Incidents Affect the Data

Within the 432 over 90-minute incidents from 2006, a small number were "extraordinary events," lasting six or more hours. These incidents can skew a quarterly average response time dramatically, increasing it anywhere from 7% to 25%.

With these types of incidents, there may be at least three or four other factors which combined to make the incident an "extraordinary event." These "extraordinary events" cannot be easily classified into one specific cause of increased duration in road closure, as each event brings its own unique challenges to the personnel working to clear the scene.

Number of Injury Collisions In Over-90-Minute Blocking Incidents on Nine Key Corridors

Quarter	Total Over-90-Minute Blocking Incidents	Number of Injury Collisions Blocking Over 90 Minutes	Percent of Injury Collisions Blocking Over 90 Minutes
2005 Q3[1]	86	29	34%
2005 Q4[1]	67	21	31%
2006 Q1	84	38	45%
2006 Q2	104	45	43%
2006 Q3	109	42	39%
2006 Q4	129	41	32%
2007 Q1	95	33	35%

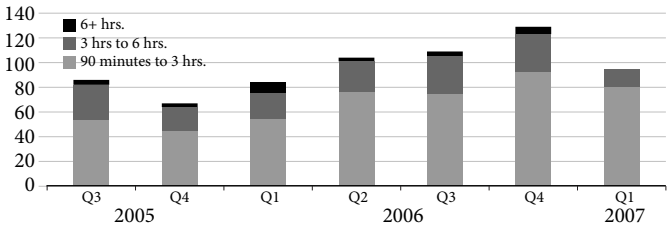
[1]2005 data represents only WSDOT data. This is a smaller subset of the over-90-minute incidents and is not representative of the complete program, which would include incidents that WSP responded to but not WSDOT. WSP data is not available for 2005 because of a changeover to a new database system.
Source: WSDOT Traffic Office and Washington State Patrol

Between third quarter of 2005 and first quarter of 2007 (seven quarters), there were 36 incidents involving road blockage lasting six hours or more. None occurred in first quarter 2007. More than half of the events (61%) involved a commercial motor vehicle, and at least 28% of all events required a Class C Tow, which means specialized equipment was needed to remove a commercial motor vehicle from the roadway. In addition, many of the extraordinary events involve public health and safety issues, such as commercial motor vehicle-related hazardous materials spills (19%), criminal activity such as shooting incidents (19% or more), and damage to WSDOT property such as bridges or safety barriers that needed to be repaired (31% or more).

Strategy to Clear Road Quicker

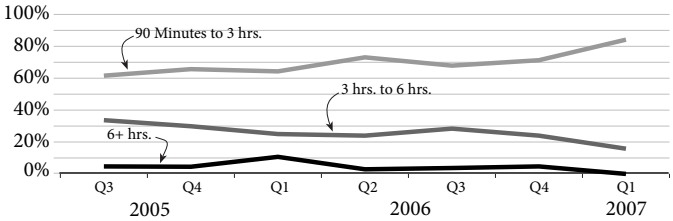
In partnership, WSDOT and WSP recently have initiated two important steps to better achieve the goal of clearing the roadway more efficiently. In eleven counties, the program has come to an agreement with the county coroner or medical examiner that allows fatalities to be cleared more quickly from roads by allowing off site extrication of the deceased. In July 2007, the program will begin a new incentive program to motivate tow truck companies to clear Class C Tows (semis and other heavy trucks) more quickly by offering a $2500 bonus if the heavy truck is cleared within 90 minutes. In the past, tow truck operators have been paid on an hourly basis and did not have the incentive to work quickly or bring the necessary resources to clear the incident quickly. This program will provide incentives for the operators to bring the necessary resources (people, additional trucks, etc.) to respond to the incident quickly and assist in maximizing throughput of people and freight on state highways.

Number of Over 90 Minutes Blocking Incidents by Quarter[1]



[1] 2005 data represents only WSDOT data. This is a smaller subset of the over-90-minute incidents and is not representative of the complete program, which would include incidents that WSP responded to but not WSDOT. WSP data is not available for 2005 because of a changeover to a new database system.
Data Source: WSDOT Traffic Office and Washington State Patrol.

Percentage of Over 90 Minutes Blocking Incidents by Quarter[1]



[1] 2005 data represents only WSDOT data. This is a smaller subset of the over-90-minute incidents and is not representative of the complete program, which would include incidents that WSP responded to but not WSDOT. WSP data is not available for 2005 because of a changeover to a new database system.
Data Source: WSDOT Traffic Office and Washington State Patrol

Washington State Ferries: Quarterly Update

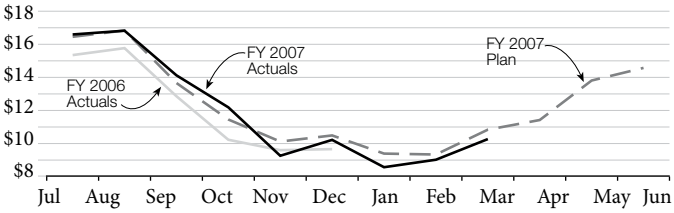
WSDOT's Ferry System is the largest ferry system in the United States, and the third largest in the world. The ferry system is also the second largest transit system in the state carrying over 11 million vehicles and 24 million passengers yearly. It makes 20 different ports of call in Washington State and in Sydney, British Columbia. The ferry system routes act as a marine highway for commercial users, tourists, and daily commuters on Puget Sound. The system, which includes 11 classes of vessels, is one of the safest and most reliable ferry systems in the world.

Farebox Revenue Remains Slightly Below Expectations

Farebox revenue is roughly 1% below planned fare recovery for the 2007 fiscal year. Since July 1, 2006, fare revenue has totaled $107,072,703 (expected fare revenue was estimated to be $108,583,507). WSDOT has taken in 6% more in fares compared to the same quarter last year ($101 million).

Farebox Revenues by Month

Dollars in Millions



Data Source: WSDOT Ferry System.
Note: Actual farebox revenues for December 2006 are revised from the December 31, 2007 *Gray Notebook* to $10,221,524 from $10,073,348.

Farebox Revenue by Month

Planned vs. Actual for Fiscal Year 2007

Month	Planned	Actual
July	$16,453,788	$16,594,370
August	$16,836,219	$16,821,106
September	$13,660,426	$14,124,755
October	$11,454,348	$12,188,396
November	$10,119,707	$9,261,724
December	$10,490,691	$10,221,524
January	$9,392,027	$8,569,079
February	$9,336,900	$9,021,790
March	$10,839,398	$10,269,959
Total	$108,583,507	$107,072,703
Fiscal Year to Date Performance		**$-1,510,804**

Data Source: WSDOT Ferry System.
Note: The current fiscal year begins July 1, 2006 and ends June 30, 2007.

Beginning May 1, 2007, newly approved fare rates will take effect. In addition to the seasonal surcharges to accommodate higher demand during the spring and summer months, a 2.5% fare increase for all routes will take effect. The fare increase is researched by WSDOT and then submitted to the Washington State Transportation Commission for approval before taking affect. WSDOT schedules hearings in communities affected by increases to gather input and make informed decisions when considering any fare increases.

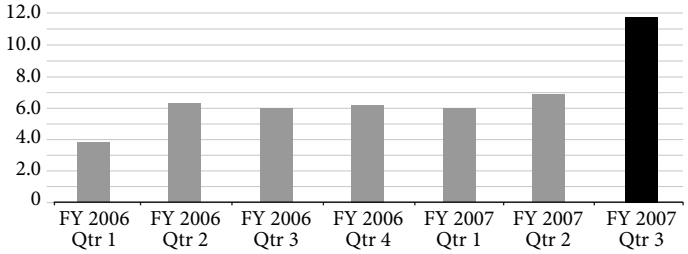
Ridership Data

Ridership along with farebox revenue are integrated into a new electronic fare system (EFS), called *Wave2Go*. Although data for farebox revenues for this quarter were accurate, technical problems with the ridership component of the software prevented WSDOT from presenting accurate ridership figures this reporting period. WSDOT hopes to quickly resolve this problem.

Customer Complaints Increase Due to Ticket Issues

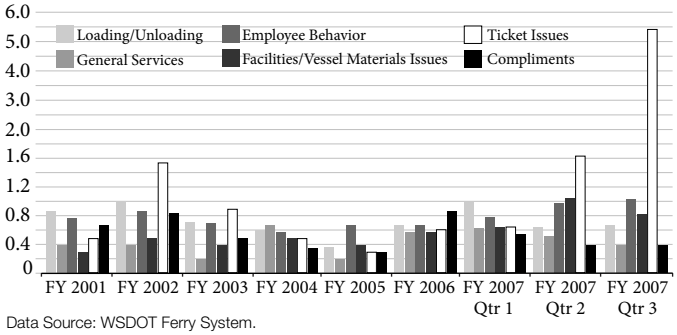
The WSDOT Ferry System monitors complaints, comments and compliments. In the first quarter of 2007, WSDOT's Ferry System completed 38,762 trips and carried over five million riders. The system received 595 complaints averaging to 11.8 complaints per 100,000 customers, which was a 70% increase compared to the 6.9 complaint average from the previous quarter (381 total complaints). WSDOT uses a transportation industry standard 100,000 person sample size in order to make accurate performance comparisons to other transportation providers, both public and private.

Average Number of Complaints per 100,000 Customers



Data Source: WSDOT Ferry System.

Common Complaints Per 100,000 Customers



Data Source: WSDOT Ferry System.

Washington State Ferries: Quarterly Update

Ticketing complaints saw a significant increase during the first quarter of 2007. The rise in the number of ticketing complaints resulted from several factors; a policy decision to eliminate coupon books, as well as a business decision to increase revenue control by requiring all customers to receive a receipt for each toll-booth transaction.

In addition to ticketing issues, WSDOT's Ferry System monitors 25 different categories that address riders' concerns including comments and compliments. Complaints included Employee Behavior (53 complaints), Facility and Vessel Maintenance (42) and Loading & Unloading (34). For complaints regarding Employee Behavior, each occurrence in this category results in a meeting between the employee and his or her supervisor to determine if corrective actions are needed. Customer complaints for Employee Behavior declined slightly from 56 in the fourth quarter of 2006 to 53 in the first quarter of 2007.

WSDOT Ferry System Rolls Out *Wave2Go*

WSDOT Ferry System's new EFS, *Wave2Go,* provides a new level of service to ferry customers in addition to improving operational and performance efficiencies throughout the ferry system. For ferry system riders, *Wave2Go* provides:

- New self-serve ticketing kiosks and online based ticket purchasing;
- Automatic purchasing of new tickets for multiple use passes that have expired or run out of purchased rides;
- Intelligent ticketing operations: *Wave2Go* integrates system-wide activities, so if a route experiences a service disruption, riders who opt to use another route, or drive around will have their tickets honored at an alternate site.

Wave2Go operations began in 2006 with the Pt. Townsend-Keystone and San Juan (domestic) routes, and the program was expanded to Mukilteo – Clinton, Edmonds – Kingston, Seattle – Bainbridge, Seattle – Bremerton and Seattle – Vashon (Passenger Only) routes in the first quarter of 2007. The remaining routes, Fautleroy – Vashon – Southworth and Point Defiance – Tahlequah will have *Wave2Go* systems up and operational as of May 2007.

Wave2Go presents new ticketing options in addition to the existing tollbooths at ferry terminals. Ferry system riders can now print single use or multi-use tickets from online accounts. Discounted fares for multi-use passes are available online, through kiosks and tollbooth point-of-sale locations. Users with multi-use passes are elligible for the *Wave2Go* '*ReValue*' program, which reloads purchased fares when they expire or if a user has run out of rides. By the end of the first quarter, 2,500 customers had selected the '*ReValue*' *Wave2Go* option.

Wave2Go offers technology benefits to riders. Riders are informed at the terminal of how many fares remain on multi-use tickets and those that have opted for the '*ReValue*' program can have additional fares loaded when a ticket has zero rides remaining. Users are informed of how many rides remain every time their ticket is scanned, and have online accounts with options for turning the '*ReValue*' option on or off. For more information, go to the *Wave2Go* web site at http://www.wsdot.wa.gov/ferries/wave2go/

WSDOT Improves Operational Accountability With *Wave2Go*

In addition to providing improved and modern ticketing options for regular and infrequent riders, *Wave2Go* was developed with local leaders in software development to improve accuracy in ridership and farebox revenue accounting practices. For fares, WSDOT gains a database for data replication from online, kiosk and tollbooth purchases, ensuring data related to customers' fare information is up-to-date at every terminal, as well at WSDOT Ferry System headquarters in Seattle. WSDOT plans to use this information (internally, not externally) not only in reporting statistics, but to predict the performance of new products or new ways to purchase trips based on the usage statistics WSDOT can track from the *Wave2Go* EFS software.

WSDOT's implementation of *Wave2Go* will also improve the data collection related to ridership on each of its ferry system routes. Prior to the EFS, WSDOT only recorded the number of vehicles and their drivers for each trip, plus the additional passenger fees collected (representing other riders including walk-ons) for a simple trip total. Now, the software will report statistics for each route that includes the number of single occupant vehicles, vehicles with one or more occupants, as well as walk-ons). In the future, this data will improve the accuracy of quarterly reporting numbers when the EFS software affecting ridership becomes fully operational sometime in the second quarter of 2007. WSDOT will then have a wealth of accurate data to improve future performance in scheduling and sailing options.

Washington State Ferries: Quarterly Update

95% of Trips Departed On-Time This Quarter

WSDOT's Ferry system uses an automated tracking system to record vessel departures from terminals to determine if a trip is on-time; defined as leaving within ten minutes of the scheduled departure time. The automated tracking system counted 36,045 trips departing on-time, for a 95% overall on-time rating. Occasionally, when a vessel leaves a terminal, atmospheric conditions will 'throw off' the accuracy of the lasers and an actual trip will not recorded as departing from the terminal. The tracking system was recently evaluated for accuracy after on-time departures declined in the fourth quarter of 2006, and technical problems were found in the data transfer from the terminal hardware to the software used at WSDOT Ferry System headquarters. Corrective actions have been taken to avoid miscalculations in the future.

The percentage of on-time departures increased to 95% overall, from 93.6% last quarter, and the average delay time remained the same at 2.9 minutes past the ten minute window.

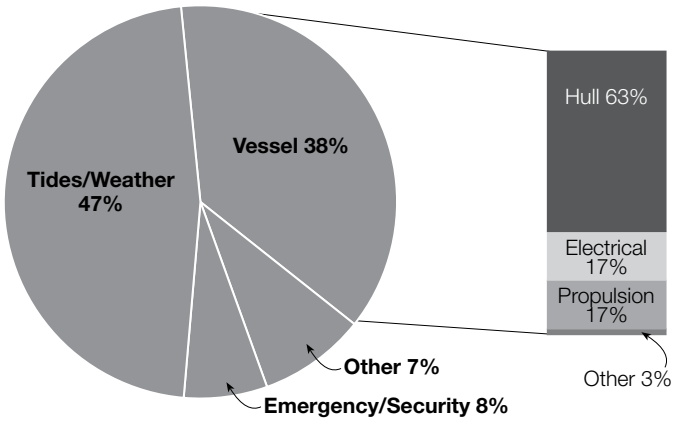
Cancellations Decline, Reliability Improves

For the first quarter of the year, there were 38,951 scheduled trips. Of these trips, 218 were canceled and 29 make-up trips occurred. The resulting total of completed trips was 38,762 (38,951-218+29=38,762 net). WSDOT's reliability index measures system-wide reliability averages. Using this index, the WSDOT ferry system had a cancelation average of 1.94 trips during the course of the year for a commuter who travels 200 days per year and makes 400 trips annually.

For the previous quarter ending December 31, 2006, the average reliability statistic was 2.32 (307 trips canceled) for an improvement this quarter of 29%. For the same quarter one year ago (March 31, 2006), the average reliability statistic was 2.64 (373 trips canceled), a 42% increase in performance.

Reasons for Trip Cancellations

Third Quarter, Fiscal Year 2007



Data Source: WSDOT Ferry System.

Trip Reliability Index

Calculated Average of Missed Trips by Commuters Annually

Fiscal Year	Reliability Rating
Fiscal Year 2002	2.3
Fiscal Year 2003	1.7
Fiscal Year 2004	2.2
Fiscal Year 2005	1.5
Fiscal Year 2006	1.2
Fiscal Year 2007 *First Quarter*	1.0
Fiscal Year 2007 *Second Quarter*	2.3
Fiscal Year 2007 *Third Quarter*	1.9

Data Source: WSDOT Ferry System.

On Time Performance Comparison

	First Quarter, 2006			First Quarter 2007		
Route	Number of Actual Trips[1]	Percentage of Trips 'On-Time'	Average Delay from Scheduled Sailing Time	Number of Actual Trips[1]	Percentage of Trips 'On-Time'	Average Delay from Scheduled Sailing Time
San Juan Domestic	5943	89%	2.8 minutes	6,134	92%	3.0 minutes
International Route	14	100%	0.7 minutes	12	100%	3.3 minutes
Edmonds - Kingston	4500	96%	3.0 minutes	4,622	90%	3.8 minutes
Seattle - Vashon (Passenger Only)	369	99%	2.1 minutes	285	98%	3.0 minutes
Fauntleroy - Vashon - Southworth	9560	93%	3.4 minutes	9,708	96%	2.9 minutes
Keystone - Port Townsend	1717	88%	4.5 minutes	1,634	89%	4.7 minutes
Mukilteo - Clinton	6421	99%	2.0 minutes	6,457	98%	2.4 minutes
Pt. Definance - Tahlequah	2952	98%	2.6 minutes	2,995	96%	3.0 minutes
Seattle-Bainbridge Island	3976	95%	3.5 minutes	4,033	98%	1.6 minutes
Seattle - Bremerton	2498	98%	2.6 minutes	2,030	97%	2.9 minutes
TOTAL	37,950	94%	2.9 minutes	37,910	95%	2.9 minutes

Data Source: WSDOT Ferry System.

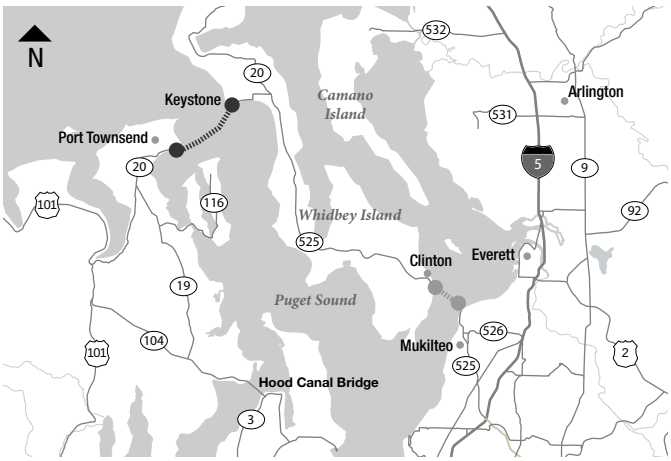
[1]Number of Actual Trips represents trips detected by the Automated Tracking System. It does not count all completed trips during the quarter.

Washington State Ferries: Quarterly Update

Performance Continues to Lag on the Pt. Townsend to Keystone Route

Of the 231 canceled trips, 60% (160 total) were from the Pt. Townsend - Keystone route. This route experienced a decrease in performance compared with one year ago when 23% (or 86 of 373) cancellations occurred on the Pt. Townsend - Keystone route. Admiralty Inlet, the passage between Whidbey Island and the Olympic Peninsula presents challenging operating conditions year round for the ferries that run between Pt. Townsend and Keystone. Reduced visibility due to heavy fog occurs year-round, and tidal conditions are especially strong; a narrow inlet with large volumes of seawater flowing in and out of Puget Sound creates stronger then normal tidal and current conditions in comparison to the remainder of Puget Sound. This quarter, 93 of the 160 cancellations were attributed to weather or tidal conditions. Weather-related cancellations were greater then the total number of cancellations one year ago on this route.

Port Townsend/Keystone Ferry Route



The additional 63 incurred cancellations were attributed to the older Steel Electric Class vessels that service this route. One vessel, *M/V Klickitat* was taken to a dry dock in Seattle's Harbor Island shipyard for repairs, removing the vessel from service for three days. The route had four additional cancellations for miscellaneous reasons. WSDOT is continuing to investigate new means of improving performance on this particular route.

WSDOT Ferry System Still Compares Favorably

Assessing WSDOT Ferry System performance without the Pt. Townsend - Keystone run, only 71 trips for the entire system were canceled out of 37,091 scheduled trips for an average reliability rating of 0.64. Even factoring in the Pt. Townsend-Keystone cancellations and on-time performance rates, WSDOT Ferry System remains a reliable service provider and is comparable to other transit systems in western Washington. Below are examples of other transit systems in western Washington including WSDOT Ferry System and their respective annual trip and on-time performance statistics for 2006.

On-Time Performance of Selected Transportation Providers in Western Washington

Annual Operating Statistics For 2006

Transportation Provider	Completed Trips	On-Time Performance
WSDOT Ferry System	165,352	91.50%[1]
King County Metro Buses	3,549,967	76.40%[2]
Community Transit Buses	469,000[7]	91.0%[3]
Sounder Commuter Rail	3,116	95.60%[4]
Tacoma Link Lite Rail	60,394	99.97%[5]
Sound Transit Express Buses	364,056	94.20%[6]
Average On-Time Performance Rating For Selected Public Transportation Services		**91.53%**

Data Source: WSDOT Urban Planning Office.
[1] WSDOT Ferry System on-time performance is any trip departing within 10 minutes of it's original scheduled sailing time.
[2] King County Metro buses on time performance is defined as any trip, at any point being no more then five minutes late or one minute early during a scheduled trip.
[3] Community Transit buses are on-time if leaving within five minutes of scheduled departure time.
[4] Sounder On-Time Performance is any trip arriving at a terminus within seven minutes of schedule.
[5] Tacoma Link Lite Rail on-time performance is any trip arriving at a terminus more then three minutes after scheduled arrival or one minute after scheduled departure.
[6] Sound Transit Express buses on time performance is any departure within 10 minutes of its original scheduled departure time.
[7] Estimate provided by Community Transit of Snohomish County, May 2007.

Category One Vessel and Terminal Preservations are Ahead of Schedule

For the current biennium, WSDOT planned to replace or refurbish 76 Category One systems and 82 Category Two systems. By the seventh quarter (ending March 31, 2007) of the biennium, 35 Category One systems have been replaced or repaired and 32 Category Two systems have been replaced or repaired. WSDOT is ahead of its biennial schedule for Category One preservations, although Category Two preservations are slightly behind planned outputs for this point in the biennium. Scheduling and space considerations at private repair facilities contributed to fewer completed repairs.

Washington State Ferries: Quarterly Report

Explanation of Key Terms

Life Cycle Rating - A life cycle rating is a percentage calculated by dividing the number of system structures weighted by their costs that are within their life cycle by the total inventory of systems weighted by costs. This measure focuses on program performance. It reflects the favorable impact of the organization's work achieved, offset by the unfavorable impacts of deferred preservation backlogs and on-going deterioration of the infrastructure.

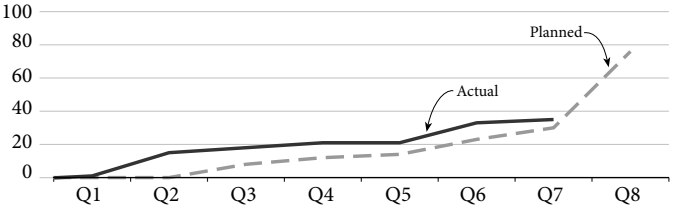
In January 2001, the Legislature's Joint Task Force on Ferries recommended that WSDOT work toward the objective of achieving a life cycle rating for Category One systems between 90% and 100%, and for Category Two systems between 60% and 80%. The Task Force set FY 2011 as the target year for achieving this objective.

Category One systems are those designated by regulatory agencies as "vital" to the protection of people, the environment, and infrastructure. Included are those vessel and terminal systems necessary to start, keep in motion, stop, land, and unload a vessel.

Category Two systems are all other terminal and vessel systems.

Category One Systems

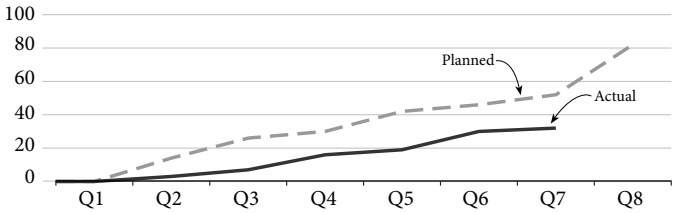
Cumulative Planned Projects vs. Actual Systems/Structures Preserved
Change in Life Cycle Cost Rating
Seventh Quarter, 2005-2007 Biennium



Data Source: WSDOT Ferry System.

Category Two Systems

Cumulative Planned Projects vs. Actual Systems/Structures Preserved
Change in Life Cycle Cost Rating
Seventh Quarter, 2005-2007 Biennium



Data Source: WSDOT Ferry System.

Capital Expenditure Performance

WSDOT makes capital investments in the ferry system through the Washington State Ferry Construction Program. This program preserves existing terminals and builds new vessels and terminals. The resulting infrastructure gives the Ferry System the capacity to deliver responsible and reliable marine transportation services to riders.

Biennium-to-Date Vessel Construction Activities are Under Planned Spending by $6.9 Million

Variances from the plan per vessel in excess of $750,000 include the following: New Auto Ferry Construction ($7.5 million under plan), *M/V Elwha* ($1.8 million under plan), *M/V Hyak* ($1.4 million over plan), and *M/V Rhododendron* ($0.8 million under plan).

The 2007 Legislature passed new rules that allow for the approval of joint bids from different companies on the construction of a new vessel, as well as the authorization to allow design-build contracts when only one firm is involved. These changes were implemented as a response to the current competitive maritime construction market and will help to deliver future projects on-time and on-budget.

Biennium-to-Date Terminal Construction Activities are Under Planned Spending by $10.6 Million.

Variances from the plan per terminal in excess of $750,000 include: Mukilteo ($3.3 million under plan), Seattle ($3.2 million under plan) Anacortes (2.9 million over plan), Southworth ($1.6 million under plan), and Edmonds ($2.9 million over plan).

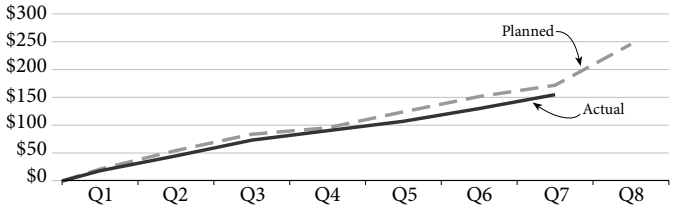
Emergency Repairs Biennium-To-Date

Emergency repair activities are over spending the biennium-to-date plan by $0.4 million. Some repairs to the *M/V Tacoma's* rudder and some repairs to terminals due to seasonal inclement weather contributed to the increases in spending.

Construction Program Expenditures

Washington State Ferry System

Through Seventh Quarter, 2005-2007 Biennium
Cumulative Dollars in Millions
Authorized vs. Actual



Data Source: WSDOT Ferry System.

Rail: Quartely Update

State-Supported Amtrak *Cascades*

Washington is one of 13 states that provides operating funds to Amtrak for intercity passenger rail service. Amtrak *Cascades* train operations span 466-miles of rail through Washington, connecting Eugene, Oregon and Vancouver, BC. Amtrak *Cascades* uses five European-designed Talgo trains for daily operations. Three of the five trains are owned by Washington State, while the other two trains are owned by Amtrak.

Amtrak *Cascades* service is jointly funded by Amtrak, Washington, and Oregon. Amtrak provides operating funds for one daily round trip route, Oregon provides for two routes, and Washington, through WSDOT, provides for four routes.

Ridership Climbs in the First Quarter of 2007

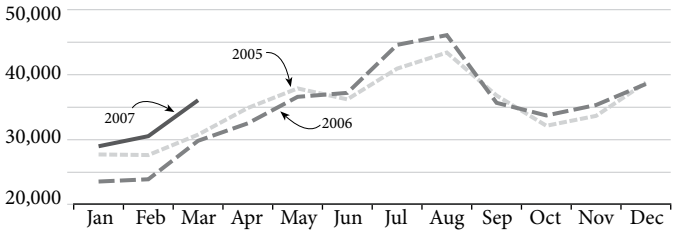
Ridership on state-supported Amtrak *Cascades* trains was 95,626 in the first quarter of 2007. This represents a 23.6% increase over the same period in 2006 and is the highest first quarter ridership in program history. First quarter ridership growth was driven by two key factors: more daily departures offered between Seattle and Portland since the launch of the fourth round trip train between these cities in July 2006; and fewer train cancellations due to weather related events. In the first three months of 2006, 148 trains were cancelled due primarily to bad weather. This year, winter weather led to the cancellation of only six trains.

On-Time Performance Improves Slightly

On-time performance for state-supported Amtrak *Cascades* averaged 52.9% in the first three months of 2007. This compares with 39.5% on-time in the first quarter of 2006. January 2007 saw a continuation of the poor on-time performance trend experienced through most of 2006. February's results improved to 55.8% on-time, and March's average of 67.8 % on-time was the highest monthly average since June 2005. The overall improvement in on-time performance was the result of fewer weather related slowdowns when compared to winter 2006, and changes in some BNSF Railway Company operating practices that reduced conflicts with freight trains along the shared rail corridor.

State Supported Amtrak *Cascades* Monthly Ridership

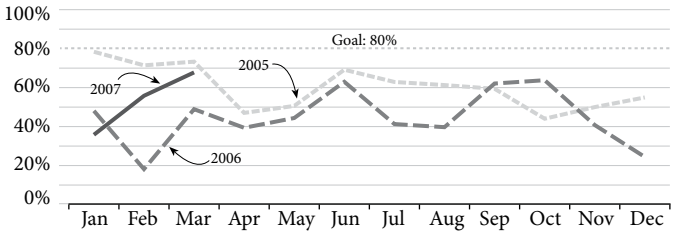
Number of Passengers



Data Source: Amtrak and WSDOT Rail Office.

State Supported Amtrak *Cascades* On-Time Performance

Percent on Time



Data Source: Amtrak and WSDOT Rail Office.

Note: The on-time performance goal for Amtrak Cascades is 80% or better. A train is considered on-time if it arrives at its final destination within 10 minutes or less of the scheduled arrival time.

Amtrak *Cascades* Ridership by Funding Entity

Every day, there are 11 Amtrak *Cascades* trains connecting the major cities along the I-5 corridor. Washington, Oregon, and Amtrak jointly fund the operation of these trains. The table to the right shows how many people are riding on the trains funded by the three partners.

State Supported Amtrak *Cascades* Ridership by Funding Entity

Funding Partner	2006	2007[1]
State of Washington	77,334	95,626
State of Oregon	21,478	25,105
Amtrak	22,037	23,520
Total Ridership	**120,849**	**144,251**

[1]New Seattle-Portland daily round trip added in July 2006. This service is funded by the State of Washington

Note: Washington-funded trains: Amtrak ***Cascades*** 501, 506, 507 between Seattle and Portland, 508, 510, 513, 516, and 517.

Oregon-funded trains: Amtrak ***Cascades*** 500, 504, 507, and 509 between Portland and Eugene.

Amtrak-funded trains: Amtrak ***Cascades*** 500 and 509 between Seattle and Portland.

Data Source: Amtrak and WSDOT Rail Office

Amtrak *Cascades* Monthly Revenue

In this edition, WSDOT is introducing a new measurement for state-supported Amtrak *Cascades*. Revenue per month includes ticket receipts, income from food and beverage sales, and proceeds from mail and express shipments. WSDOT receives Amtrak *Cascades* revenue data 60 days after a given month has passed. This delay is the result of slower processing times for food, beverage, and mail receipts, which typically account for 11% of total revenues.

The time frame used in this measurement is the federal fiscal year (FFY), which starts in October and ends in September coinciding with WSDOTs annual Amtrak operating contract.

To date in FFY 2007, total revenues are up 23.7% when compared to the same period in FFY 2006. This significant revenue increase is primarily due to increased ticket income generated by the new Seattle-Portland round trip that began operating in July 2006.

Overall Passenger Volumes at Washington Train Stations Decline Slightly in 2006

Amtrak trains serve 17 Washington communities each day. When Amtrak sells a ticket, the starting and ending points of the trip for tickets are recorded in a national database. At the end of each year, Amtrak calculates the total volume of passengers by the starting and ending of trips at each station.

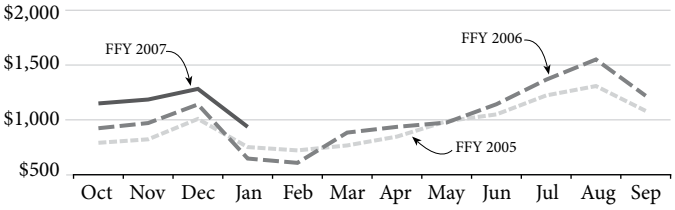
Ten of the 17 Amtrak stations in Washington experienced slight increases in passenger volumes 2006, while seven experienced slight declines. Overall, passenger volumes at Washington's Amtrak stations declined 2.5% last year, primarily because of numerous train cancellations due to weather-related events.

In 1994, Washington State began providing funds to operate additional Amtrak trains between Seattle and Portland. Since that time, passenger volumes have increased significantly, particularly at stations in western Washington.

For an historic overview of ridership and passenger volumes generated by Amtrak *Cascades*, go to http://www.wsdot.wa.gov/rail/Information/Ridership/AmtrakRidership.pdf

State Supported Amtrak *Cascades* Revenue per Month

2005-2007
Dollars in Thousands



*The Federal Fiscal Year (FFY) runs October through September
Data Source: Amtrak and WSDOT Rail Office.

More Service to Canada Coming in 2008

In March 2007, the Province of British Columbia announced a funding agreement with Amtrak and the BNSF Railway Company to build a new railroad siding that will lead to a second daily Amtrak *Cascades* round trip train between Seattle and Vancouver, B.C. The $7 million construction project will allow freight and passenger trains to pass one another and is expected to be completed in 2008. Once completed, Amtrak *Cascades* trains 513 and 516 will begin and end trips in Vancouver, B.C. rather than Bellingham. WSDOT and Amtrak anticipate that more rail service to and from Vancouver, B.C. will lead to higher ridership and improved public mobility along the I-5 corridor. "This is an important step toward improving passenger rail transportation in Washington," said Governor Chris Gregoire. "The additional service between Seattle and Vancouver, B.C. will provide more options for Pacific Northwest travelers, as well as visitors coming to our region for the 2010 Winter Olympics."

A formal announcement of the new service start date will be made later this year.

Pacific Central Station in Vancouver, B.C. Photo courtesy VIA Rail

Washington State Grain Train

The Washington Grain Train is a financially self-sustaining transportation program that supports the state's agricultural community while helping short line railroads maintain a sufficient customer base for long-term financial viability.

In the early 1990s, a national shortage of rail hopper cars made it difficult and expensive for Washington State farmers to get grain to market. To help alleviate this shortage of grain cars, the Washington State Energy Office and WSDOT used federal funds to purchase 29 used grain cars to carry wheat and barley from loading facilities in eastern Washington to export facilities in western Washington.

Today, the Washington State Grain Train has over 2500 cooperative members and owns 94 grain cars (76 are owned by the state, and 18 are owned by the Port of Walla Walla). The Union Pacific Railroad, BNSF Railway Company, and Washington short line railroads operate the cars and carry the grain to market.

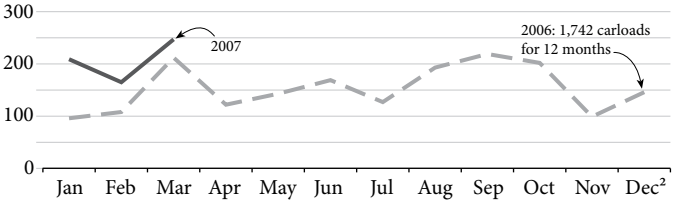
Demand for Grain Train Cars Remains High

WSDOT and the Port of Walla Walla own 89 grain cars that help Washington farmers move grain to market. Twenty-nine cars are positioned on the Columbia Basin Railroad that extends from Moses Lake to Connell. The remaining cars continue to be used in the shuttle service between grain elevators on the PV Hooper line and the Blue Mountain line to a barge facility on the Snake River. Barges then transport the grain to ports in Vancouver, Kalama, and Portland.

Use of the grain cars remains strong. Total carloads for the first quarter of 2007 increased 49 percent over the first quarter of 2006. There were 621 carloads shipped in the first quarter of 2007 compared with 416 in the first quarter of 2006. WSDOT continues to monitor the use of cars and move cars if needed to reflect usage.

Washington Grain Train Carloads

Carloads per month 2007 vs. 2006



Data Source: WSDOT Rail Office.

*In the December 31, 2006 edition of the Grey Notebook, it was incorrectly reported that 353 carloads of grain were shipped in the fourth quarter of 2006. The correct number of carloads shipped was 447, and it is reflected in the graph above.

Highlights of Program Activities

Project Starts, Completions, or Updates

Project Starts

U.S. 2/Index

On January 9 work began east of Index, repairing a 130-foot-long section of U.S. 2 that sank in November. Record-breaking rains caused a landslide that washed out the ground underneath the eastbound lane, causing the road to crack and drop more than seven feet in some places. As of February, crews had 91 soil nails drilled into the hillside. Initially, crews expected to use 66 nails, but found poor soil conditions under U.S. 2. Workers are using additional nails to ensure that the repair work successfully secures the hillside. Once the nailing is finished, a concrete wall will be built to connect the nails and hold in the hillside. Crews are also working on relining the old, damaged drainage pipe that runs under the road to help keep excess water out of the soil.

SR 28/Wenatchee

Work to extend a center turn-lane on Sunset Highway (SR 28) in East Wenatchee began in March. As part of this work, crews are replacing the irrigation canal crossing between 29th and 31st streets. The project is scheduled for completion by the end of July.

U.S. 12/Yakima

WSDOT kicked off the start of the U.S. 12 – 40th Avenue Interchange Improvement project with a groundbreaking event in March. Crews will add a second lane on the U.S. 12 eastbound on-ramp and upgrade traffic signals to improve traffic flow through the intersection. Project work will also re-connect the Yakima Greenway to local bike and pedestrian pathways. The $2.1 million project is scheduled for completion in June.

U.S. 97/Ellensburg

Crews began a project to install centerline rumble strips on over 100 miles of highways in North Central Washington. Rumble strips are grooves cut into the pavement that are intended to jar a driver to attention when they drive onto the centerline. See the June 2004 *Gray Notebook* (pg. 39) and June 2005 *Gray Notebook* (pg. 52) for more information on centerline rumble strips. Highway segments included 44 miles of US 97 from Ellensburg to the Big Y, 29 miles of U.S. 97A from Wenatchee to Chelan, seven miles of SR 243 from Desert Aire to Mattawa, and 24 miles of SR 821 from Ellensburg to Yakima.

SR 262/Grant County

Crews began work March 19 on a project to widen the shoulders of SR 262 near Potholes Reservoir. Approximately 1.5 miles of highway shoulder will be widened for pedestrian safety between Mardon Resort and Potholes State Park. Work is scheduled for completion by mid April.

SR 524/Maltby

In January, crews began work to widen the intersection of SR 524 and SR 9. When this project is finished in the spring of 2008, two miles of SR 9 will be transformed from a two-lane, rural highway into a four-lane, divided urban highway with additional turn lanes at major intersections. This $40.5 million project is funded primarily by the 2003 Nickel Gas Tax.

Project Updates

I-5/41st St Interchange - Widening and Rebuild Ramps (Snohomish)

Crews working for WSDOT opened the new northbound exit to Everett's 41st Street on February 27. The new off-ramp is just to the north of the Broadway exit. The 41st Street Bridge opened to traffic on February 19 – only ten months after crews demolished the old bridge. The I-5/41st Street interchange will be complete by June, 2007. The 41st Street interchange improvements are part of the larger I-5, Everett HOV freeway expansion project.

I-5/S 48th to Pacific Avenue - Add HOV Lanes (Pierce)

Demolition crews began taking down three bridges over I-5 near the Tacoma Dome on February 6. The demolition work is part of WSDOT's I-5 improvement project through downtown Tacoma. In late March, traffic was shifted around the work zone in order to complete demolition above the freeway lanes. The project provides a safer, less congested highway and creates space for future HOV lanes. The bridge demolition work is scheduled to stretch into the summer.

Workers perform a nighttime demolition of the Delin Street bridge over I-5 in downtown Tacoma.

Highlights of Program Activities

SR 4/Stella

Crews returned to SR 4 near Stella in March to stabilize a slope above the highway. Work includes removing loose rock and large, unstable trees at this site (milepost 50.9). Approximately 300 cubic yards, or 30 dump truck loads of debris, will be hauled away. Rock anchors will be installed to help stabilize the rock slope above the highway. This is one of three unstable slopes along SR 4 that have required emergency repair work this winter season. Two other projects have been completed; one near Rosburg in Wahkiakum County and the other just east of this location at milepost 53.

U.S. 12/Yakima

Crews are proceeding with an emergency contract to save the highway from the swollen Naches River that is devouring the foundation of U.S. 12 in Yakima near the 16th Avenue exit and two other locations near Naches. The project will steer the Naches River away from the roadway. Large rocks will be placed in the river and along the roadbed in sharp triangular shapes called "barbs." These barbs extend out into the river to force the current to be deflected away from the road's foundation.

Project Completions

I-205/Vancouver

In late February, WSDOT wrapped up another project to install travel information components, including cameras, data systems, and fiber optic cables on portions of I-5 and I-205 in Clark County. The upgrade to fiber optic cables allows real-time streaming video of traffic cameras. In addition, crews added new traffic cameras in four locations: on I-5 at the 33rd Street Bridge and on I-205 at NE 18th Street, NE 78th Street, and Padden Parkway. New traffic data systems will also help provide "flow map" information on how fast traffic is moving – where traffic is stop and go, heavy, or wide open.

Crews install fiber optic cable to support traffic cameras near Vancouver.

U.S. 12/Aberdeen

Crews repaired and rebuilt the mechanical and electrical systems for the U.S. 12 Heron Street Bridge in late March. The project renovated the bridge's movable swing span over the Wishkah River. The $813,000 project also included seismic retrofitting of the bridge. The Heron Street Bridge was built in 1949 and carries 15,000 vehicles a day.

U.S. 101/Olympia

Crews installed a high-tension, cable guardrail system on U.S. 101 between Black Lake and Crosby boulevards (mileposts 365.42 – 366.91) as a safety enhancement. Work on this $1.5 million project was completed mid-February.

Ferries

Transportation Commission Approved 2.5% Ferry Fare Increase

The Washington State Transportation Commission approved a 2.5 percent fare increase for WSF at a public hearing in Seattle on March 22. The increase goes into effect May 1, 2007. The increase is less than the 4% increase proposed by the Commission in the 2007 Tariff Proposal released in February. The Commission decided on the 2.5% rate increase based upon comments from ferry users, who were quite vocal over the effects rising ferry fares have on their communities. The Commission held 11 public meetings throughout the region and received over 270 comments. Petitions were also received with over 1,100 signatures from San Juan Island residents.

Improved Motorist/Project Information

Website Usage Breaks WSDOT's Previous Record

On January 10, WSDOT pages were viewed 15.2 million times, outpacing the previous record of 14 million page views on November 26, 2006. Recent network improvements performed by the Office of Information Technology allowed more people to access the site simultaneously. Network bandwidth usage was reported well below capacity at 55%.

WSDOT also set a new annual record. In 2006, the site served up 1.5 billion page views; a 35% increase over 2005.

2006 - 1.5 billion page views
2005 - 1.1 billion page views
2004 - 810 million page views
2003 - 677 million page views

Highlights of Program Activities

WSDOT Adds New Traffic Cameras

Motorists in North Central Washington now have three new traffic cameras at their disposal to check on weather and travel conditions before they hit the road. One new camera is located near the entrance to the Loup Loup Ski Area on SR 20 in Okanogan County. A Road Weather Information Station (RWIS) was also installed, providing real-time weather and road conditions. New cameras have also been added in the Wenatchee area for U.S. 97A North and US 2 / US 97 East at the west end of the U.S. 2/97 Odabashian Bridge. One camera provides an eastward view of the bridge deck and roadway to the SR 28 intersection in Douglas County. The second camera provides a northward view of US 97A toward Entiat and Chelan on the west bank of the Columbia River.

In Benton County, the Plymouth Port of Entry traffic camera on I-82 at the Columbia River was added in January. The new camera looks south at the I-82 Umatilla Bridge crossing the Columbia River into Oregon. During March, three more cameras were added: one on U.S. 395 in Colville and two on U.S. 195 in Colfax.

Rail

New Freight Systems Division Created at WSDOT

In late January WSDOT strengthened its organizational capacity to respond to the needs of Washington's rail transportation system by combining passenger and freight rail offices. Barb Ivanov, who has led the Freight Strategy and Policy Division since 2004, will continue as Director of the new Freight Systems Division. Scott Witt, WSDOT multimodal manager, assumes the title of "State Rail and Marine Director" leading the newly combined passenger and freight rail offices. The Public Transportation and Rail Division will now be known as the Public Transportation Division. The Freight Systems Division will serve as a resource on issues of state interests regarding mainline rail with other state agencies supporting agricultural and commodity movement and statewide economic development. Agencies include the Washington State Department of Community Trade and Economic Development; Department of Agriculture; the Freight Mobility Strategic Investment Board; the Transportation Improvement Board; and the County Road Administration Board.

Aviation

WSDOT Aviation Awards $173,900 in Local Airport Aid Grants

In January WSDOT Aviation announced that it will award $173,900 in aid to 14 airports throughout the state. Any municipality or federally recognized tribe, which owns an airport that is open and available for public use, can apply. Under new Airport Aid Grant criteria, requesting airports had to define projects that were specific to pavement, safety, maintenance, security, and planning. This represents the third round of Local Airport Aid grants that WSDOT has awarded during the 2005-2007 biennium. In this latest round, WSDOT awarded grants for 19 projects totaling $394,522. It used $4,842 in state funds to leverage $183,312 in federal grants. The remaining $37,310 came from local matching funds. Sixty-eight percent of grants will go to smaller airports that are ineligible to receive federal funding.

Announcements, Awards and Events

Scenic Byway Project Selected for FHWA Award

The American Association of State Highway and Transportation Officials (AASHTO) has announced that one of Washington's scenic byways has been selected for a national award in its 2007 Scenic Byways Awards: Sharing Success & Honoring Excellence. Washington's Coulee Corridor National Scenic Byway in coordination with WSDOT's Byway Coordinator submitted the winning entry, "Great Washington Birding Trail Map," among 49 other applications. AASHTO's competition seeks to showcase projects of excellence, recognize the byway communities, and share successful models that can be adapted for other byway corridors. The award will be presented during the National Scenic Byways Conference in Baltimore, Maryland, in May.

WSDOT and WSP Launch Online Tool to Crack Down on Metal Theft

Copper wire and other valuable metals are being stolen in plain view along the highway and from construction sites, prompting WSDOT and WSP to launch a new web site encouraging drivers to help catch these thieves. As scrap metal prices increase, thieves are taking more risks, stealing wires and other metals from state facilities. To date, copper wire valued at more than $100,000 has been stolen from state-owned street lights, signals, and storage yards. Thieves also are stealing aluminum and steel. WSDOT is asking the public to keep their eyes and ears open for any suspicious or odd looking work zones. WSDOT crews

and contractors' trucks and equipment are clearly identifiable with logos. Work zones are clearly signed. Drivers should see a sign telling them a work zone is set up ahead. To report a crime in progress, please call 9-1-1. WSDOT, in partnership with WSP, has also established a website: http://www.wsdot.wa.gov/maintenance/material, where citizens can report suspicious activity. The crime does cost taxpayers as WSDOT is self-insured. There is no insurance company to file a claim with, so all losses are replaced using tax dollars.

North Cascades Highway to Open in Mid-May

WSDOT maintenance crews started plowing snow off the North Cascades Highway (SR 20) on Monday, March 26, in an annual effort to open the pass for drivers. WSDOT closed the pass on November 16, 2006 because of dangerous avalanche conditions. During the week of March 5, crews assessed the snow depths while taking a trip up the pass in a Sno-Cat. It was estimated that a five to six week period was needed to clear the greater-than-normal snow depths and open the pass. Crews found snow depths ranging from four feet at the gates to 55 feet deep in avalanche zones. WSDOT is aiming to open the pass by Mid-May this year, which is slightly later than the Mid- to Late-April openings that have averaged over the past 30 years.

WSDOT Kicks Off Updated Bicycle and Pedestrian Plan

WSDOT has started its State Bicycle Facilities and Pedestrian Walkways Plan update. The plan, which is an element of Washington's Multi-modal Transportation Plan, was last updated in 1995. WSDOT staff is conducting a survey of public opinion about needs related to sidewalks, crosswalks, trails, and bike lanes, which will become the basis for the plan. As part of this effort, WSDOT will also propose a strategy for addressing these needs and improving coordination between local governments, regional agencies, and the state.

Comments and feedback can be submitted either through the web site at: http://www.wsdot.wa.gov/Bike/Bike_Plan.htm or by calling the toll free number: 1-866-375-6729. Comments will be taken throughout the update process. All comments will be considered in the final plan, scheduled for completion in spring 2008.

Snowblower helps clear SR 20 in March 2007.

Gray Notebook
Subject Index

Edition Key: **1** = Quarter 1 2001, **2** = Quarter 2 2001, **3** = Quarter 3 2001, **4** = Quarter 4 2001, **5** = Quarter 1 2002, **6** = Quarter 2 2002, **7** = Quarter 3 2002, **8** = Quarter 4 2002, **9** = Quarter 1 2003, **10** = Quarter 2, 2003, **11** = Quarter 3, 2003, **12** = Quarter 4, 2003 **13** = Quarter 1, 2004 **14** = Quarter 2, 2004 **15** = Quarter 3, 2004 **16**= Quarter 4, 2004 **17** = Quarter 1, 2005 **18** = Quarter 2, 2005 **19** = Quarter 3, 2005, **20** = Quarter 4, 2005, **21** = Quarter 1, 2006, **22** = Quarter 2, 2006, **23** = Quarter 3, 2006, **24** = Quarter 4, 2006 **25** = Quarter 1, 2007

All editions can be accessed at *www.wsdot.wa.gov/accountability*

Topic ***Edition***

Aviation

Air Cargo....25
Air Search and Rescue....6, 13, 17
Airport Aid Grant Program: Amount Awarded....6, 13, 17, 21, 25
Airport Land Use Compatibility and Technical Assistance....21,25
Airport Pavement Conditions....17, 21, 25
Airports in Washington....6, 13, 17
Aviation System Planning....17
Fuel: Taxable Gallons....6
Project Delivery....21, 25
Registrations of Pilots, Mechanics and Aircraft....6, 10, 13, 17, 21, 25
Registration Revenue....10, 13, 17
Training of Pilots and Mechanics....6

Benchmarks (RCW 47.01.012)

Administrative Efficiency....9, 14, 18, 22
Bridge Condition Goal....14, 18, 22
Non-Auto Share Commute Trips Goal....14, 18, 22
Pavement Goal....14, 18, 22
Transit Efficiency....9, 14, 18, 22
Safety Goal....14, 18, 22
Vehicle Miles Traveled (VMT) per Capita....9, 14, 18, 22

Bridge Conditions on State Highways

Age of WSDOT Bridges....4
Bridge Ratings (FHWA): Structurally Deficient and Functionally Obsolete....4
Bridge Condition Ratings: State Comparison....8
Bridge Replacements....19, 23
Bridge Structural Condition Ratings....11, 15, 19, 22, 23
Deck Protection Program: Overview....4, 8, 11, 15, 23
Deck Protection Projects: Planned vs. Actual Projects....4, 5, 8, 11, 15, 23
Hood Canal Bridge Update....11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Inspection Program....4, 11, 15, 19, 23
Inventory of WSDOT Bridges....4, 5, 8, 11, 15, 19, 23
Movable Bridge Repair....19
Preservation Program Results....11, 15, 19
Rehabilitation and Replacement Project Schedule....4, 11, 15, 19, 23
Repairs....19, 23
Risk Reduction....19, 23
Scour Mitigation....4, 11, 15, 19, 23
Seismic Retrofit Program: 1990-2020 Status....4, 8, 22, 23
Seismic Retrofit Program: Planned vs. Actual Projects....4, 5, 8, 11, 15, 23
Seismic Retrofit Program: Risk Reduction....19, 23
Seismic Retrofit Program: Top 10 Priority Bridges....4, 8
Steel Bridge Painting: Planned vs. Actual Projects....4, 5, 8, 11, 15
Tacoma Narrows Bridge Update....8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25

Commute Options

Award for the Commute Trip Reduction Program....6, 11
City of Redmond Case Study....19
Commute Mode Share Trends....4, 6, 7, 13
Commuting Trends at CTR Work Sites and Work Sites in General....4, 19, 22, 23
CTR Task Force Report: Biennial Results....4, 13
Cost Effective Strategies....19
Drive Alone....6, 7, 20, 23
Eastgate Park and Ride Expansion....9
Effectiveness of CTR Program (Biennial Results)....4
Employer Participation, Investment, and Benefits....2
Gasoline Consumption Per Capita (Northwest Environment Watch)....7
Grant Programs....20, 23
Opportunities for Commuters....15
Park and Ride Lot Occupancy Rates: Central Puget Sound....4, 14, 23
Park and Ride Lot Occupancy Rates: King County....3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 23
Park and Ride Lot Security....5

Edition Key: **1** = Quarter 1 2001, **2** = Quarter 2 2001, **3** = Quarter 3 2001, **4** = Quarter 4 2001, **5** = Quarter 1 2002, **6** = Quarter 2 2002, **7** = Quarter 3 2002, **8** = Quarter 4 2002, **9** = Quarter 1 2003, **10** = Quarter 2, 2003, **11** = Quarter 3, 2003, **12** = Quarter 4, 2003 **13** = Quarter 1, 2004 **14** = Quarter 2, 2004 **15** = Quarter 3, 2004 **16**= Quarter 4, 2004 **17** = Quarter 1, 2005 **18** = Quarter 2, 2005 **19** = Quarter 3, 2005, **20** = Quarter 4, 2005, **21** = Quarter 1, 2006, **22** = Quarter 2, 2006, **23** = Quarter 3, 2006, **24** = Quarter 4, 2006 **25** = Quarter 1, 2007

All editions can be accessed at *www.wsdot.wa.gov/accountability*

Topic ***Edition***

Park and Ride Lot Puget Sound System 8
Vanpool Investments 15, 23
Vanpool Operation in the Puget Sound Region 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 23
Vanpooling Share of Daily Puget Sound Area VMT 2, 15
Van Share Trends 8, 9, 11, 12, 15

Congestion on State Highways
Accidents on Interstate 405: 2001 and 2002 9
Automated License Plate Recognition Technology 23
Benchmark Policy Goals for Congestion: Analysis 5
Case Studies: Before and After Results 15, 19, 23
Comparisons of Conditions 2002-2003 15
Comparisons of Conditions 2003-2005 23
Congestion Measurement Principles 5, 6, 19, 23
Congestion Monitoring 19,23
Cost of Delay 15,23
Daily Vehicle Hours of Delay per Mile, Sample Commutes Measured
by Delay, Time of Day Distribution of Delay, and Travel Rate Index 2, 5
Distribution of Traffic Between Freeways and Arterials: 1999 to 2003 9
Earlier Congestion Measurement Efforts: 9
Employment in the Puget Sound Region 9
Highway Improvements Have Reduced Congestion 9
HOV Lane Performance 19, 23
Induction Loop Detectors 5
Intelligent Transportation Systems in Washington State 5, 22
Lost Throughput Efficiency 19, 23
Measuring Delay 19, 23
More Work on Recurrent and Non-Recurrent 15
Peak Travel Times for 20 Routes 15
Peak Travel Times: Key Commute Routes 19, 23
Recurrent and Non-Recurrent Congestion 19
Sources of Congestion 15, 23
Traffic Speeds and Volumes on SR 520: 2000 and 2003 9
Traffic Volumes at Seven Locations in March, 2000 to 2003 Average 9
Traffic Volumes on Nine Puget Sound Region Corridors 5
Travel Time Performance 19, 23
Travel Time Reliability 6, 9, 15
Travel Time to Work Comparison: State and County Rankings 5
Travel Times on 11 Puget Sound Region Corridors 5, 9
Travel Times With and Without Incidents 6
Typical Freeway Traffic Volume Trend: 1993 to 2002 9

Construction Program for State Highways
Advertisements Process 13
Advertisements by Subprogram: Planned, Actual & Deferred 4, 5
CIPP Value of Advertised & Deferred Projects by Subprogram 4, 5
Construction Program Cash Flow: Planned vs. Actual Expenditures 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 23, 24, 25
Construction Program Delivery: Planned vs. Actual Advertisements 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 23, 24, 25
Contracts Awarded: Award Amount to Engineer's Estimate 6, 10, 14, 18, 22
Contracts Completed: Final Cost to Award Amount 6, 10, 14, 18, 22
Contracts Completed: Final Cost to Engineer's Estimate 6, 10, 14, 18, 22
End-of-Season Highway Construction Project Evaluations 12, 16, 20, 24
FHWA Federal Performance Report Card 12
Hood Canal Bridge Update 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Hot Mix Asphalt Pavement Delivery 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 22, 23, 25
Lane Miles Added to State Highway System 2, 13, 23
Rising Cost of Construction Materials 15, 19, 23, 25
Safety Construction Program: Planned vs. Actual Advertisements 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19
Tacoma HOV I 5 Lane Additions 25
Tacoma Narrows Bridge Update 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25

Design
Age Related Safety Issues 10
Cable Median Barrier Installation: Before and After Collision Data 12, 20
Driving Speeds on State Highways 4, 23
Guardrail Retrofit Program 11
Roundabout Installation: Before and After Collision and Injury Data 12, 22
Value Engineering 6, 10

Edition Key: **1** = Quarter 1 2001, **2** = Quarter 2 2001, **3** = Quarter 3 2001, **4** = Quarter 4 2001, **5** = Quarter 1 2002, **6** = Quarter 2 2002, **7** = Quarter 3 2002, **8** = Quarter 4 2002, **9** = Quarter 1 2003, **10** = Quarter 2, 2003, **11** = Quarter 3, 2003, **12** = Quarter 4, 2003 **13** = Quarter 1, 2004 **14** = Quarter 2, 2004 **15** = Quarter 3, 2004 **16**= Quarter 4, 2004 **17** = Quarter 1, 2005 **18** = Quarter 2, 2005 **19** = Quarter 3, 2005, **20** = Quarter 4, 2005, **21** = Quarter 1, 2006, **22** = Quarter 2, 2006, **23** = Quarter 3, 2006, **24** = Quarter 4, 2006 **25** = Quarter 1, 2007

All editions can be accessed at *www.wsdot.wa.gov/accountability*

Topic ***Edition***

Environmental Stewardship

Agencies Approve Projects 18,25
Compost Use 7
Construction Site Erosion and Runoff Protection 4, 6, 9, 12, 16
Chronic Riverbank Erosion - Hoh River 15
Diesel, Particulate Matter 17
"Ecology Embankment" Pollutant Removal 8
Endangered Species Act 23
Environmental Assessments 18
Environmental Compliance Assurance: Tracking 9, 12, 16, 18, 20, 23, 24, 25
Environmental Impact Statement Processing Time 9, 13
Environmental Impact Statement Concurrence Request Approval Rate 13
Environmental Management Systems Update 20, 24
Erosion Control Preparedness 20, 24
Fish Passage Barriers 4, 13, 17, 22
GIS Workbench 14
Hazardous Materials Removal 15
Herbicide Usage Trends 5, 8, 12, 16, 24
Noise Impact 23
Operational Improvements 22
Organic Recycling Award for WSDOT 12
Programmatic Permits 13, 17, 22
Quieter Pavements 22, 24
Recycling Aluminum Signs 7
Stormwater Treatment Facilities 12, 16, 20, 24
Violations 9, 12, 16
Water Quality Impacts 16, 20, 24
Wetland Internship 14
Wetland Mitigation and Monitoring 5, 9, 12, 16, 20, 24, 25
Wetland 14, 16
Wildlife Crossings 18

Ferries (WSF)

Capital Expenditure Performance: Actual vs. Authorized 19, 20, 21, 23, 24, 25
Capital Expenditure Performance: Planned vs. Actual 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17,18, 21, 22, 23, 24, 25
Customer Comments 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Capital Project Delivery Executive Summary: Ferries 24
Electronic Fare System and Smart Card 17, 25
Fare Comparison: WSF to Other Auto Ferries 4
Farebox Recovery Comparison: WSF to Other Auto Ferries and Transit 5
Farebox Recovery Rate 5, 12, 16
Farebox Revenues by Month 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Fleet Condition: Ferry Ages by Class of Vessels 13, 21
Life Cycle Preservation Performance: Planned vs. Actual 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
On-Time Performance 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Operating Costs Comparison: WSF to Other Ferry Systems 3
Ridership by Month 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24,
Trip Planner 17, 18
Trip Reliability Index and Trip Cancellation Causes 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Trip Completion and On Time Performance Comparison to Washington Transit Services 25

GPS at WSDOT

Tour the State Highway system- SR view Development of the "Smart Map" 13

Maintenance of State Highways

Achievement of Biennial Maintenance Targets (MAP) 3, 4, 8, 12, 16, 24
Anti-Icer Evaluation 17, 18, 21, 25
Anti-Icer Use 21, 25
Anti-Litter Campaign Update 5, 11
Automated Anti-Icing Systems 7
Avalanche Control 15, 21
Capital Facilities Construction Projects 18, 22
Cooperative Maintenance Partnerships with Counties and Cities 25
Costs of State Highway Maintenance 4, 16, 25
Customer Satisfaction with WSDOT Highway Maintenance Activities 3
Debris Pusher Maintenance Attachment 6
Facilities 19, 22
Facilities Condition Rating 18, 22
Global Positioning for Snow and Ice Control 13
Guidepost Driver 11

Edition Key: **1** = Quarter 1 2001, **2** = Quarter 2 2001, **3** = Quarter 3 2001, **4** = Quarter 4 2001, **5** = Quarter 1 2002, **6** = Quarter 2 2002, **7** = Quarter 3 2002, **8** = Quarter 4 2002, **9** = Quarter 1 2003, **10** = Quarter 2, 2003, **11** = Quarter 3, 2003, **12** = Quarter 4, 2003 **13** = Quarter 1, 2004 **14** = Quarter 2, 2004 **15** = Quarter 3, 2004 **16**= Quarter 4, 2004 **17** = Quarter 1, 2005 **18** = Quarter 2, 2005 **19** = Quarter 3, 2005, **20** = Quarter 4, 2005, **21** = Quarter 1, 2006, **22** = Quarter 2, 2006, **23** = Quarter 3, 2006, **24** = Quarter 4, 2006 **25** = Quarter 1, 2007

All editions can be accessed at *www.wsdot.wa.gov/accountability*

Topic ***Edition***

Herbicide Usage Trends....5, 8, 12, 16
Highway Sign Bridges: Planned vs. Actual Repairs....3, 4, 6, 8
Highway Signs: Number of Maintenance Actions....6, 8
Integrated Vegetation Management....5, 12, 16, 20, 24
Landscape....19
Litter Removal from State Highways....5, 6, 8, 11, 15
Litter Violations Issued by WA State Patrol....23
Living Snow Fence on SR 25....9
Maintenance Accountability Process....20, 24
Mountain Pass Highway Closures....7, 9, 17, 21, 25
Pavement Striping: How Do They Paint the Stripes So Straight?....6
Pavement Striping: Planned vs. Actual Miles Painted....3, 4, 6, 8
Pavement Striping: Winter Field Test....18
Road Kill on State Highways....5, 23
Safety Rest Area Condition Report....21, 25
Safety Rest Area Improvement Program....21, 25
Safety Rest Area Locations and Amenities....9, 13, 17, 19
Safety Rest Area Level of Service....17, 21, 25
Safety Rest Area Preservation....17, 21, 25
Safety Rest Area Survey....9, 17, 21, 25
Safety Rest Area Truck Parking and Security....17, 21, 25
Safety Rest Area Visitors....21, 25
Safety Rest Areas Wireless Internet Access....19, 25
Salt Pilot Project....7, 10, 17, 18
Snow and Ice Control Operations....4, 7
Snow and Ice Expenditures....17, 21
Suspender Cable Painting....23
Survey on Pass Travel Conditions and Anti-Icer Use....2, 13,17
Tools for Winter Driving....17, 25
Traffic Signals: Annual Energy Costs and Incandescent Bulb Conversion....3
Trucks to Get Through the Winter....17
Vortex Generators....5
Water Conservation....19
West Nile Virus....16
Winter Overtime Hours and Snowfall Amount....7, 9
Winter Roadway Condition Level of Service and Anti-Icer Chemicals....9, 13, 17
Winter Severity and Snow and Ice Expenditures....4, 9, 13, 17, 21, 25

Pavement Conditions on State Highways

Concrete Pavement....16
Concrete Pavement Lane Miles by Age and Dowel Bar Retrofit Status....12
"Due" Pavement Rehabilitation Needs....4, 8
Pavement Condition of Various Pavement Types....2,
Pavement Condition Trends....4, 8, 12, 16, 20, 22, 24
Pavement Lane Miles, Annual Vehicle Miles Traveled, and Programmed Dollars....12, 16
Pavement Ratings....20
Pavement Smoothness Rankings by State....4, 8, 12, 16, 20, 24
Portland Cement Concrete Pavement....16
Selecting Pavement Types....16

Program Activities Highlights

Project Starts, Completions, Updates....20, 21, 23, 24, 25
Highlights....20, 21, 23, 24, 25

Project Reporting (Beige Pages)

Capital Project Delivery: Executive Summary, Rail and Ferries....24, 25
Construction Cost....20, 21, 22, 23, 24, 25
Construction Employment Information....20, 21, 22, 23, 24, 25
Construction Safety Information....20, 21
Current Project Highlights and Accomplishments....10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25
Environmental Documentation, Review, Permitting and Compliance....20, 24, 25
Financial Information....10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25
Transportation 2003 (Nickel) Account....20, 21, 22, 23, 24, 25
Multimodal Account....20, 21, 22, 23, 24, 25
Transportation Partnership Account....20, 21, 22, 23, 24, 25
Pre-Existing Funds....20, 21, 22, 23, 24, 25
Hot Mix Asphalt....21, 23, 24, 25
Nickel Program: 2003 Transportation Funding Package....20, 21, 22, 23, 24, 25
Overview of WSDOT's Three Capital Project Delivery Mandates....20, 21, 22, 23, 24, 25
Partnership Program: 2005 Transportation Funding Package....20, 21, 22, 23, 24, 25
Planned vs Actual Number of Projects....20, 21, 22, 23, 24, 25

Edition Key: **1** = Quarter 1 2001, **2** = Quarter 2 2001, **3** = Quarter 3 2001, **4** = Quarter 4 2001, **5** = Quarter 1 2002, **6** = Quarter 2 2002, **7** = Quarter 3 2002, **8** = Quarter 4 2002, **9** = Quarter 1 2003, **10** = Quarter 2, 2003, **11** = Quarter 3, 2003, **12** = Quarter 4, 2003 **13** = Quarter 1, 2004 **14** = Quarter 2, 2004 **15** = Quarter 3, 2004 **16**= Quarter 4, 2004 **17** = Quarter 1, 2005 **18** = Quarter 2, 2005 **19** = Quarter 3, 2005, **20** = Quarter 4, 2005, **21** = Quarter 1, 2006, **22** = Quarter 2, 2006, **23** = Quarter 3, 2006, **24** = Quarter 4, 2006 **25** = Quarter 1, 2007

All editions can be accessed at *www.wsdot.wa.gov/accountability*

Topic ***Edition***

Pre-Existing Funds Project....20, 21, 22, 23, 24, 25
Program Management Information....10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21. 22, 23, 24, 25
Project Delivery....11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Right of Way Risks....20, 22, 24
Roll-Up of Performance Information....20, 21, 22, 23, 24, 25
Special Project: Hood Canal Bridge....20, 21, 22, 23, 24, 25
Special Project: Tacoma Narrows Bridge....20, 21, 22, 23, 24, 25
Utilities....20, 22, 24

Rail: Freight
2005 Results Flatline....18
Freight Rail Study....25
Grain Train - Long Term....18
Grain Train Carloads....5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Grain Train Route Map....5, 9
Palouse River COulee City Railroad: State Aquisition....24
Washington Fruit Express: Car Loadings Per Week....5, 8

Rail: State-Supported Amtrak *Cascades* Service
Amtrak Funding Update....17, 18
Amtrak's Future....5, 6, 7, 9, 10, 17, 18
Budget Update....10
Canadian Service....25
Capital Improvement Program and WSDOT Service Goals....2
Capital Project Delivery Executive Summary: Rail....24
Customer Satisfaction....2, 3, 4, 7, 9, 12, 14, 16, 21, 23
Farebox Recovery Percentage by Train....4, 8, 12, 16, 20, 24
Internet Reservations and Automated Ticketing....6
Investment in Intercity Rail Comparison....5
New Crossovers and additional service....18
On-Time Performance....2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Operating Costs....4
Passenger Trips by Station....6, 20
Rail Plus Program....15, 16, 19, 20
Ridership by Funding Source....25
Ridership by Month....2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25
Ridership by Year....20, 24
Ridership by Year: Long-Term Trends....2, 4, 8, 12, 16
Ridership Patterns by Segment (Seats Sold)....3
Route Map: Amtrak in Washington....6
Schools on Trains....18
Station Update....11, 13, 14, 15, 16. 17. 22
Vehicles Diverted Annually from I-5 by *Cascades*....2

Safety on State Highways
Age-Related Safety Issues....10
Alcohol-Related Fatalities: State Comparison....7
Alcohol-Related Fatality Rate....12, 22
Before and After Collision Data for Highway Safety Improvement Projects....12, 16, 20, 24
Bicycle and Pedestrian Safety: Federal Benchmark....9
Bicyclist Fatality Rates: State Comparison....9, 20, 24
Cable Median Barrier Installation: Before and After Collision Data....12, 20, 24
Corridor Safety Program Results....8, 19, 23
Demographics of Pedestrian Risk....20
Driving Speeds on State Highways....4, 23
Fatal and Disabling Collisions: Circumstances and Type....8
Fatal and Disabling Collisions: at Intersections....9
Fatal and Disabling Crashes and VMT, Percent Change....3, 7, 11, 16, 22
Fatalities and Fatality Rates in Washington....13, 16, 22
Fatalities by Gender and Age Group....10
Fatalities per Capita by State....13, 22
Fatality Rates: State Highways, All State Public Roads & U.S....3, 7, 11, 16
Guardrail Retrofit Program....11, 24
High Accident Corridors and Locations by Region....4
High Accident Corridors and Locations Statewide....3, 15, 20
Intermediate Driver's License Program....13
Low Accident Locations and Corridors in Cities Over 22,500....20
Low Cost Safety Enhancement Program: Planned vs. Actual Projects....3, 4, 5
Low Cost Safety Enhancement Program: Sample Projects....4, 6
Low Cost Enhancement Safety Program: Before and After Analysis....20

Edition Key: **1** = Quarter 1 2001, **2** = Quarter 2 2001, **3** = Quarter 3 2001, **4** = Quarter 4 2001, **5** = Quarter 1 2002, **6** = Quarter 2 2002, **7** = Quarter 3 2002, **8** = Quarter 4 2002, **9** = Quarter 1 2003, **10** = Quarter 2, 2003, **11** = Quarter 3, 2003, **12** = Quarter 4, 2003 **13** = Quarter 1, 2004 **14** = Quarter 2, 2004 **15** = Quarter 3, 2004 **16**= Quarter 4, 2004 **17** = Quarter 1, 2005 **18** = Quarter 2, 2005 **19** = Quarter 3, 2005, **20** = Quarter 4, 2005, **21** = Quarter 1, 2006, **22** = Quarter 2, 2006, **23** = Quarter 3, 2006, **24** = Quarter 4, 2006 **25** = Quarter 1, 2007

All editions can be accessed at *www.wsdot.wa.gov/accountability*

Topic ***Edition***

Motorcycle Fatalities and Injuries 23
Motorcycle Safety 23
Pedestrian Factors in Vehicle/Pedestrian Collisions 8
Pedestrian Fatality Rates by State 8, 16, 20, 24
Pedestrian Safety in Washington 16
Photo Enforcement 16
Roadside Improvements 24
Roundabout Installation: Before and After Collision and Injury Data 12, 18, 22
Rumble Strips 14, 18
Safe Routes to Schools Grant Program Status 9, 12
Safety Construction Program: Planned vs. Actual Project Advertisements 3, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17
Washington State Safety Data 13
Safety Laws: Booster Seats and Mandatory Seat Belts 5
Seatbelt Use: State Comparison 7, 11, 22
Safety Enhancements 20
Safety Rest Area Level of Service Trends 13, 17, 21, 25
Safety Rest Area Locations and Amenities 9, 13, 17, 21, 25
Safety Rest Area Preservation: Capital Investment Program 2003-05 ..... 13, 17, 21
Safety Rest Area Program 13, 17, 21, 25
Safety Rest Area Survey 9, 17, 21, 25
Safety Rest Area Truck Parking and Security 17, 21, 25
Safety Rest Area Usage 13, 17, 21, 25
Speeding Enforcement 23
Top Ten High Accident Corridor: 2007-09 Biennium 20
Top Ten High Accident Locations: 2007-09 Biennium 20
Wildlife crossings 18

Special Features

2 Dots 2 Safety 23
Ecosystem Initiative Award 23
Eruption Watch 15
Guardrail Sign Mount 15
Overweight and Oversize Permit 16
Performance Audits and Reviews 16
Photo Enforcement 16
Portable Incident Screens 20, 22
"Smart Map" Development 13
Tour the State Highway System with WSDOT's SR view 13
Traffic Signal Operations 17
Using Plain English at WSDOT 17
Water Conservation Activities 17
West Nile Virus 15

Traffic Operations on State Highways

Blocking Disabled Vehicles and Debris - Trends 15
FHWA Self-Assessment 9
Governor's Strategic Action Plan for Incident Response 25
History of Incidence Response 16
Incidents On I-5- Everett to Seatac 15
Incident Response: A Day in the Life Of 19
Incident Response: Anatomy of a 90-minute incident 18
Incident Response Calls Responded to by Region 2
Incident Response Clearance Times 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Incident Response Customer Comments 8
Incident Response Economic Analysis 10
Incident Response Non-Collision Response Types 8, 9, 10, 11, 12, 13, 14, 19, 20, 21, 22, 23, 24, 25
Incident Response Program Activities on Urban Commute Routes 15
Incident Response Program: Construction Zone Traffic Management 19
Incident Response Program: Types of Responses 9, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 23, 24, 25
Incident Response: Roving Units Compared to Response by Called-Out Units 13, 14, 18
Incident Response Service Actions Taken 7, 10, 11, 12, 13, 14, 18, 22, 23, 24, 25
Incident Response Teams Go to the Olympics 5
Incident Response Teams: Location and Type 7
Incident Response Then and Now 16
Incident Response Time line 6
Incident Response Times 2, 3, 4, 5
Incident Response: Total Number of Responses by Month 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18
Incident Response: Total Number of Responses by Quarter 19, 20, 21, 22, 23, 25
Incidents with Clearance Times Over 90 Minutes 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 19, 20, 21, 22, 23, 25
Induction Loop Detectors 5

Edition Key: **1** = Quarter 1 2001, **2** = Quarter 2 2001, **3** = Quarter 3 2001, **4** = Quarter 4 2001, **5** = Quarter 1 2002, **6** = Quarter 2 2002, **7** = Quarter 3 2002, **8** = Quarter 4 2002, **9** = Quarter 1 2003, **10** = Quarter 2, 2003, **11** = Quarter 3, 2003, **12** = Quarter 4, 2003 **13** = Quarter 1, 2004 **14** = Quarter 2, 2004 **15** = Quarter 3, 2004 **16**= Quarter 4, 2004 **17** = Quarter 1, 2005 **18** = Quarter 2, 2005 **19** = Quarter 3, 2005, **20** = Quarter 4, 2005, **21** = Quarter 1, 2006, **22** = Quarter 2, 2006, **23** = Quarter 3, 2006, **24** = Quarter 4, 2006 **25** = Quarter 1, 2007

All editions can be accessed at *www.wsdot.wa.gov/accountability*

Topic ***Edition***

Injury Collisions in Over 90 Minute Blocking Incidents....25
Intelligent Transportation Systems in Washington State....5
Joint Operations Policy Statement between WSDOT and Washington State Patrol....5, 17
Number of Responses to Incidents....18, 20, 23, 24, 25
Operational Efficiency Program Strategies....2
Over 90 Minute Blocking Incidents by Type....25
Overall Average Clearance Time....20
Response Modes....16
Responses to Fatality Collisions....20, 21, 22, 23, 24, 25
Roving Coverage....16, 18
Service Patrols Contacts....3, 4
Spokane Interstate 90 Peak Hour Roving Service Patrol Pilot....5
Traffic Incident Management Self Assessment....17
Training Incident Responders....16

Travel Information
Award for Traveler Information Web Site....11
Calls to 1-800-695-ROAD and 511....7, 8, 9, 10, 11, 12, 13, 14, 18, 19, 20, 21, 22, 23, 24
Camera Views....7, 8
Evaluation Survey....10
Three-Year Milestones....22
Traveler Information Services Overview....7
Types of Information Requested to 511....18, 20, 23, 24
Web site Feedback....8, 9
Web site Daily Usage....7, 8, 9, 10, 11, 12, 13, 14, 18, 19, 20, 21, 22, 23, 24, 25

Trucks, Goods, and Freight
Automatic De-icers Help Keep Truckers Safe....16
CVISN - Commercial Vehicle Information Systems and Networks....15
Cross Border Truck Volumes....6, 10, 16, 21, 25
Freight Industry Survey....16
Freight Routes and Border Crossings in Washington....6, 10, 16, 21, 25
Freight Shipments To, From, and Within Washington....10
Impediments to Truck Shipping: Bridges with Posted Weight Restrictions....6
Improvement Projects with Freight Benefits....10
Intelligent Transportation Systems Use for Trucks....6, 10
Managing Over-Sized Truck Loads....6
Marine Cargo Forecast....16, 21, 25
Osoyoos/Oroville Border Facts....10
Over dimensional Trucking Permits....6, 16
Projects with Freight Benefits....16, 21, 25
Revenue Prorated to Washington for Trucks in Interstate Use....6, 10, 16, 21, 25
Road Segment Ranking....16
Severe Weather Closures....16, 21, 25
Supply Chain Performance....25
Truck Registrations in Washington....6, 21, 25
Truck Share of Total Daily Vehicle Volumes....6

Worker Safety
Accident Prevention Activities....14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25
Ferry Vessel Workers Recordable Injuries....2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25
Highway Engineer Workers Recordable Injuries....2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25
Highway Maintenance Workers Recordable Injuries....1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25
North American Association of Transportation Safety and Health Officials Meeting....3
Number of OSHA-Recordable Injuries/Illnesses: WSDOT Regions and Ferry System....22, 23, 24, 25
OSHA-Recordable Injuries: Quarterly Rate....22, 23, 24, 25
OSHA-Recordable Injuries: Fiscal-Year-to-Date....23, 24, 25

Workforce Levels and Training
Highway Maintenance Workers Safety Training....5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Required Training for all WSDOT Employees....7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
Required Training for Maintenance Workers by Region....20, 21, 22, 23, 24, 25
Workforce Levels....5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25

Americans with Disabilities Act (ADA) Information

Persons with disabilities may request this information be prepared and supplied in alternate formats by calling the Washington State Department of Transportation at (360) 705-7097. Persons who are deaf or hard of hearing may call access Washington State Telecommunications Relay Service by dialing 7-1-1 and asking to be connected to (360) 705-7097.

Civil Rights Act of 1964, Title VI Statement to Public

Washington State Department of Transportation (WSDOT) hereby gives public notice that it is the policy of the department to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and related statutes and regulations in all programs and activities. Persons wishing information may call the WSDOT Office of Equal Opportunity at (360) 705-7098.

Other WSDOT Information Available

The Washington State Department of Transportation has a vast amount of traveler information available. Current traffic and weather information is available by dialing 5-1-1 from most phones. This automated telephone system provides information on:

Puget Sound traffic conditions
Statewide construction impacts
Statewide incident information
Mountain pass conditions
Weather information
State ferry system information, and
Phone numbers for transit, passenger rail, airlines and travel information systems in adjacent states and for British Columbia.

For additional information about highway traffic flow and cameras, ferry routes and schedules, Amtrak *Cascades* rail, and other transportation operations, as well as WSDOT programs and projects, visit
www.wsdot.wa.gov

For this or a previous edition of the *Gray Notebook*, visit
www.wsdot.wa.gov/accountability

0401-0004