Highway Construction Program

Monthly Delivery Progress Report Watch List

February 2017

This report focuses on Capital Highway Program projects, which have, or may have significant changes in scope, schedule, or budget. These projects are reported monthly by CPDM to identify when and how these delivery issues are resolved.


This report sorts projects into three categories: new projects being reported on, changes from last month, and projects previously reported that have no changes and are not yet resolved.

- **New projects this month.** These projects have been added to the watch list due to potential changes or issues in scope, schedule, or budget. This category also includes projects with changes that occurred and were resolved within the current month.

- **Changes from Prior Month.** Changes discussed in this section were on the previous month's watch list and have other issues that have happened; or they may have been resolved.

- **No Changes from Prior Month.** These projects were on the previous month's watch list and are being followed while an issue is in the process of being resolved.

- **Projects are Removed** when delivery has been delayed out of the Six-Year Plan, when delivery has been attained, or when a significant issue has been mitigated and/or approved by WSDOT.

For additional information on scope, schedule and budget for all projects, please visit WSDOT’s project pages. This is the link that leads to the websites of individual projects: http://www.wsdot.wa.gov/projects/search/

To search for a particular project, please enter the state route, county, project title or PIN.
Summary

Delivery Progress Report Summary Table as of February 28, 2017, with issues based on a monthly update.

New in February 2017

<table>
<thead>
<tr>
<th>Project</th>
<th>Phase/Issue</th>
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<tbody>
<tr>
<td>I-5/NB S 260th St to Duwamish River Bridge - Concrete Pavement Rehab (King) 100506G</td>
<td>Construction: cost increase</td>
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<tr>
<td>I-5/Northbound Boeing Access Rd to NE Ravenna Bridge - Pavement Repair (King) 100515B</td>
<td>Construction: cost increase, schedule delay</td>
</tr>
<tr>
<td>I-82/Red Mountain Vicinity - Construct Interchange (Benton) 508207R</td>
<td>Design: schedule delay</td>
</tr>
<tr>
<td>SR 518/Des Moines Memorial Drive - Interchange Improvements (King) 151801K</td>
<td>Design: schedule delay</td>
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Changes from Prior Month

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<td>I-5/NB I-90 Vic to James St Vic - Concrete Pavement Replacement (King) 100519B</td>
<td>Construction: cost increase, schedule delay</td>
</tr>
<tr>
<td>I-5/NB Spokane St to Lake WA Ship Canal Bridge - Special Bridge Repair (King) 100522C</td>
<td>Construction: cost increase, schedule delay</td>
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<td>Design: scope change, design element</td>
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<td>Design: scope change, design element</td>
</tr>
<tr>
<td>SR 99/S King St Vic to Roy St - Viaduct Replacement (King) 809936E</td>
<td>Construction: cost estimate, schedule update</td>
</tr>
<tr>
<td>US 395/North Spokane Corridor - New Construction (Spokane) 600015A (CWA Revenue Package)</td>
<td>Design: schedule delay</td>
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### Removed in February 2017

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### Project Detail

Below is the detail behind the above summary.
New in February 2017

I-5/NB S 260th St to Duwamish River Bridge - Concrete Pavement Rehab (King) 100506G

**Issue:** Continuing pavement deterioration has worsened and increased the project’s costs. This project is being reported and removed from this list.

This project rehabilitates the concrete pavement along northbound I-5 from South 260th Street to the Duwamish River Bridge. It replaces about 440 broken concrete panels, repaves about four miles of asphalt between SR 516 and South 178th Street, grinds off ruts and bumps, replaces eight expansion joints, and rehabilitates the Interurban Avenue and Duwamish River bridge decks.

The current cost estimate has increased by $8.9 million, from $30.9 million to $39.8 million. The increase is mainly due to the concrete pavement deteriorating more than anticipated. An updated engineers’ estimate at advertisement reflected the revised unit bid quantities and costs. Finally, WSDOT received high bids, which increased the cost at award.

I-5/Northbound Boeing Access Rd to NE Ravenna Bridge - Pavement Repair (King) 100515B

**Issue:** The cost estimate has increased by $3.7 million. The operationally complete date is delayed 10 months to fall 2019. This project is being reported and removed from this list.

This project repairs the concrete pavement through select panel replacements and diamond grinding concrete pavement surfaces along the full width of northbound I-5, from NB I-90 to James Street Vicinity. It will address roadway drainage through grinding and paving the inside and outside shoulders, adjusting catch basins and junction boxes as needed, as well as paving 20 mainline ramps.

The current cost estimate has increased by $3.7 million, from $13.2 million to $16.9 million. An updated engineer's estimate reflects additional reinforced concrete panel replacement work and bridge approach slabs. Also added to the project was a contract incentive to reduce the number of weekend closures. Further increases included an update of unit bid prices on several bid items, based on recent projects’ costs.

Due to recent expansion joint failures, WSDOT began looking for opportunities to reduce delays to the traveling public and gain construction efficiencies. As a result, 37 expansion joints on seven bridges on I-5 were identified and added to the I-5/NB Spokane St to Lake WA Ship Canal Bridge - Special Bridge Repair (100522C) project. This added work increased the construction duration for the Design-Build project from one season to two, delaying the operationally complete date by one year from fall 2018 to fall 2019.
**I-82/Red Mountain Vicinity - Construct Interchange (Benton) 508207R**

**Issue:** Delays with attaining the Interchange Justification Report (IJR) approval has delayed the project start by two years. This project is being reported and removed from the list.

This project will construct a new interchange on I-82 east of Benton City. The new interchange will provide direct access to West Richland and the surrounding Red Mountain area, and a new connection to SR 224. This improved access for the 1.5-mile section on the I-82 corridor east of Benton City to the I-182 junction is critical for continuing economic development.

WSDOT is working with the Federal Highway Administration (FHWA) on preparation of a required Interchange Justification Report (IJR). The IJR effort is being accomplished under the I-82/Red Mountain Vicinity - Pre-Design Analysis (508207M) project and this process is taking longer than originally anticipated. Additional study and analysis of the Tri-Cities road network is being prepared in cooperation with the local Metropolitan Planning Organization to support the IJR.

Due to the delay with attaining IJR approval, the project start was delayed by two years from fall 2015 to fall 2017, which has delayed the right-of-way certification and advertisement by one year to fall 2019, and operational completion by one year to summer 2020.

**SR 518/Des Moines Memorial Drive - Interchange Improvements (King) 151801K**

**Issue:** The construction duration changed has delayed the operationally complete date by one year. This project is being reported and removed from this list.

This project will add a new two-lane off-ramp from eastbound State Route 518 that will cross over 8th Avenue South and join Des Moines Memorial Drive. The new off-ramp will provide direct access for freight and drivers using State Route 509 to Des Moines Memorial Drive. The project’s cost, estimated at $13.5 million, will advertise in spring 2017.

Originally, the construction phase was planned to be completed in fall 2017, in one construction season. During design, an error in the construction duration schedule was identified. Projects with bridge work typically need two construction season. As a result, the construction duration has changed from one to two seasons, which has delayed the operationally complete date by one year from fall 2017 to fall 2018.

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**Changes from Prior Month**
Changes from Prior Report: The cost estimate has increased by $1.9 million. The operationally complete date is delayed 10 months to fall 2019. This project is being reported and removed from this list.

Previously reported: This project was combined with a larger, single Design-Build contract (I-5/NB Martin Luther King Jr Way to NE Ravenna Br - Pavement Repair & More) to gain construction efficiencies and minimize associated traffic impacts. This delayed the construction delivery by one year, delaying the advertisement date to fall 2016 and the operationally complete date to fall 2018.

Update to the August 2016 report: An updated engineer’s estimate reflects an increase to the unit bid prices on several items, based on recent projects’ costs. The estimated cost has increased by $1.9 million, from $7.4 million to $9.3 million.

Due to recent expansion joint failures, WSDOT began looking for opportunities to reduce delays to the traveling public and gain construction efficiencies. As a result, 37 expansion joints on seven bridges on I-5 were identified and added to the I-5/NB Spokane St to Lake WA Ship Canal Bridge - Special Bridge Repair (100522C) project. This added work increased the construction duration for the Design-Build project from one season to two, delaying the operationally complete date by one year from fall 2018 to fall 2019.

Changes from Prior Report: WSDOT advanced the replacement of six additional expansion joints, and increased the cost estimate by $781,000. The operationally complete date is delayed by one year to fall 2019. This project is being reported and removed from this list.

Previously reported: Due to recent expansion joint failures, WSDOT began looking for opportunities to reduce delays to the traveling public and gain construction efficiencies. As a result, 31 expansion joints on seven bridges on I-5 near this project were identified as needing replacement and were added to this project. The additional work expanded the project limits by five miles and increased the cost estimate by $3.9 million, from $271,000 to $4.2 million. This work can be accomplished within the original schedule and is on track to be advertised in fall 2016 and operationally complete in fall 2018.

Update to the March 2016 report: Further analysis identified an additional six expansion joints needing replacement within the current project limits. In addition, the engineer’s estimate was updated to reflect current unit bid prices on several items. The estimated cost has increased by $781,000, from $4.2 million to $5 million.
In addition, adding the expansion joint work to the existing Design-Build project has increased the construction duration from one season to two, delaying the operationally complete date by one year from fall 2018 to fall 2019.

**No Changes from Prior Month**

**I-5/SR 510 Interchange - Reconstruct Interchange (Thurston) 300502C**

**Status: No Change**

Previously reported: WSDOT is requesting a scope change to remove the specific interchange type 'Single Point Urban Interchange' (SPUI) from the project description.

The available funding for the project is not sufficient to construct an SPUI. Additionally, traffic modeling indicates that a Diverging Diamond Interchange (DDI) performs better and at a significantly reduced project cost. The lead project proponent, the City of Lacey, was part of the Value Engineering workshop that recommended the proposed change. The City Council is in full support of constructing a Diverging Diamond Interchange.

**SR 14/West Camas Slough Bridge-Bridge Widening (Clark) 401419A**

**Status: No Change**

Previously reported: WSDOT is requesting a scope change on this project that will defer the improvements and shift funding.

Originally, this project was to widen and retrofit the bridge to increase capacity and reduce travel time to accommodate expected residential, commercial, and industrial growth on SR 14. The agency request is to defer the SR 14 West Camas Slough Bridge and shift the funding to another project on the SR 14 Corridor. Funding will go towards addressing congestion on SR 14 from the SR 14/I-205 Interchange to SE 164th Avenue. Initial concepts for the project include constructing auxiliary lanes in both directions between the interchanges and modifying the ramp configuration from I-205 to eastbound SR 14.

Community engagement and practical solution implementation will further refine the scope and operational elements of the project. The cities of Vancouver, Camas, and Washougal as well as the Port of Camas/Washougal support this proposed change and are committed to working with WSDOT to identify the best application of these funds to reduce traffic delays along SR 14.
Status: No Change.

Previously reported: The original tunnel contract opening date was November 2016. The Seattle Tunnel Partners (STP), the design build contractor, first delayed the opening to spring of 2018. According to their new schedule, the estimated completion date for the tunnel is November 2018. After STP hands over the tunnel to the state, work must be done to connect the new tunnel to SR 99 in the south and Aurora Avenue North in the north. Based on STP’s schedule, WSDOT estimates the tunnel would be open to traffic in early 2019. The state cannot verify STP’s schedule.

Based on a preliminary review of the budget, the program anticipates a cash-flow need of up to $60 million in the 2017-19 biennium, to ensure continued progress. Looking toward completion of the viaduct replacement program, the program estimates a total provisional budget need of $223 million. Funds from litigation, insurance claims, and savings from unpaid early completion incentives may offset some of the costs. Due to litigation, funding sources may not be resolved until after the tunnel is open to traffic.

Update to the November 2016 report: The Program completed a Cost Risk Evaluation that included statistical modeling to update the total program budget. The program total budget need was reduced to $167 million (from $223 million). Of this amount, $18 million will be covered by local funding.

For more updates on the Alaskan Way Viaduct Replacement project, please see the Alaskan Way Viaduct website at http://www.wsdot.wa.gov/projects/viaduct/

US 395/North Spokane Corridor - New Construction (Spokane) 600015A

Status: No Change

Previously reported: WSDOT must find an alternative to capping and covering a railroad black tank site.

This roadway project completes the corridor from Francis Avenue to an interim connection with I-90. In addition, it would complete the corridor to the Trent Avenue Interchange.

The original plan for this project was to cap and cover the railroad's black tank site and build the roadway over the top. The Department of Ecology no longer supports this solution. Options for cleaning up the Bunker C heavy fuel that is 170 feet underground have not been determined yet.

The cleanup of the site may take seven years to complete and will delay the project at least this amount of time. If the roadway alignment is moved to go around the site, there
will be an additional cost, estimated at $20 million, and WSDOT is likely to see public resistance to it. WSDOT is currently considering alternatives.