

Transportation GMAP August 9, 2007

I. Project Delivery

Since we last reported to the Governor and her leadership team in May, WSDOT has delivered an additional 16 Nickel and TPA projects, for a cumulative total of 92.

On Time

- 91% (82 of 92) were delivered on time

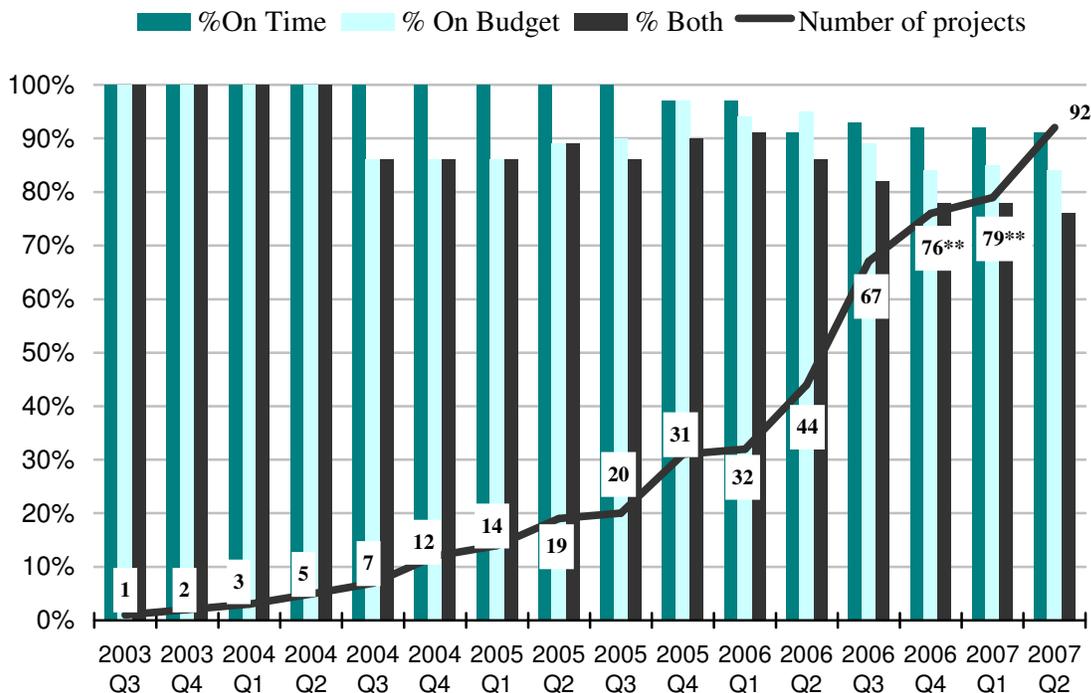
On Budget

- 84% were delivered on budget (76 of 92)
- Programmatically, WSDOT has successfully managed to budget expectations. Based on the 2006 Supplemental Transportation Budget, WSDOT was within 99.6% of budget expectations for all of the 92 projects that have been completed. Legislative expectations were \$768.8 million, and projects have been delivered for \$771.9 million as of 6/30/07.

On Time and On Budget

- WSDOT has delivered 76% of the 92 (69 of 92) Nickel and TPA projects completed both on time and on budget
- WSDOT delivered the \$849 million Tacoma Narrows Bridge on time and on budget. Also of note since the May forum, WSDOT completed the \$118 million SR 16/I-5 to Tacoma Narrows Bridge (Add HOV Lanes) project on time and on budget. This is the largest Nickel project completed to date, and in conjunction with the new Tacoma Narrows Bridge, will provide greater capacity that will provide faster and safer travel through the corridor and improve access to surrounding communities.

*Cumulative Performance for Nickel and TPA projects**



*Data pending biennial close-out and may change

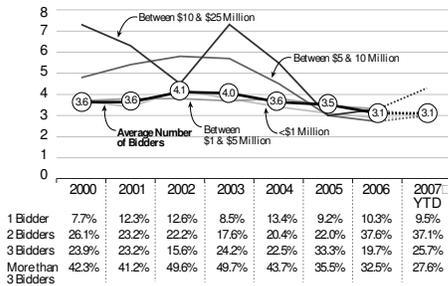
**For details on updated data for 2006 Q4 and 2007 Q1, see p. 13.

Transportation GMAP August 9, 2007

By the end of 2007, WSDOT will have completed over 30 additional Nickel and TPA projects. These projects, and the results of the current construction season, will be reported at the December forum.

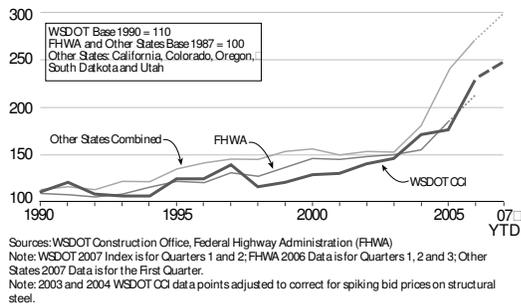
Bidding Climate and Construction Cost Index

Average Number of Bidders
By Size of Contract



Data Source: WSDOT Construction Office

Construction Cost Indices
Washington State, FHWA, and Other States



- In May, we reported that the national Associated General Contractors' chief economist estimated that material costs may increase by 6% – 8% by year's end. The Washington CCI has increased 7% in the first two quarters of 2007 above the 2006 annual average. Much of this increase is attributable to the rise in hot mix asphalt prices, which have increased 9% during the first two quarters of 2007. WSDOT will continue to monitor and report this information in the *Gray Notebook* and at future GMAP forums.
- The average number of bidders remained unchanged from the 2006 average of 3.1. WSDOT's challenges in attracting bidders are not unique: the *Puget Sound Business Journal* noted in April that due to the high volume of work in Washington, local contractors are choosing not to bid on work for public agencies, which typically have more regulations than private sector work. To address the challenging bidding climate, WSDOT has continued implementing strategies to make the agency a customer with whom contractors want to do business.

Actions: Update

WSDOT uses a variety of approaches to mitigate rising construction costs. Two of the efforts underway include the hot mix asphalt and fuel escalation clauses, both of which are intended to transfer risk from contractors to the state. These clauses reduce the effect of cost uncertainty on contractors' bids, and are hoped to result in contractors submitting lower bids.

Transportation GMAP August 9, 2007

HMA escalation clause

- WSDOT implemented an asphalt escalation clause in September 2006, and has awarded eight contracts with this clause as of 6/30/07.
- Based on the results of these projects, the HMA Escalation Clause has performed as WSDOT expected. Bids submitted by contractors for these multi-season jobs containing HMA are currently within 10% of the average price for HMA submitted by contractors which includes both single season and multi-season projects

Status: To date WSDOT has not made any payments as a result of the clause.

Fuel escalation clause

- In December 2006, WSDOT implemented a fuel escalation clause for projects lasting longer than 200 working days.¹ Like the HMA clause, this transfers risk from the contractor to the state, reducing the effect of cost uncertainty on contractors' bids, which may result in contractors submitting lower bids.

Status: WSDOT has awarded nine contracts that contain this provision to date. Two contracts have triggered payments to contractors totaling approximately \$21,300 due to the clause.

2. When appropriate, Utilize Design-Build Contracts

Status: This is an ongoing practice used by WSDOT when appropriate. If requested, WSDOT can provide further information in future GMAP forums.

3. Utilize Alternate Contract Methodologies to Maximize Value Within Budgeted Dollars

Status: Contracting methods, such as Additive Alternates method we discussed in May, are used by WSDOT when appropriate. If requested, WSDOT can provide further information on contracts using this method in future GMAP forums.

4. WSDOT pursued legislation this session to make the requirements for surety bonds on large construction projects more flexible.

- WSDOT-request legislation was not passed this past session, but will be pursued in 2008.

Status: No new action to report until the 2008 legislative session.

¹ This clause is used at the discretion of the WSDOT regions.

Transportation GMAP

August 9, 2007

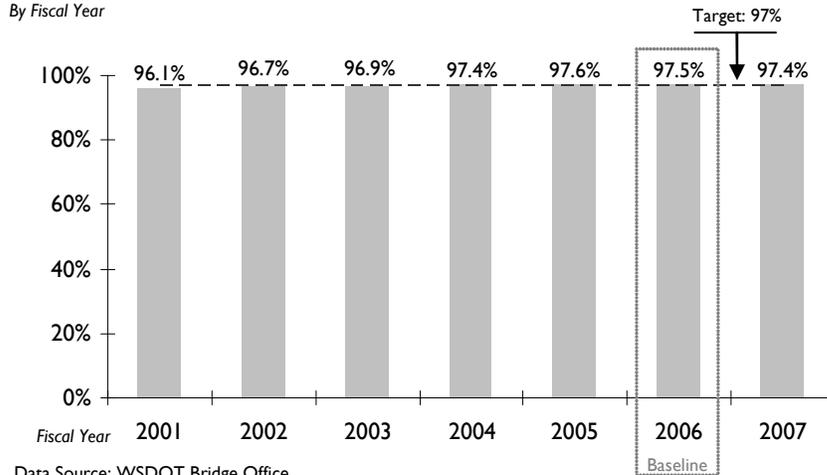
II. Bridge Conditions

In the May forum, we presented FY06 bridge condition data. This GMAP presents updated data for FY07. The Cabinet Strategic Action Plan goal is to maintain 97% of all bridges statewide at a condition rating of good or satisfactory (fair). This measure is based on data provided in the Comprehensive Annual Financial Report, which reports the condition of bridges, ferry terminal structures, and culverts.² For FY07, 3,030, or 97.4%, of the state's 3,112 bridge structures are in good or fair condition. The 2.6% of structures rated as "poor" is slightly higher than FY06 (2.5%).³

- The FY07 assessment shows 82 bridges classified as "Poor" compared to 78 in FY06.
 - This includes 10 bridges that are now classified as poor which were classified as good/satisfactory condition in FY06.
 - Six bridges that were rated poor in FY06 have been rehabilitated and are now assessed as good/satisfactory.

Bridge Structures in Good and Fair Condition: As of FY 2007, 97.4%
of Bridges are in Good or Fair Condition

By Fiscal Year



Data Source: WSDOT Bridge Office

Comments: Based on an annual inspection of 50% of all state bridge structures.

Bridge condition ratings for 2007 are reported in the June 30, 2007 Gray Notebook.

With the recent collapse of the I-35W Bridge in Minnesota, much of the national discussion has focused on bridges classified as structurally deficient. *Structurally deficient* means that a bridge requires repair, or that a certain component need replacing, such as cracked or spalled concrete or in some cases, the entire bridge itself. Structurally deficient bridges are distinguished from bridges in *poor condition*, which have deficiencies in either the superstructure—the steel support beams that hold up the deck, or the substructure—the piers and columns that make up the foundation.

² The rating system is based on criteria established by the Federal Highway Administration.

³ In May, we reported that 3,010 out of 3,088 structures were in good or fair condition based on FY06 data.

Transportation GMAP
August 9, 2007

- A structurally deficient rating does not imply that the bridge is in danger of collapse or unsafe to the traveling public. There are 122 bridges rated structurally deficient, 82 of which are rated as being in poor condition. The remaining forty structurally deficient bridges are not rated as poor, but instead have issues related to the bridge deck.
- No bridge that is currently rated as poor is unsafe for public travel. If a bridge's condition prevents it from safely carrying its intended traffic loads, WSDOT may restrict its weight capacity. However, bridges WSDOT determines to be unsafe are closed to traffic.

For additional detail, WSDOT's complete FY2007 Bridge Assessment can be found at: <http://www.wsdot.wa.gov/Accountability/bridges>

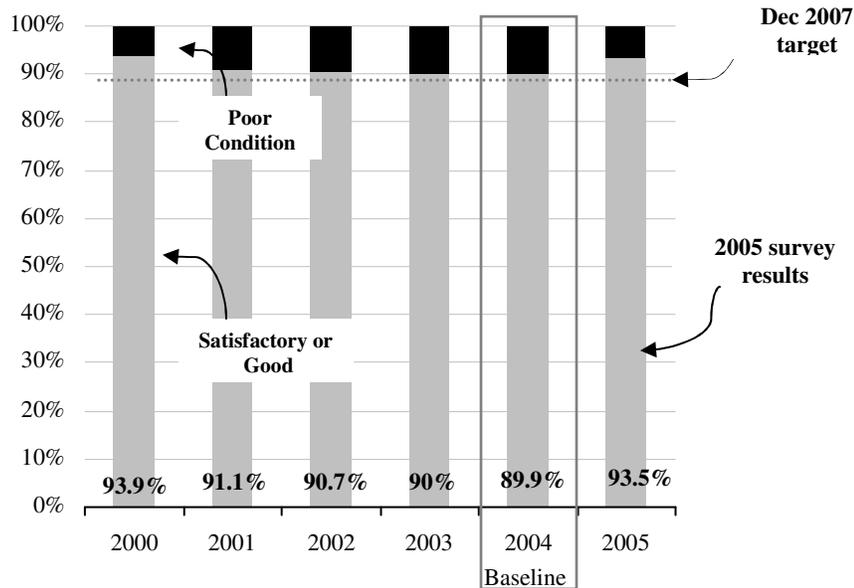
Actions: Update

- The State's ability to address deficient bridges is highly dependent on federal aid program funding.
- Currently, WSDOT is funded and programmed to replace one bridge and to repair three bridges by contract before December 31, 2007.
- Per the Governor's request, WSDOT prepared an update of the condition of the state's bridges. Interim Secretary Hammond provided this to the Governor and her staff on August 6.

Transportation GMAP August 9, 2007

III. Pavement Conditions

The Cabinet Strategic Action Plan goal for pavement is to maintain 90% of all state highway pavements in good or fair condition.



Note: Data has not changed from the May forum. Data for 2006 will be presented at the December Transportation GMAP.

Update: University of Washington Study

As we discussed in May, the need to replace 600 lane miles of concrete in the next 10 years is an issue of concern that underlies the current condition rating. The I-5 concrete deterioration study discussed in May is currently proceeding as planned, with an anticipated final report due December 31, 2008. The following are key study milestones:

- The University of Washington assisted in developing selection criteria and pavement repair locations for the I-5 rehabilitation project, a \$21 million pavement repair project that will be completed by December 2009.
- In July 2008, the study team will test and evaluate existing concrete slabs north of Seattle that have been in place since the mid-1960s. This location was also tested in 1986 as part of another concrete pavement study. Testing the same slabs provides an assessment of the concrete pavement performance over the last 21 years.
- Review of the various concrete pavement rehabilitation treatments.
- Review of the Washington State Pavement Management System for any insight in aiding the pavement condition prediction process (i.e. prediction of cracking trends).

One important consideration with any research project is the potential that the research may not obtain the desired outcomes. For example, with this study, it may not be

Transportation GMAP
August 9, 2007

possible to develop a reliable prediction of concrete pavement performance. This would certainly not be the result of effort or capabilities of the researchers or WSDOT, but the inability to predict how a given pavement will perform under a variety of truck traffic volumes, materials properties, air temperatures, etc.

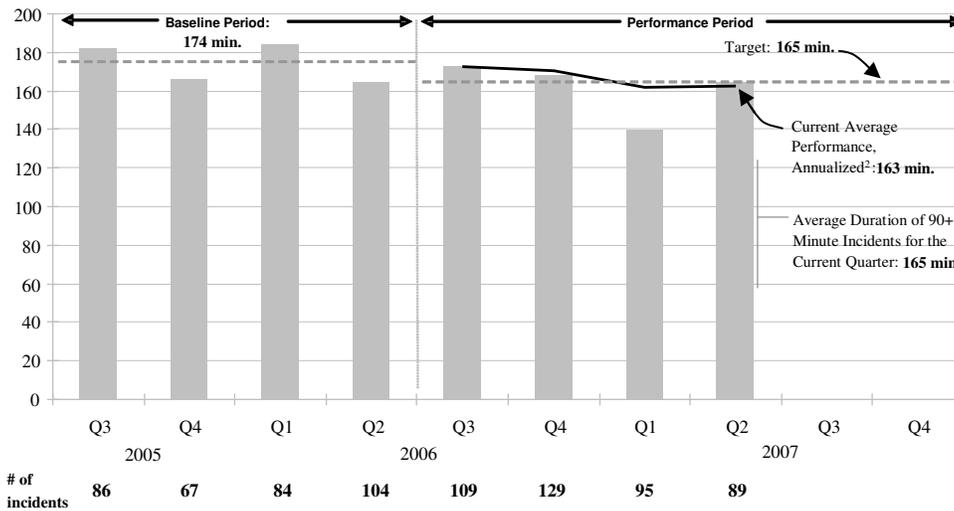
If the research is successful, WSDOT will conduct a variety of calibration/validation scenarios to determine the prediction model's effectiveness on all concrete pavements in Washington State. If all goes according to plan, the new prediction models would be incorporated into the 2009 or 2010 Washington State Pavement Management System.

Transportation GMAP August 9, 2007

IV. Incident Response

WSDOT and WSP continue to work together to reduce the duration of incidents lasting over 90 minutes by 5%. After incorporating last quarter's data, the annualized average for the performance period is 163 minutes. This is up one minute from last quarter; however, the average remains two minutes below the Cabinet Strategic Action Plan goal.

Cabinet Strategic Plan Goal: Reducing the Average Clearance Time for Incidents Lasting 90 Minutes or Longer On Nine Key Highway Segments ¹
In Minutes



The 90+ minute average for the most recent quarter was **165 minutes**. The annualized average, tracked for the Cabinet Strategic Action Plan, is **163 minutes**.

Source: 2005-WSDOT Incident Response Tracking System; 2006-WSP- Computer Aided Dispatch System and WSDOT IRT System.
 1-Selected Key Highway Segments –1-5 (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.
 Data Comments: 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.

Actions: Update

1. WSDOT and WSP are working with Fire, EMS, Towing, and other stakeholders to become one of the first states to ratify and develop a plan to implement the National Unified Goal for Traffic Incident Management. A Washington Traffic Incident Management coalition to oversee implementation of the NUG will be created by September 2007.

Status: No new action to report until September.

2. Increase the number of counties allowing offsite extrications of deceased by July 2007.

Status: There are now 14 counties that provide guidelines for expediting removal of the deceased from fatality collisions. This is up from the 12 reported in May.

Transportation GMAP
August 9, 2007

3. WSDOT *2007-09 Budget* includes funding for a tow performance program for heavy trucks, beginning July 2007.

Status: Five tow companies have signed on to participate in the Major Incident Tow (MIT) towing incentive program. No incentives have been paid as a result of the program in its first month of operation.

There are about 40 companies with at least one class C tow in the King, Pierce, and Snohomish area, but few that can meet the increased training and equipment standards required by the MIT program. In order to enable to widest participation, the program allows tow companies to partner with other companies to meet the minimum equipment standard—a concept that has been very successful in Florida. Hopefully, the program will encourage more companies to work to meet the increased training and equipment standards needed to participate.

4. WSDOT and WSP implemented an Instant Towing program in August 2006 that is set to run through October 2007 (the date for the expiration of all towing contracts). The program dispatches tow trucks with WSP troopers simultaneously, rather than waiting for verification of the incident by a trooper.

Status: The Instant Tow program has been expanded county-wide in King County. WSDOT and WSP are analyzing preliminary data on the program's performance and will determine whether it should be continued beyond October.

Transportation GMAP
August 9, 2007

V. Highway Maintenance

Update: Cabinet Questions Related to the Calculation of Statewide MAP Averages

WSDOT is aware of the Governor's Office's questions concerning the Maintenance Program's calculation of the statewide average for the 33 activities reported annually. WSDOT is assessing other methods of reporting performance to display the variability across the six WSDOT regions.

In addition, this is one of four WSDOT programs that the State Auditor's Office is assessing as part of its WSDOT Highway Program Performance Audit. It is anticipated that the audit will make recommendations on the Maintenance Accountability Program.

Actions: Update

The Cabinet also raised questions about when the actions reported at the May forum would be completed. Due to limitations of the DataView system, all actions were reported as of June 2009—the end of the current biennium. WSDOT can report the following progress:

- Analyze maintenance budget to determine if funds can be shifted.

Status: The six regions are finalizing their detailed plans for the upcoming biennium based on the results of the 2006 MAP report. The finalized plans will be completed and in place by the end of August 2007.

- Develop optimal preventative maintenance schedule.

Status: Several maintenance activities are tracked through a single information management system which records repairs completed. WSDOT recently improved the system to also track preventative maintenance work completed, which allows the department to develop an optimal preventative maintenance schedule to proactively accomplish this work and potentially reduce the required repairs.

- Signals, Highway Lighting, Urban Tunnels and Intelligent Transportation Systems will each report "Preventative Maintenance" service levels as well as the current-outcome based measures in CY 2007 MAP reports.
- Preventative maintenance schedules are in the process of being developed for Moveable Bridges. WSDOT anticipates on reporting this measure in future MAP reports.

Transportation GMAP
August 9, 2007

This chart to the right displays CY06 statewide maintenance activity results sorted by priority, as was requested at the May forum. CY07 results will be available in January 2008, and will also report preventative maintenance targets and performance on activities described on page 10.

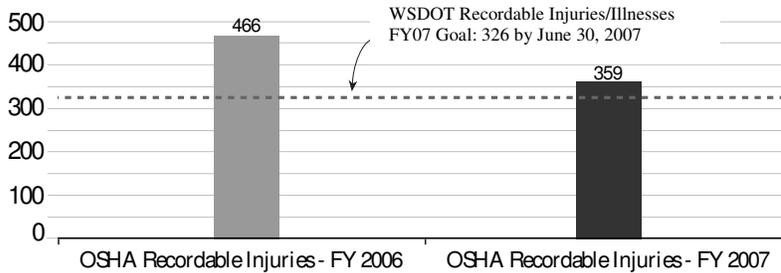
Activity	CY06: Achieved	CY06: Not Achieved
Movable & Floating Bridge Operations	x	
Disaster Operations	x	
Traffic Signal System Operations		x
Snow & Ice Control Operations	x	
Keller Ferry Operations	x	
Urban Tunnel Systems Operations	x	
Structural Bridge Repair	x	
Regulatory/Warning Sign Maintenance	x	
Slope Repairs	x	
Intelligent Transportation Systems(ITS)		x
Maintain Catch Basins & Inlets	x	
Pavement Patching & Repair	x	
Bridge Deck Repair	x	
Guardrail Maintenance*	x	
Pavement Striping Maintenance	x	
Raised/Depressed Pavement Markers	x	
Control of Vegetation Obstructions	x	
Rest Area Operations	x	
Sweeping and Cleaning	x	
Maintain Ditches	x	
Highway Lighting Systems		x
Guidepost Maintenance	x	
Safety Patrol	x	
Maintain Culverts	x	
Permits/Franchises	x	
Pavement Marking maintenance	x	
Noxious Weed Control	x	
Shoulder Maintenance	x	
Guide Sign Maintenance	x	
Maintain Detention/Retention Basins	x	
Bridge Cleaning & painting	x	
Nuisance Vegetation Control	x	
Landscape Maintenance	x	
Crack Sealing	x	
Litter Pickup	x	

Transportation GMAP August 9, 2007

VI. Worker Safety

WSDOT established a goal of reducing OSHA-recordable injuries by 30% during FY07. While WSDOT did not achieve its goal, injuries decreased 23% during this time period for a total of 107 fewer recordable injuries and illnesses.⁴

Goal to Reduce All OSHA Recordable Injuries and Illnesses by 30% by the End of FY2007



Actions: Update

WSDOT held its second all staff Safety Stand Down on July 25 to focus on our "state of safety" at WSDOT. Interim Secretary Hammond announced the agency's new target to reduce recordable injuries from the FY 2006 total of 466 injuries by 50% in FY 2008. The stand down can be viewed at:

<http://media.wsdot.wa.gov/asx/gen/video/safety/webcast07.wmv>

WSDOT will focus on preventing sprains and strains, particularly those resulting in musculoskeletal disorders associated with ergonomic hazards and those caused by slips, trips, and falls. Since susceptibility to these disorders is associated with one's physical condition, part of WSDOT's mitigation plan integrates components of an Employee Wellness program, such as stretching and exercise before performing physical work and emphasizing personal responsibility in staying fit for the job they do.

WSDOT believes that hearing loss is 100% preventable, and has adopted a policy requiring any employee exposed to noise levels at or above 85 decibels to wear hearing protection. To assist employees in determining the noise levels to which they are exposed, WSDOT distributed 425 sound level meters to work units and is making hearing protection devices readily available to all exposed employees.

Safety accountability at every level of the organization is also another critical component of WSDOT's enterprise risk management approach. During the safety stand down, all employees were required to discuss and implement the requirements of the new performance management program for both WMS and non-WMS employees which has safety behavior as a core competency.

⁴ This measure only applies to WSDOT employees.

Transportation GMAP **August 9, 2007**

ADDENDUM: Project Delivery Data Update

In the course of preparing this GMAP presentation, the following updates were made to figures reported in the previous Transportation GMAP:

In the fourth quarter of 2006, WSDOT reported three projects as over budget. These projects have subsequently been determined to be on budget, and impact the number of projects that are reported as “On Budget” and “Both On Time and On Budget”. The projects are:

- I-5/SB Ramps at SR 11/Old Fairhaven Parkway – This project had additional work performed by the local jurisdiction, at their request and their funding. This extra work was previously incorrectly reported as a budget overrun. Figures have been adjusted to reflect this error.
- US 97/Ellensburg to Tonasket – after project close outs were completed, this project fell within the five percent budget threshold to be considered on budget.
- SR 194/SW of Colfax - after project close outs were completed, this project fell within the five percent budget threshold to be considered on budget.

The I-5/SB Ramps at SR 11/Old Fairhaven Parkway reporting error was included in the March 31 edition of the *Gray Notebook* and has subsequently been updated for this GMAP.