



**Washington State
Department of Transportation**

Measures, Markers and Mileposts

Gray Notebook Lite

for the quarter ending March 31, 2006

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



**Washington State
Department of Transportation**

This *Gray Notebook Lite* is the ninth edition of relevant highlights and performance topics selected from the *Gray Notebook*. This quarter's edition of the *Lite* includes excerpts from the Annual Trucks, Goods, and Freight report, Annual Aviation report, Annual Safety Rest Areas report, and the Annual Highway Maintenance, Snow and Ice report.

The beige insert contains an expanded quarterly update on WSDOT's Capital Delivery Program. In addition to the traditional Nickel Project reporting, it now includes descriptions of Pre-Existing Funds projects and 2005 Transportation Partnership Account projects.

The full *Gray Notebook* can be found at www.wsdot.wa.gov/accountability/graynotebook.pdf

Please let us continue to hear your thoughts about what you would like to see in the *Gray Notebook Lite*. Send me an e-mail at macdond@wsdot.wa.gov.

Doug MacDonald

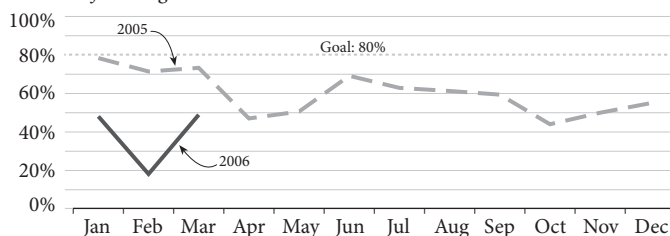


Amtrak Cascades: Reaches All Time Low On-Time Performance

The first quarter of 2006 on-time performance average was 39.5% for the state-supported Amtrak Cascades. This compares to 74.4% for the first quarter of 2005. The primary cause of delays was freight train interference due to limited rail line capacity. February's monthly average was 18.2% on-time, establishing an all-time low for Amtrak Cascades. On-time performance did improve somewhat in March to 49%, but this is well below WSDOT and Amtrak's goal of at least 80% on-time. The BNSF Railway is responsible for managing all rail traffic on the corridor between Portland, Seattle, Bellingham, and Vancouver, BC. WSDOT and Amtrak asked the BNSF Railway to work to correct this poor on-time performance.

State Supported Amtrak Cascades On-Time Performance

Number of Passengers



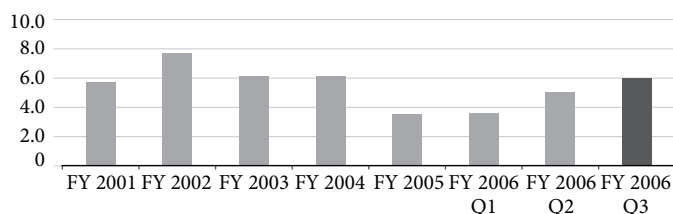
Source: Amtrak and WSDOT Rail Office.

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.

Customer Feedback

In the third quarter of Fiscal Year (FY) 2006, WSDOT's Ferry System completed approximately 39,000 trips. There were 5.4 million riders this quarter, and a total of 307 complaints. This quarter, complaints per 100,000 customers were 6.0, a 20% increase from the preceding quarter and an 80% increase from the same period last year.

Total Number of Complaints per 100,000 Customers



Source: WSDOT Ferry System.

Washington State Ferries: Maintains Good On-Time Performance

This quarter, on-time trip performance totaled 37,950 trips and represents the total number of trips captured by the automated on-time monitoring system. A trip sailing on-time will be within 10 minutes of its published sailing schedule.

- In the third quarter of FY 2006, the average delay was 6% lower (2.9 minutes) than the preceding quarter (3.1 minutes).
- 94% of trips sailed on-time, which is a slight increase from the preceding quarter (93%).
- In the third quarter of FY 2006, the average delay time improved slightly from a 3.0 minute delay in the third quarter of FY 2005, to a 2.9 minute delay per departure. The average percentage of trips sailing on-time remained the same in both quarters (94%).

WSDOT Adopts New Safety Standard for Worker Safety Data Tracking

WSDOT has changed its reporting measure to align with current industry standards, activities will now be reported using the North American Industry Classification System. For additional information on the new reporting method, see the current *Gray Notebook* (p. 39).

Recordable Injury Rates

The first quarter of 2006, recordable injury rates for Highway Maintenance and Engineering workers (Highway, Street, and Bridge workers) totaled 5.1 per 100 workers. This total is 1.3, or 20%, below the industry benchmark standard of 6.4. The first quarter of 2006, recordable injuries for Ferry workers (Inland Water Transportation) totalled 7.1 per 100 workers. This total is 2.2, or 45%, above the industry benchmark standard of 4.9.

Data for 2003-04 Incomplete and Must be Withdrawn

In the December 2005 *Gray Notebook* (p. 33), WSDOT reported it would attempt to recapture the uncounted injuries and correct the previously reported data. In the process of recapturing the uncounted cases, other questions arose concerning the accuracy of the data reported. For these reasons, WSDOT decided not to

use the recaptured data for 2003-04. However, the 2005 recaptured data appears to be reasonably complete and can be used for comparison purposes. As of January 2006, WSDOT has begun re-establishing a new baseline of recordable injury rates. The reexamination of the ferry data is currently underway and will be reported next quarter in the *Gray Notebook*.

	Highway Maintenance and Engineering Worker Injury Rate ¹		Ferry Worker Injury Rate ²	
	2005	2006	2005	2006
Quarter 1	4.8	5.1	NA	7.1
Quarter 2	4.5	-	NA	-
Quarter 3	7.2	-	NA	-
Quarter 4	5.6	-	NA	-
Quarterly Average	5.5	5.1	NA	7.1

2004 Benchmark 6.4

¹Highway, Street, and Bridge Worker Injury Rate

Benchmark 4.9

²Inland Water Transportation Worker Injury Rate

Source: WSDOT Safety Office

How to Find Performance Information

The electronic subject index gives readers access to current and archived performance information. This 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.

The information presented here is a snapshot of what you'll find in the full version of the *Gray Notebook*. The full version for the quarter ending March 31, 2006 is available on line at: www.wsdot.wa.gov/accountability/graynotebook.pdf.

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Trucks, Goods, and Freight: Annual Report

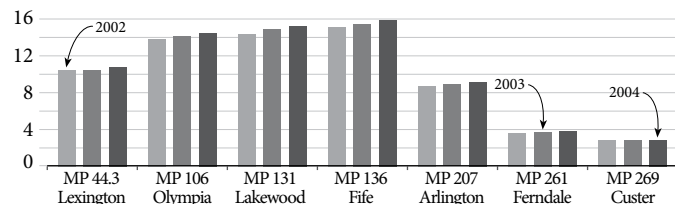
Due to the limited nature of freight data, WSDOT reports on the following indicators: truck volumes on four major highways; truck registrations; gross business revenues for freight dependent industries; international container volumes at seaports; freight cargo on mainline rail; and truck border traffic at border crossings. To review the current article, see page 44 of the current *Gray Notebook*. Excerpts are below.

More Freight On Our Highways

Timely, reliable movement of goods allows businesses to reduce manufacturing and inventory costs and to improve responsiveness to rapidly changing markets. Truck volumes on four major highways in Washington show steady increases. For example, on I-5 near Olympia, annual daily truck traffic increased 5.9%, from 13,800 trucks per day in 2002 to 14,518 trucks per day in 2004.

Interstate 5 Average Daily Number of by Milepost (South to North)

Numbers in Thousands



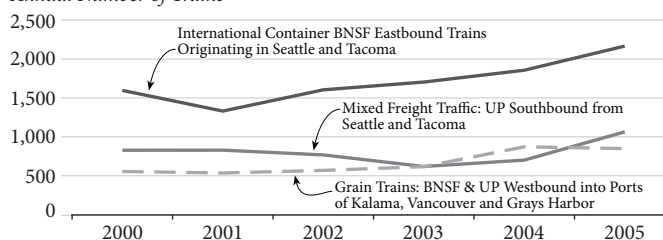
Source: WSDOT: Transportation Data Office.

Freight Rail Increases in 2005

Rail traffic is also growing across the state. An estimated 70% to 80% of the containerized imports transfer to rail near the ports, and are shipped east via rail lines through Washington to larger east coast consumer markets. The following chart shows growth in these containers, and other major commodities, carried by mainline rail in Washington.

Freight Rail Growth through Washington 2000 - 2005

Annual Number of Trains



Source: Burlington Northern and Santa Fe Railway and Union Pacific Railroad.
Assembled by WSDOT Office of Freight Strategy and Policy.

Aviation: Annual Report

Aviation provides a critical link to the local, state, and national transportation system. With 139 public-use airports in Washington State, the state's aviation system efficiently connects people to goods and services. WSDOT is responsible for preserving the aviation system through airport aid grants, land-use planning, air search and rescue, and maintaining 16 back country emergency airports. The annual report can be found in the current *Gray Notebook* on page 54. Excerpts are below.

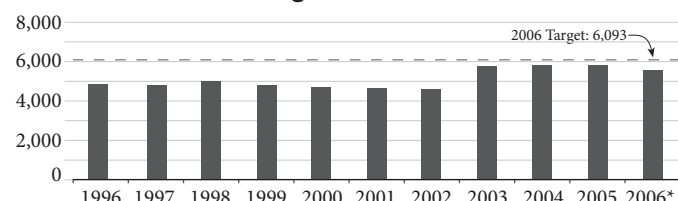
Aircraft Registration Program

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.

WSDOT's goal is to increase the previous year aircraft registrations by five percent. Based on the collection of 5,803 registrations in 2005, WSDOT's goal is to increase registrations to 6,093 in 2006. Currently, there are approximately 372 aircraft that are not registered.

Since November 2005, WSDOT has stepped up efforts to ensure the registration database is updated and accurate. By sending letters to every aircraft owner in the registration database, as well as to those that are new to the FAA database, WSDOT determined the status of their aircraft and urged individuals to either file an exemption or register with WSDOT.

Number of Aircraft Registrations 1996 - 2006



* Number reflects registration-collected year to date.

Source: WSDOT Aviation.

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 fee per gallon on aviation fuel.

New Project Delivery Performance Measure

WSDOT will measure performance of the Local Airport Aid Grant Program by tracking on-time and on-budget project delivery. WSDOT selected five focus projects for individual project reporting and will work with airport sponsors to develop project milestones. These focus projects have been selected due to the size and visibility of each project. To view the list of selected projects, see page 55 of the *Gray Notebook*. Future editions of the *Gray Notebook* will report the actual and planned results on the following milestones for the five projects:

- Start of Preliminary Engineering – Phase 1
- Bid Advertisement Date – Phase 2
- Operationally Complete – Phase 3
- Completed On-Budget

Information on the new performance measures can be found on page 54 of the current *Gray Notebook*.

Asset Management: Safety Rest Areas Annual Update

Washington’s safety rest areas provide the opportunity for travelers to rest and take much-needed breaks to ensure alertness and safety during long trips. This annual report provides an update on WSDOT’s safety rest areas, covering topics such as visitor data, service performance measures, the annual service rating report, the 2005-07 capital investment program and the commercial truck parking study. To view the report in its entirety, see page 48 of the current *Gray Notebook*. Excerpts are below.

21.3 Million Safety Rest Area Visitors in 2005

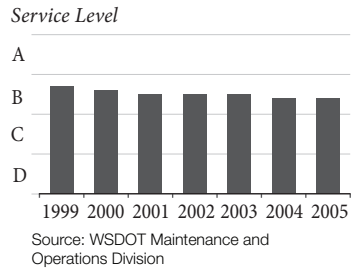
Since the last *Gray Notebook* report in March 31, 2005, WSDOT has implemented a new estimation methodology to more accurately determine the number of rest area visitors. Based on these new calculations, an estimated 21.3 million people visited Washington’s safety rest areas in 2005. The I-5 Toutle River Safety Rest Areas in Cowlitz County were the most visited, with over 3.6 million visitors in 2005. The chart to the right provides visitor information for interstate rest areas in Washington.

Safety Rest Area Service Rating Holds Steady at “B”

WSDOT inspects all safety rest areas semiannually to determine the Level of Service (LOS) that WSDOT delivered. Levels of Service are based primarily on operational aspects of the safety rest areas, and are only based in small part on facilities condition. WSDOT has maintained interstate safety rest areas at a rating of “good condition” (LOS B) since 1999. The 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.

Rest Area Service Level Trends for All Rest Areas



Safety Rest Area Visitor Data 2005

Safety Rest Area (State Route)	County	Annual Use (Visitors)	Percent of Passing Vehicles that Stop
27 Interstate			
Gee Creek ² (5)	Clark	1,056,598	2.07%
Toutle River ² (5)	Cowlitz	3,623,522	12.15%
Scatter Creek (5)	Thurston	1,010,494	5.30%
Maytown (5)	Thurston	827,888	4.05%
SeaTac (5)	King	940,098	1.48%
Silver Lake (5)	Snohomish	534,028	0.92%
Smokey Point ² (5)	Snohomish	1,016,917	1.79%
Bow Hill ² (5)	Skagit	1,862,779	6.10%
Custer ² (5)	Whatcom	1,207,341	6.70%
Selah Creek ² (82)	Yakima	576,964	5.20%
Prosser (82)	Benton	715,475	6.45%
Indian John Hill ² (90)	Kittitas	1,771,965	11.61%
Ryegrass ² (90)	Kittitas	797,103	8.21%
Winchester ² (90)	Grant	491,987	6.45%
Schrag ² (90)	Adams	1,204,693	17.37%
Sprague Lake ² (90)	Lincoln	1,512,761	12.83%
Interstate Totals		19,150,615	6.79%

Source: WSDOT Maintenance & Operations Division, Facilities Office

Note: The table above can be viewed in its entirety on page 48.

Highway Maintenance: Annual Update

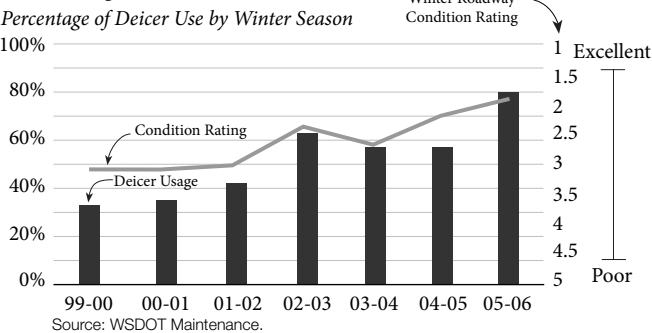
Two major rock fall incidents on I-90, one month of record-breaking rainfall in western Washington, and greater-than-average mountain snowfall have given WSDOT crews and the traveling public some challenging obstacles to overcome. The two major rockfalls in September and November 2005 on Snoqualmie Pass made it especially difficult for crews to keep the pass open this season. Mountain pass highways experienced above-average levels of snowfall this winter which required creative solutions, such as shifting resources and traffic flow management. Also, record breaking rainfall in western Washington resulted in 92 slides on state highways. As a result, WSDOT’s maintenance crews were busy this winter clearing roadways from debris and repairing damage caused by the rainfall. For additional information on Highway Maintenance, please see the current edition of the *Gray Notebook* (p. 58). Excerpts are below.

Improving Winter Road Conditions

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

Through March 31st, maintenance crews documented 22,147 road treatments to help improve winter road conditions statewide. Maintenance crews used deicers during 17,676 (80%) of these treatments, and sand on the remaining 4,471 treatments. A higher percentage of deicer use leads to better road conditions. This in turn leads to improved safety, fewer road closures, and reduced need for studded tires.

Statewide Deicer Use and Winter Roadway Conditions



An Excerpt from the *Beige Pages*: Project Reporting on WSDOT's Capital Delivery Program

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* (p. 1-37) 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

Executive Summary of Project Delivery

Each quarter WSDOT provides a detailed update on the delivery of the highway capital programs through the *Gray Notebook*, and via 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).

Performance Information <i>As of March 31, 2006, Dollars in Thousands</i>	Nickel (2003)	Transportation Partnership Account (TPA, 2005)	Combined Nickel & TPA	Pre-Existing Funds
Total Biennial Number of Projects (2005-07)	145	178	323	923
Total Biennial Program (2005-07)	\$1,192,198	\$409,727	\$1,601,925	\$1,061,010
Schedule, Scope and Budget Summary: Results of Completed Projects				
	See Pages 3-4	See Pages 3-4	See Pages 3-4	NA
Cumulative to Date, 2003 – March 31, 2006				
Total Completed	21	8	29	-
% Completed Early or On-Time	95%	100%	97%	-
% Completed Within Scope	100%	100%	100%	-
% Completed Under or On-Budget	90%	88%	90%	-
Current Legislative Expectation (Baseline)	\$159,700	\$3,895	\$163,594	-
Current Estimated Cost to Complete (WSDOT)	\$159,645	\$3,971	\$163,616	-
Biennium to Date, 2005-07				
Total Completed	8	8	16	172
% Completed Early or On-Time	100%	100%	100%	-
% Completed Within Scope	100%	100%	100%	-
% Completed Under or On-Budget	100%	88%	94%	-
Current Legislative Expectation (Baseline)	\$107,707	\$3,895	\$111,601	\$527,471
Current Estimated Cost to Complete (WSDOT)	\$107,571	\$3,971	\$111,543	\$527,873
Advertisement Record: Results of Projects Entering into the Construction Phase				
	See Pages 5-6	See Pages 5-6	See Pages 5-6	See Page 24
Biennium to Date, 2005-07				
Total Advertised	15	7	22	109
% Advertised Early or On-Time	60%	100%	76%	76%
Total Award Amounts to Date	\$108,828 (3 pending bid or award)	\$4,686 (1 pending bid or award)	\$113,514 (4 pending bid or award)	NA
Advertisement Schedule for Projects in the Pipeline: Results of Projects Now Being Advertised for Construction or Planned to be Advertised				
	See Page 7	See Page 7	See Page 7	See Page 22 (graph)
April 1, 2006 through September 30, 2006				
Total in Pipeline	2	6	8	47
% On or Better than Schedule	100%	50%	63%	-

Excerpts: Cross-Cutting Management Issues

Hot Mix Asphalt Forecast Decreases 32% for 2006

The 2006 forecast of 1,213,985 tons of Hot Mix Asphalt (HMA) is a 32% decrease compared to the 2005 forecast of 1,779,826 tons. There were multiple reasons for this decrease.

Biennial Scheduling. WSDOT put a higher percentage of its paving jobs on advertisement in the first year of the 2005-07 biennium.

Funding Reallocation. In a collaborative decision, WSDOT and the Legislature reduced the amount of money provided to the roadway preservation program in the 2005-07 biennium; this money was reallocated to WSDOT's safety program for cable median barriers. As a part of this reallocation, WSDOT has started using more chip seal pavement in place of asphalt for the road surfaces on lower volume roadways. This will help keep the backlog of paving needs down.

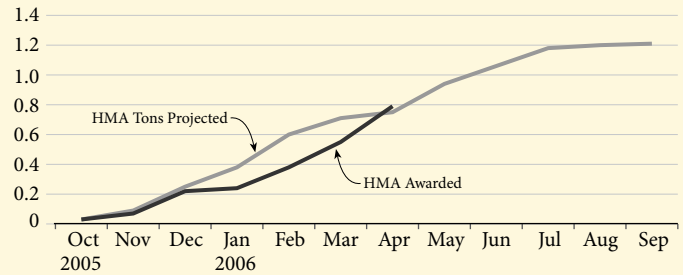
HMA Cost Increases. The price of HMA has increased from \$33/ton in 2002 to \$55/ton in the first quarter of 2006 (a 67% increase). This has decreased the amount of HMA that WSDOT can afford to purchase.

HMA tonnage will likely go back up in future years as the Transportation Partnership Account projects begin construction. See page 32 of the *Gray Notebook* for more information.

Hot Mix Asphalt Tons Awarded

October 2005 - March 2006

Tons in Millions



Hot Mix Asphalt Pavement - Projected vs. Actual, 2002-2005

In Tons, October through September of each year

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

Source: WSDOT Construction Office

Construction Cost Index is up 33% for the First Quarter of 2006

WSDOT's construction cost index (CCI) has increased 33% in the first quarter of 2006 over the annual average for 2005, from 176 to 234. Of the seven materials WSDOT tracks in the CCI, Hot Mix Asphalt (HMA) comprises the majority, or 48.5%, of the index. Currently, HMA prices are up due to the rise in the cost of petroleum products. Hot Mix Asphalt costs are closely tied to oil costs: the asphalt used in HMA is made from crude oil, the machines that process the HMA run on oil and gas, and the trucks that haul and deliver the HMA require diesel.

But HMA alone does not account for the rise in the CCI, structural concrete showed an increase of 38% this quarter. The agreement this month between Mexico and the United States, wherein a duty cost of \$3 per metric ton replaces the previous duty cost of \$26 per metric ton, may help balance out the cost of cement over the course of 2006. See page 33 for additional information.

Construction Cost Indices Washington State and Others

