

# Measures, Markers and Mileposts

## **Gray Notebook Lite**

for the quarter ending March 31, 2005

WSDOT's quarterly report to the Governor Washington State Transportation Common transportation programs and departr

**Douglas B. MacDonald**Secretary of Transportation



This Gray Notebook Lite is the fifth edition of relevant highlights and performance topics selected from the Gray Notebook.

This quarter's edition of Lite includes excerpts from the annual Aviation update, a summary of Rest Area Conditions, a Post Winter Report and a snapshot of the Environmental update as well as the "Nickel Projects" delivery summary. The full Gray Notebook can be found at www.wsdot.wa.gov/accountibility/

Please Lee

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











#### **Highway Maintenance**

#### 2004 - 2005 Post Winter Report

Snow and ice control expenditures in the maintenance program are obviously related to the severity of the winter. Even in low snowfall years such as this past winter, maintenance continues working on frosty mornings to make sure that icy road surfaces are either treated with chemicals or sanded to provide safe travel. Although frost and ice control activities were similar to an average winter, this past winter's expenditures were related to low snow removal activities.

#### **Improving Winter Road Conditions**

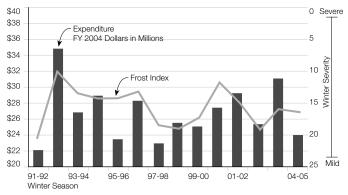
One of the best strategies to keep roadways clear of snow and ice is to prevent snow and ice from accumulating and bonding to the pavement. WSDOT does this by applying anti-icing agents. While anti-icing agents are not a cure-all for hazardous winter road conditions, they are an increasingly important complement to plow-and-sand techniques traditionally used by highway maintenance crews.

WSDOT continues to study how best to use anti-icers. One problem is that anti-icing chemicals (formulations containing magnesium chloride, for example) can cause corrosion of aluminum vehicle components. WSDOT has recommended for the past several years that people regularly wash their vehicles during winter to avoid this problem.

For more information see pages 44-46 of the *Gray Notebook*.

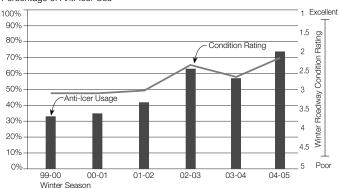
#### Winter Severity and Snow and Ice Expenditures

Dollars in Millions



## Statewide Anti-Icer Use and Winter Roadway Conditions

Percentage of Anti-Icer Use



# **Environmental Programs Inventory of Fish Passage Barriers**

WSDOT and the Washington Department of Fish and Wildlife (WDFW) have worked together since 1991 on a program to correct fish passage barriers where streams flow under state highways. Part of this program entails taking an inventory of WSDOT's 7,045 mile highway system and identifying barrier locations throughout the state. To date, the inventory has been completed on 3,405 miles of state routes or 48% of the total highway system. WSDOT has met its goal of identifying fish barriers on 700 miles for the 2003-2005 biennium and exceeded it by 500 additional miles. As of April 2005, WDFW has inspected 5,050 highway crossings and has identified 882 WSDOT-owned fish passage barriers where modification to the culvert or other water crossing would result in significant habitat gain. These barriers are blocking more than 1,164 linear miles of potential salmon breeding streams. WSDOT has removed 142 of those barriers and over 391 miles of stream habitat has been reclaimed. To achieve the full environmental value from this work. other non-WSDOT barriers will also need to be corrected in the future.

For more detail on this topic and other environmental topics such as Programmatice Permits and Air Quality see pages 47-49 in the *Gray Notebook*.



Before: A double box culvert at Jimmycomelately creek



After: A new bridge at Jimmycomelately creek.

#### **WSDOT Aviation: Annual Update**

Aviation is vital to Washington State's transportation system. With its 129 public use airports, the state's aviation system plays a crucial role in connecting people to goods and services.

## WSDOT Increases Aid to Washington Airports Over the Last Two Biennia

During the 2003 – 2005 biennium WSDOT awarded more than \$2.8 million in Local Airport Aid Grants to fund over 100 projects at general aviation airports across the state. WSDOT also leveraged state funds to obtain about \$10 million in federal money.

During the biennium, WSDOT awarded an unprecedented three rounds of Local Airport Aid Grants. Typically, only two rounds have been issued. However, a \$7 increase in pilot and aircraft registration from \$8 to \$15, and a three-cent increase in aviation fuel from \$.07 to \$.10 enabled the additional round to take place so that these new revenues could be directly applied to airport improvements.

For more detail on the grant program and other Aviation topics see pages 52-54 in the *Gray Notebook*.

#### **Airport Grant Program**

Amount Awarded in \$ Millions



#### Local Airport Aid Grants 2003-2005 Biennium Total

| Total Airport Aid Grants                  | \$2,806,199 |
|---|-------------|
| Maintenance, Security & Planning Projects | \$341,085   |
| Safety Projects                           | \$615,655   |
| Pavement Projects                         | \$1,849,459 |
| Projects                                  | 104         |
| Airports Awarded Grants                   | 74          |

#### **Innovative Water Conservation**

Long before this year's drought, Cecil Rench at WSDOT's Monroe Maintenance Facility began thinking about innovative ways to conserve water. Cecil decided to capture rain runoff from the shop and sand shed roofs. The average annual rainfall at the facility is 55 inches. About 300,000 gallons of water per year are generated by the roofs.

#### **Not Satisfied Yet**

Another opportunity arose in 2005, when the Monroe Maintenance Facility agreed to host the annual erosion and sediment control

training. Seven days of training would use about 84,000 gallons of water. A water conservation plan emerged. At the end of each day, water was pumped back to the top of the ditches for use in the next day's training. In this way, only 12,000 gallons of water were used, saving an estimated 72,000 gallons.

For more information on WSDOT's water conservation efforts see page 64 in the *Gray Notebook*.



At the Monroe Maintenance Facility, rainwater is collected off the roofs of the buildings



Then, the rainwater is filtered and pumped to two additional storage tanks

#### **Using Plain English at WSDOT**

Recently Governor Gregoire issued Executive Order 05-03, requiring state agencies to use "Plain Talk" in letters, announcements, publications, and other documents. Plain Talk means writing with everyday language, presenting information logically, composing short sentences, developing easy-to-read layout and design, and using active voice sentences that clearly show who is responsible for what. WSDOT's ongoing effort to use "Plain English" is receiving national attention through its *Gray Notebook*, and reader-friendly environmental impact statements. WSDOT employees also apply easy-to-read writing throughout the agency as part of its everyday way of doing business. Using Plain English is WSDOT's way of staying accountable to its citizens.

#### **Reader-Friendly Environmental Impact Statements**

WSDOT's Environmental Impact Statements (EISs) are developed using guidelines from a 60-plus page publication known as the *Reader-Friendly Document Tool Kit* for environmental documents. Using the principles in the tool kit, WSDOT created the *SR 99 Alaskan Way Viaduct and Seawall Replacement Draft EIS*, which recently received The National Association of Environmental Professionals' (NAEP's) 2005 President's National Environmental Excellence Award.

For more information see page 65 in the *Gray Notebook*.

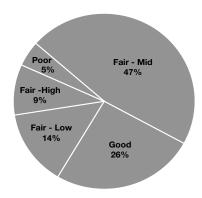
# **Asset Management: Safety Rest Areas Annual Update**

#### Safety Rest Area Conditions for 2004

In 2004 WSDOT began rating safety rest area building and site condition. WSDOT currently has 11 safety rest areas in "good" condition, with minimal deficiencies. Four safety rest areas are rated "fair-high". Twenty are rated "fair-mid". Six are rated "fair-low", having average condition with minor deficiencies requiring component renovation/replacement. Two are rated "poor" having multiple deficiencies requiring major renovation or replacement. WSDOT's goal is to have no more than 5% of the facilities rated "poor". Currently, 5% are in poor condition.

For more on safety rest areas see pages 39-43 in the *Gray Notebook*.

#### 2004 Overall Conditions of 43 Highway Safety Rest Areas



# Washington State Ferries: Quarterly Update

#### **Trip Reliability**

WSDOT Ferry System scheduled 39,586 trips during the third quarter of fiscal year 2005. Of these trips, 160 were cancelled but 29 make-up trips were made. Total completed trips were 39,455.¹ The chart at the right shows a system-wide average reliability index. Using this index, 1.3 ferry trips may be cancelled during the course of a year for a commuter making 400 trips to work 200 days per year. This suggests an average of 3.25 trips cancelled per thousand. However, the trip reliability index for the ferry system without the Keystone-Pt. Townsend route is 0.6.

For more information see pages 55-60 in the *Gray Notebook*.  $^1$  39,586 scheduled trips - 160 cancelled trips + 29 make-up trips = 39,455 total completed trips

#### **Average Missed Trips per Commuter**

| FY 2001                    | 1.6 |
|----------------------------|-----|
| FY 2002                    | 2.3 |
| FY 2003                    | 1.7 |
| FY 2004                    | 2.2 |
| FY 2005 Qtr 1              | 1.6 |
| FY 2005 Qtr 2              | 1.9 |
| FY 2005 Qtr 3              | 1.3 |
| FY 2005 Qtr 3 <sup>2</sup> | 0.6 |

A total of 66 trips were cancelled on the Port Townsend – Keystone route due to weather/tides. The Keystone terminal configuration is the cause of the tide-related cancellations and per Legislative direction, The ferry system is reviewing in-harbor options to improve reliability.

# **State-Supported Amtrak Cascades Service: Quarterly Update**

#### **On-Time Performance**

On-time performance of state-supported Amtrak *Cascades* trains was 74.4% in the first three months of 2005. This compares to 67.2% for first quarter of 2004. The slight improvement was caused by a reduction in freight interference along the shared rail corridor. Trains with the highest on-time performance during the quarter include the evening trains between Seattle and Bellingham (97.7% on-time) and Seattle and Portland (84.4% on-time). The train with the poorest performance (48.7% on-time) was the morning train between Seattle and Vancouver, BC, which continues to experience delays in the cross-border region.

See pages 61-62 in the *Gray Notebook* for more details.

An Amtak Cascades train, as seen from the top of the Tacoma Narrows Bridge

#### **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.

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, 2005 is available on line at: www.wsdot. wa.gov/accountability/graynotebook.pdf

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<sup>&</sup>lt;sup>2</sup> without Keystone-Pt. Townsend

## Beige Pages: Project Reporting on the 2003 Transportation Funding Package For the quarter ending March 31, 2005

WSDOT's Web site provides information on almost every project at www.wsdot.wa.gov/projects. The *Beige Pages* begin with guidance and instruction on how to navigate to WSDOT's on-line project pages where you can find more detailed project information. The on-line project information is updated regularly.

## Summary of 2003 Transportation Funding Package (Nickel Package) Project Advertisements, Awards and Completions

#### **Biennium to Date**

As of March 31, 2005, 35 highway projects have been advertised. Of those, 12 have been completed.

#### Recap of Twelve Nickel Projects Completed as of March 31, 2005

| <b>Project Description</b>                                    | On Time<br>Advertised | On Time<br>Completed | Within<br>Scope | On Budget (Dollars in Millions) |           |           |
|---|-----------------------|----------------------|-----------------|---------------------------------|-----------|-----------|
|   |                       |                      |                 | Planned                         | Actual    |           |
| 1) SR 9/SR 528 Intersection – Signal                          | <b>√</b>              | <b>√</b>             | <b>√</b>        | \$ 710                          | \$ 565    | 20% Under |
| 2) I-90, Cle Elum River Bridge                                | ✓                     | $\checkmark$         | ✓               | 1,272                           | 784       | 38% Under |
| 3) I-90, Geiger Road to U.S. 2 Median Barrier                 | Early                 | Early                | ✓               | 781                             | 781       | ✓         |
| 4) I-90, Highline Canal to Elk Heights – Truck Climbing Lanes | Early                 | Early                | ✓               | 4,200                           | 4,483     | 2% Over 1 |
| 5) I-90, Ryegrass Summit to Vantage – Truck Climbing Lanes    | Early                 | Early                | ✓               | 8,389                           | 8,389     | ✓         |
| 6) I-90, Sullivan – State Line Median Barrier                 | Early                 | Early                | $\checkmark$    | 1,040                           | 973       | 6% Under  |
| 7) SR 97A, Entiat Park Entrance– Turn Lanes                   | ✓                     | Early                | ✓               | 196                             | 136       | 31% Under |
| 8) SR 124, East Jct SR 12 - Reconstruction                    | ✓                     | ✓                    | ✓               | 295                             | 295       | ✓         |
| 9) I-182/U.S. 395 Interchange – Roadside Safety               | ✓                     | Early                | ✓               | 76                              | 59        | 22% Under |
| 10) SR 203, NE 124th/Novelty Road Vicinity                    | ✓                     | Early                | ✓               | 1,487                           | 1,487     | ✓         |
| 11) U.S. 395, Kennewick Variable Message Sign                 | ✓                     | Late                 | ✓               | 332                             | 308       | 7% Under  |
| 12) SR 500, NE 112th Ave Interchange                          | Early                 | Early                | ✓               | 21,300                          | 21,300    | ✓         |
| <b>Cumulative Cost to Date</b>                                |                       |                      |                 | \$ 40,078                       | \$ 39,560 |           |

#### **Definitions:**

"On Time Advertised": the project was advertised within the quarter as planned

"On Time Completed": the project was operationally complete within the quarter as planned in the 03-05 Budget.

"Within Scope": the project was completed within the specific functional intent of a project as approved by the Legislature.

"On Budget": within +/- 5% of the baseline budget.

Section 503 2004 Supplemental Budget provides the Transportation

Commission flexibility to balance project cost increases and decreases between Nickel projects, and to balance cash flow between biennia near biennial lines, as long as the adjustment does not impact the overall delivery of the ten-year program and does not involve changing the scope of any Nickel funded project.

#### **Project Details:**

1. During excavation for the new lane, a large amount of saturated clay was found; this increased the cost of construction.

#### **Biennium To Date**

1-12 Completed projects see recap above.

#### **Projects Advertised and Awarded**

- 13) I-5, 2nd St.. Bridge Replace Bridge
- 14) I-5, Salmon Creek to I-205
- 15) I-5, Roanoke Vicinity Noise Wall
- 16) I-5, Pierce County Line to Tukwila
- 17) I-5, NE 175th St. to NE 205th St. NB Lane
- 18) U.S. 12/SR 124 to McNary Pool Add Lanes
- 19) SR 16, 36th St.. to Olympic NW HOV
- 20) SR 16, HOV Improvements Union Ave to Jackson Ave
- 21) SR 18, Covington to Maple Valley Highway
- 22) SR 31, Metaline Fall to International Border
- 23) I-90, Argonne to Sullivan Rd. (includes: I-90, Argonne to Pine Road)
- 24) I-90, Eastbound Ramps to SR 18 Signal
- 25) SR 161, 204th to 176th St..
- 26) SR 161, 234th Street to 204th St. E

- 27) SR 161, Jovita Blvd. to South 360th St.
- 28) SR 240/I-182 to Richland Y Add Lanes
- 29) SR 240, Richland Y to Columbia Center Interchange
- 30) SR 395, NSC Francis Ave. to Farwell Rd.
- 31) SR 527, 132nd St. SE to 112th St. SE

#### Projects Advertised, Pending Award

- 32) SR 24, I-82 to Keys Road
- 33) SR 106, Skobob Creek Fish Passage
- 34) I-5, South 48th to Pacific Avenue Core HOV
- 35) I-5, SR 526 to Marine View Dr.

#### **Awarded Projects**

The total amount for the 31 awarded projects is \$285 million, \$19 million below the pre-bid engineer's estimate of \$304 million. Three projects have been advertised and are pending award. These projects are not included in the engineer's estimate of \$304 million.

#### **Delayed/Deferred Projects**

Ten projects that were scheduled to be advertised prior to March 31, 2005 have not been advertised.

#### **Progress on Projects to Date**

Several of the highway projects funded by the Nickel Account are now under construction or have reached other important milestones. Details can be found in the respective on-line Project Pages at www.wsdot.wa.gov/projects.

#### I-5, 2nd Street Bridge - Replace Bridge

This contract was awarded in June 2004 for \$9.3 million and is currently 45% complete. The contractor has completed the 21 shafts needed for the foundation and all the columns that will support the new bridge. The contractor is working on building the scaffolding that will support the six spans that make up the new bridge. The first concrete pour for piers 1 and 2 occurred in March 2005. The next I-5 closure to place scaffolding over I-5 will occur by early April 2005. The travel lanes on I-5 will be shifted to accommodate the columns that will support the scaffolding. This project is currently on time and within budget.

#### U.S. 12 /SR 124 to McNary Pool - Add Lanes

This contract was awarded in December 2004 for \$5.6 million and is currently 45% complete. This project constructs two additional lanes and a frontage road. It is the second of five phases that will provide a four-lane section on U.S. 12 from SR 124 to the Wallula vicinity. This is part of an overall, longrange plan to complete a four-lane highway from Burbank to Walla Walla. Work began on the second phase in January 2005. Roadway excavation, embankment compaction and crushed surfacing placement is largely complete. Construction is on schedule and within the proposed budget. The new lanes will be open to traffic by the end of August 2005.

#### **Watch List Projects**

WSDOT is giving special attention to projects where cost, schedule or scope expectations may be at risk in the project delivery process, sometimes for reasons outside of WSDOT's control. See pages 16 - 17 of the *Gray Notebook* for details on all the Watch List projects.

#### SR 9, 268th Street Intersection

This project will construct a northbound left turn lane and a southbound left turn lane from SR 9 to 268th St. in combination with two other projects on SR 9. The current construction estimate of \$3.1 million is \$1.8 million higher than the budgeted amount of \$1.3 million. The increased cost is due to unanticipated poor soil conditions under the existing roadway, which requires adding a retaining wall to protect wetland property and more traffic control to the project. A Value Engineering (VE) study will be conducted in May 2005 with special emphasis on the geotechnical issues. Results from the VE study will be reported next quarter.

#### SR 9/SR 522 to 212th Street SE (Stages 1b & 2)

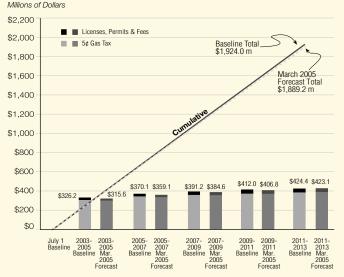
Delays in completing the design, receiving environmental permits and obtaining right of way acquisitions have resulted in a three month project advertisement slip from February to May 2005. The advertisement delay and slower than anticipated right of way expenditure will result in a deferral of \$1.5 million from 03-05 to 05-07. These adjustments will have no impact on the budget for the project or the open-to-traffic date.

#### **Revenue Forecast**

The 2003 Transportation Funding Package enacted by the 2003 Legislature included tax and fee increases. The following charts show the current projected revenues over the next ten years (for the new funding sources) as forecasted in March 2005 by the Transportation Revenue Forecast Council.

## Transportation 2003 (Nickel) Account Revenue Forecast

March 2003 Legislative Baseline Compared to March 2005 Transportation Revenue Forecast Council



## Multimodal Account (New Sources) Revenue Forecast

March 2003 Legislative Baseline Compared to March 2005 Transportation Revenue Forecast Council

