



**Washington State
Department of Transportation**

Measures, Markers and Mileposts

Gray Notebook Lite

for the quarter ending June 30, 2004

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

Douglas B. MacDonald
Secretary of Transportation



**Washington State
Department of Transportation**

Last quarter we presented our first *Gray Notebook Lite*. Here's the next edition, continuing to present key factors of "Nickel Project" delivery and also drawing on other *Gray Notebook* highlights of special interest. You can find the *Gray Notebook* on-line at www.wsdot.wa.gov/accountability/.

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.

Douglas B. MacDonald



Construction Contracts

Annual Update

This quarter's *Gray Notebook* reports on the Fiscal Year 2004 completed construction contracts for three areas: award amount to engineer's estimate, final cost to award amount, and final cost to engineer's estimate. The data shows that the difference between the award amount and the engineer's estimate has gotten smaller. The variability in cost growth between award and final cost has stayed the same. The table below is an excerpt from the *Gray Notebook*. For more information and analysis see pages 34-36.

A broad national conversation among construction engineers, documented in trade publications such as *Engineering News Record*, has noted inflated project cost trends in the past year. WSDOT is currently looking into the escalation issue on several major work items (concrete, steel and asphalt), and will highlight the results of this effort in a future *Gray Notebook*.

Awarded Contracts: Year-to-Year Comparison

	FY 2002	FY 2003*	FY 2004
Number of highway construction contracts awarded during the fiscal year	177	176	129
Total award amount for highway construction contracts during the fiscal year	\$250,561,516	\$314,534,831	\$389,592,349
Total engineer's estimate for highway construction contracts during the fiscal year	\$277,091,361	\$355,420,644	\$398,923,582
Average percent that individual awards were below the engineer's estimate	7.5%	6.5%	1.4%
Percent that the total award amount fell below the engineer's estimate	9.6%	11.5%	2.3%
Percent of combined contract value awarded below the engineer's estimate	71.0%	84.0%	55.3%
Number of contracts awarded below the engineer's estimate	129	123	85
Percent of contracts awarded below the engineer's estimate	72.9%	69.9%	65.9%

* Does not include two Tacoma Narrows Bridge contracts or the Hood Canal Bridge Contract.

Highway Construction

WSDOT has been tracking construction projects funded by the 2003 Transportation Funding Package (Nickel projects) in the *Beige Pages* for several quarters (see insert). WSDOT also has many projects from "pre-existing law" funds. Overall delivery of the Highway Construction Program is tracked and monitored against schedule projections.

The program includes 345 project construction commitments during the biennium of which 46 are Nickel projects and 299 are funded with pre-existing funds. The chart below summarizes the status to date of pre-existing projects advertised this quarter and a comparison of last quarter. For more information see the *GNB* pages 31-33.

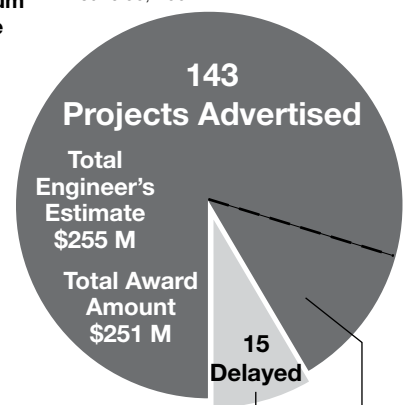
Pre-Existing Funding Projects: A Snapshot of Quarterly Progress and Total Progress to Date

End of Last Quarter
March 31, 2004



	Projects Through Last Quarter	This Quarter's Progress	Biennium to Date Total
Projects Advertised			
As Scheduled	81	13	94
Project Ads Early	9	5	14
Project Ads Late	9	23*	32
Emergency Projects	3	0	3
Total Advertised	102	41	143
* Includes 19 of the 21 <i>Late But Ready</i> projects from last quarter			
Projects Delayed			
To 2005 (Still within the Biennium)	6	6*	12
Out of the Biennium	3	0	3
Total Delayed	9	6	15
* Includes 1 of the 21 <i>Late But Ready</i> projects from last quarter			
Projects Deleted	1	0	1

End of This Quarter
June 30, 2004



Includes 19 of the 21 "Late But Ready" projects from last quarter

- These projects have been delayed due to challenges with:
- Environmental Permitting
 - Stormwater Mitigation
 - Right of Way Acquisition
 - Consolidating projects for efficiency

Worker Safety

Comparing FY 03 to FY 04, highway maintenance worker injuries increased 13.7 percent and lost workdays increased 42 percent. The number of lost workdays increased because in some cases workers were unable to return to their regular duties. Ferry vessel worker injuries decreased over the year by 9.8 percent. Workforce training courses continued to show progress but at a slower rate than the previous quarter.

Highway Safety Success: Center line Rumble Strip

Center line rumble strips provide an immediate reduction in crossover collisions on two-lane, undivided roadways. Before and after data from the first centerline rumble strip installation in Washington in 1996-7, along a 38-mile segment of U.S. 12 between the Tri-Cities and Walla Walla, shows a 57 percent drop in crossover collisions when the rumble strip cuts are one foot apart. Additional information is reported in the *Gray Notebook* on page 39.

Number of Crossover Crashes on U.S. 12 between Tri-Cities and Walla Walla After Installation of Center Line Rumble Strips



Source: WSDOT Highways and Local Programs

*The benefit vs. cost (B/C) to date (reduced collisions compared to the installation costs up to now) gives a ratio of 23:1. With no additional costs required until another new paving job (12 years from the last paver), the additional years of benefit (another 10 years out) gives a B/C ratio of 60:1.



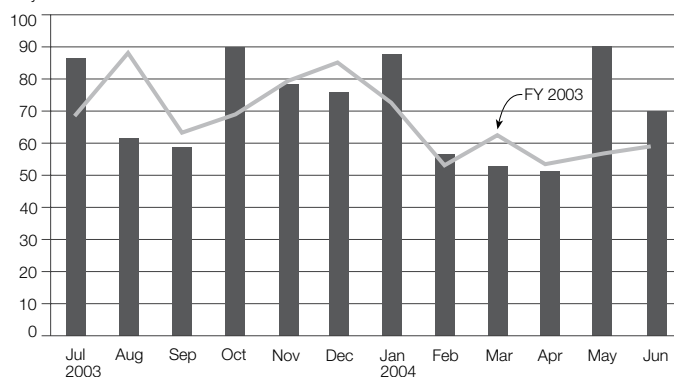
Incident Response

WSDOT's Incident Response Team (IRT) program (including contracted units) performed a total of 13,392 incident responses between March and June 30, 2004. The number of responses was up 13% from the same time last year. There were 204 over 90 minute incidents.

Example: April 27 - a downed power line on HWY 99 near 360th in King County was causing sporadic fires. WSDOT's IRT closed the right lane for emergency responders and awaited for Puget Sounds Energy to de-energize the line. WSDOT's IRT and maintenance crews provided traffic control. A total of 8.3 hours was required to clear the scene.

Number of Over 90 Minute Incidents by Month

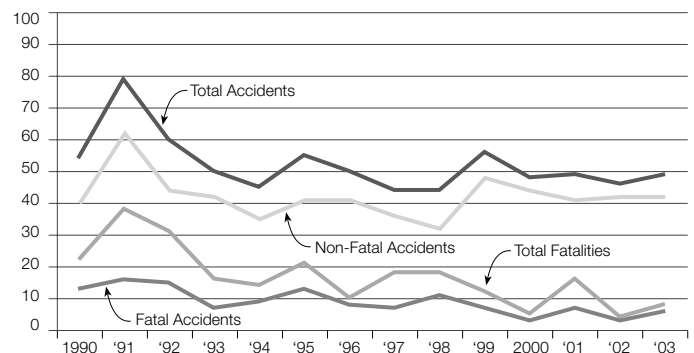
July 2003 to June 2004



General Aviation Accident Data

Over the last three years since 9/11, the number of flight hours in the nation has decreased dramatically, contributing to a decline in aviation accidents and fatalities in Washington. However, according to the Federal Aviation Administration (FAA), the number of flight hours has been increasing since 2003 and is expected to return to pre - 9/11 numbers by 2006.

Washington State General Aviation Accidents 1990-2003



Source: Annual Review of Aircraft Accidents Data, U.S. General Aviation Calendar year 1999, National Transportation Safety Board, pg. 14. The 2000 report is expected out on August 2004: <http://www.nts.gov/publicatn/2003/ARG0302.pdf>

Washington State Ferry System

On-Time Performance

Performance improved from 3.5 minutes in the fourth quarter FY 2003 to 2.7 minutes in the fourth quarter FY 2004 for average delay from scheduled sailing time (see table below).

Trip Reliability

Trip reliability improved from 1.8 missed sailings per 400 sailings in the fourth quarter FY 2003 to 1.2 missed sailing per 400 sailings in the fourth quarter FY 2004.

Customer Complaints

The total number of customer complaints was down dramatically (62 percent) from the preceding quarter making this the best quarterly performance on record.

For more information and analysis on WSF see the *GNB* 14 pages 46-49.

Rail

Amtrak Cascades

Ridership on state-supported Amtrak *Cascades* trains was 106,774 in the second quarter of 2004. This represents a 5.7 percent increase over the second quarter of 2003 and is the highest second quarter total in program history. Ridership in May and June increased 13.9 and 4.0 percent, respectively.

Washington Grain Trains

The Washington Grain Train carried 304 carloads of grain to Columbia River ports in the second quarter of calendar year 2004. This represents an 11 percent decrease when compared to the second quarter of 2003.

Washington State Ferry System On - Time Performance

Route	Fourth Quarter FY 2003			Fourth Quarter FY 2004			FY 2004		
	Number of Trips	Percent of Trips Within 10 Minutes of Schedule	All Trips Average Delay From Scheduled Sailing Time	Number of Trips	Percent of Trips Within 10 Minutes of Schedule	All Trips Average Delay From Scheduled Sailing Time	Number of Trips	Percent of Trips Within 10 Minutes of Schedule	All Trips Average Delay From Scheduled Sailing Time
San Juan Domestic	6,390	82%	4.7 Minutes	6,237	84%	2.2 Minutes	24,511	79%	5.5 Minutes
International Route	184	69%	10.6 Minutes	205	85%	4.5 Minutes	719	78%	6.9 Minutes
Edmonds - Kingston	4,441	98%	2.7 Minutes	4,479	95%	3.2 Minutes	18,001	94%	3.4 Minutes
Pass-Only Seattle - Bremerton	1,700	99%	2.4 Minutes			Minutes	1,564	97%	2.8 Minutes
Pass-Only Seattle - Vashon	1,073	97%	1.7 Minutes	984	99%	1.5 Minutes	3,951	99%	1.8 Minutes
Fauntleroy - Vashon - Southworth	10,223	87%	4.3 Minutes	9,553	91%	3.3 Minutes	39,629	91%	3.5 Minutes
Keystone - Port Townsend	2,192	91%	3.6 Minutes	2,252	91%	3.7 Minutes	8,366	88%	4.4 Minutes
Mukilteo - Clinton	6,196	97%	2.4 Minutes	6,430	98%	2.0 Minutes	25,771	98%	2.1 Minutes
Pt. Defiance - Tahlequah	2,785	89%	3.8 Minutes	2,779	98%	2.4 Minutes	11,188	95%	3.2 Minutes
Seattle - Bainbridge Island	3,964	97%	2.8 Minutes	3,909	96%	3.0 Minutes	15,731	96%	2.9 Minutes
Seattle - Bremerton	2,488	98%	2.3 Minutes	2,300	99%	2.4 Minutes	9,785	98%	2.8 Minutes
Total	41,636	92%	3.5 Minutes	39,128	93%	2.7 Minutes	159,216	92%	3.5 Minutes

Benchmarks

On August 20, 2003, the Washington State Transportation Commission adopted a set of benchmarks for measuring the performance of the state's transportation system. Legislative requirement RCW 47.01.012, established policy goals in the areas of safety, pavement, condition, bridge condition, traffic congestion and driver delay, per capita vehicle miles traveled, non-auto share of commute trips, administrative efficiency, and transit cost efficiency. These policy goals are the basis of the performance benchmarks discussed in this *Gray Notebook*, see pages 53-56 for the annual update of these benchmarks.

The information presented here is a snapshot of what you'll find in the full version of the *Gray Notebook*. For detailed information, please refer to the unabridged copy (June 30, 2004) always available on line at:

www.wsdot.wa.gov/accountability/

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Cover photos:
left to right; the ferry Wenatchee approaches Pier 52 in Seattle, Incident Response Truck, Amtrak Cascades, U.S. 395 in Stevens County.

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Stay tuned for the next issue of the *Gray Notebook* for WSDOT's annual update on Measuring Congestion.