



# STATE ROUTE 520

## CONSTRUCTION PROGRESS REPORT

### JUNE 2014



*Aberdeen: Setting precast panels for Pontoon L*



*Floating Bridge & Landings: Building crossbeam falsework*



*West Connection Bridge: Aerial view of bridge construction*



*Eastside: Westbound 92nd Avenue NE transit station*

DATE PUBLISHED: JULY 30, 2014





*Floating Bridge & Landings: Pontoons U and V, looking west*



*Aberdeen: Cycle 4 pontoons prepping for float-out*

Executive Summary.....	3
<b><u>ACTIVE CONSTRUCTION PROJECT REPORTS</u></b>	
Pontoon Construction Project (PCP).....	6
Eastside Transit and HOV.....	11
Floating Bridge and Landings (FB&L).....	16
West Connection Bridge (WCB).....	22
DBE/Apprenticeship/Training*.....	27
Right of Way/Drawbridge Openings*.....	28
Sustainability*.....	29
Communications and Outreach*.....	30
Jobs*.....	31
Glossary of Terms.....	32

*\*Information reported quarterly*

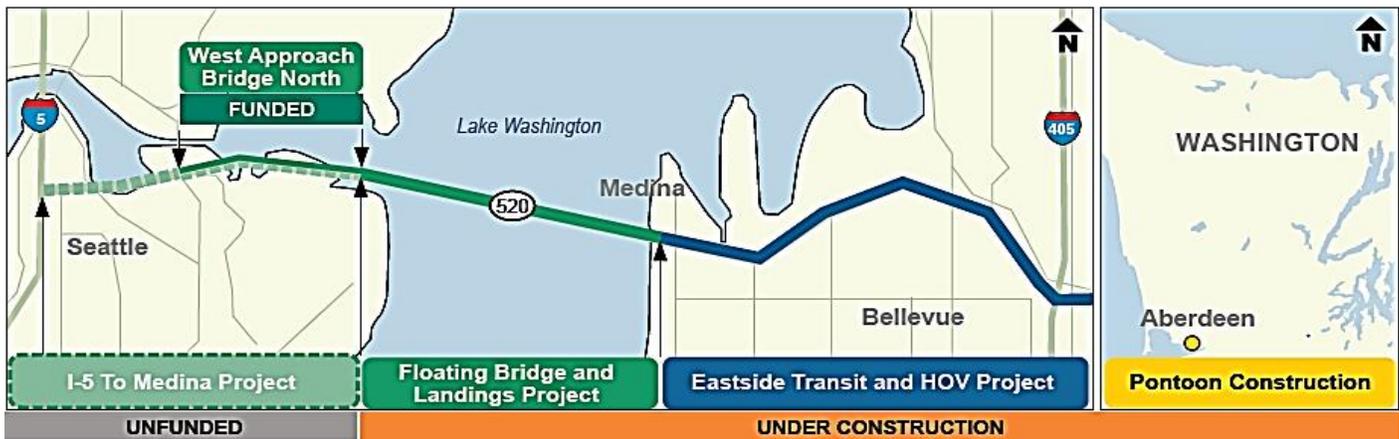
## Executive Summary

### EXECUTIVE OVERVIEW

The SR 520 Bridge Replacement and HOV Program will improve safety and reliability throughout the SR 520 corridor, from I-5 in Seattle to the Eastside. Projects currently under construction include the new six-lane SR 520 floating bridge, the new six-lane Eastside corridor that includes culverts, improved transit facilities and lids, and pontoon construction in Aberdeen. Future work includes replacing the Portage Bay and West Approach bridges, building lids in Seattle, and connecting a bicycle/pedestrian path from the floating bridge to local and regional trails in Seattle.



*Floating Bridge & Landings: Pier 2 traveler system*



*Map of SR 520 Bridge Replacement and HOV Program*

### CURRENTLY FUNDED PROGRAM

We are currently funded to move forward with:

- Constructing a new, safer floating bridge, as well as a fixed West Connection Bridge linking the new floating bridge to SR 520's existing four-lane segment in Seattle.
- Building pontoons at casting basin facilities in Tacoma and Grays Harbor.
- Constructing the Eastside Transit and HOV Project.
- Building the north half of the new west approach bridge, and connecting six lanes of traffic from the Montlake interchange to the new floating bridge.
- Continuing to design the remaining elements of the west side of the corridor.

## PROGRAM STATUS

**Pontoon Construction Project:** Crews continued concrete pours for the keel slabs and lower anchor gallery on pontoons I, J, K, and L. Crews also set the forms for the lower anchor gallery and inside face of exterior walls on pontoons GNW and GSW.

**Eastside Transit and HOV:** Crews excavated and prepped for a barrier at the eastbound off-ramp at 84th Avenue Northeast. At 92nd Avenue Northeast, crews continued waterproofing and paving the lid and finishing the transit station. At Bellevue Way and 108th Avenue Northeast, crews worked on building temporary mainline median barrier and noise wall 4B-23.

**Floating Bridge and Landings (FB&L):** At Pier 1, crews removed the westbound pier table top deck falsework and started placing forms, rebar, post-tension ducts and concrete for the up station bridge segments. Crews also placed the traveler system at the westbound pier table. On the lake, crews continued staging, joining and stressing pontoons.

**West Connection Bridge (WCB):** Crews completed the bridge deck strip, formed and poured the first 56 linear feet of barrier at span 35 and completed deck rebar placement at span 32.



FB&L: Pouring concrete for bridge columns

## MAJOR RISKS

Notable major risks that could delay the program or increase costs include:

- Weather, tides or other natural events that delay pontoons needed for the FB&L project.
- Production and quality issues that further delay pontoons needed for the FB&L project.
- Inflation costs for labor, materials and equipment.
- New requirements or contract changes required by local communities, regulatory groups or agencies.
- Pontoon moorage is not available as needed.
- Pontoon joining complications.

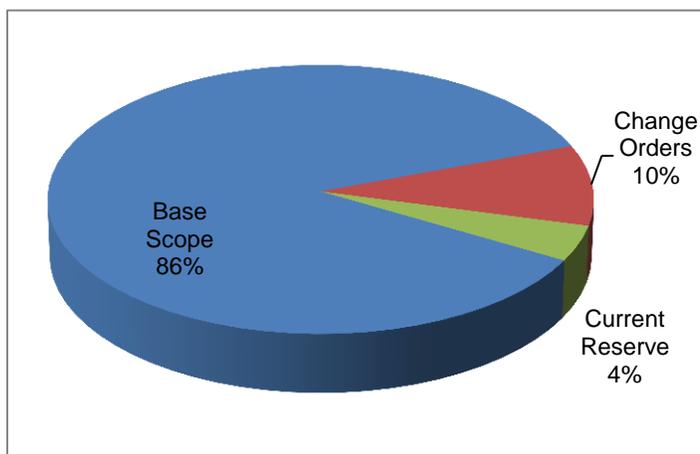
## UPCOMING MILESTONES

- Pontoons: Crews will continue work on Cycle 5 of 6. They will pour concrete for exterior wall forms and upper anchor galleries for pontoons I, J, K, L, GNW, and GSW.
- Eastside Transit and HOV: Crews will continue work on lid finishes, pavers, plants and drains. At Evergreen Point Road, crews will conduct transit station finishing work. At 92nd Avenue Northeast, crews will work on a variety of transit station items, including steel work, glazing and paving. At the Bellevue Way area, work will continue on noise wall construction, landscaping and waterproofing of the Bellevue Way bridge.
- Floating Bridge and Landings: On Lake Washington, crews will continue to join supplemental pontoons, pour concrete and install falsework for pontoons P, Q & V. At the Concrete Technology Corp. site in Tacoma, crews will place concrete in the keel slabs of pontoons 2C, 2D, 2F and place formwork for wall 1 pours.
- WCB: Goals for July include completing the bridge deck cure, completing the soffit strip, installing Intelligent Transportation System (ITS) conduit and barrier conduit, completing barrier rebar, and pouring concrete barrier for spans 30-35.

### Total Program

	Total Budget	Actuals to Date	Remaining
<b>SR 520 Program Totals</b>	<b>\$4,297,907,053</b>	<b>\$1,849,761,042</b>	<b>\$2,448,146,011</b>
<b>Funded Program</b>	<b>\$2,893,907,053</b>	<b>\$1,849,761,042</b>	<b>\$1,044,146,011</b>
<b>Federal</b>	<b>\$498,134,699</b>	<b>\$128,922,908</b>	<b>\$369,211,791</b>
FEDERAL GRANT FUNDS	\$3,000,000	\$3,000,000	\$0
FEDERAL FORMULA FUNDS	\$179,952,816	\$110,741,025	\$69,211,791
HIGHWAY SAFETY IMPROVEMENT	\$14,015,000	\$14,015,000	\$0
OUTDOOR ADVERTISING-INTERSTATE	\$855,000	\$855,000	\$0
STATE MATCHING (FUND 880)	\$311,883	\$311,883	\$0
TIFIA (USDOT - TIFIA LOAN)	\$300,000,000	\$0	\$300,000,000
<b>Local</b>	<b>\$1,721,010</b>	<b>\$1,208,847</b>	<b>\$512,163</b>
LOCAL PROJECT(CURRENT)	\$1,721,010	\$1,208,847	\$512,163
<b>State</b>	<b>\$2,235,251,344</b>	<b>\$1,719,629,287</b>	<b>\$515,622,057</b>
TRANSPORTATION PARTNERSHIP ACCOUNT (TPA)	\$525,891,000	\$363,867,659	\$162,023,341
NICKEL ACCOUNT STATE DOLLARS	\$52,244,156	\$52,244,156	\$0
SR 520 CORRIDOR	\$549,032,022	\$549,032,022	\$0
SR 520 GARVEE	\$924,150,000	\$731,475,272	\$192,674,728
SR 520 TRIPLE BACKED BOND SECOND SALE	\$111,031,674	\$0	\$111,031,674
SR 520 TRIPLE BACKED BONDS	\$70,329,000	\$20,436,686	\$49,892,314
STATE FUNDS	\$2,573,492	\$2,573,492	\$0
<b>Deferred Sales Tax</b>	<b>\$158,800,000</b>		<b>\$158,800,000</b>
DEFERRED SALES TAX	\$158,800,000		\$158,800,000
<b>Unfunded Program</b>	<b>\$1,404,000,000</b>		<b>\$1,404,000,000</b>
I-5 TO THE FLOATING BRIDGE	\$1,404,000,000		\$1,404,000,000

### PROGRAM RESERVE STATUS (FUNDED PROGRAM)



Cumulative Reserve	\$403,500,000
June Change Orders	(\$586,385)
Previous Change Orders	(\$280,233,712.00)
<b>Current Reserve*</b>	<b>\$122,679,903</b>

\*The current reserve number does not reflect pending or potential change orders.

## Pontoon Construction Project

### ABERDEEN PONTOONS OVERVIEW

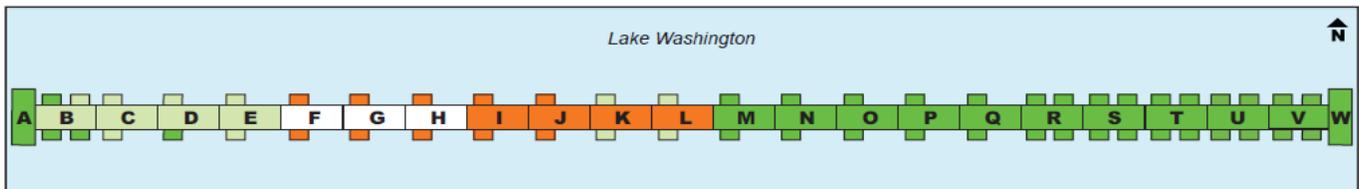
The Washington State Department of Transportation is continuing pontoon construction to replace the aging and vulnerable SR 520 floating bridge on Lake Washington. The Pontoon Construction Project broke ground in June 2011 at a 55-acre site in Aberdeen. As part of this project, contractor Kiewit-General (K-G) Joint Venture built a new casting basin facility and is constructing 33 concrete pontoons that will be used to replace the SR 520 floating bridge.



Aberdeen: Pontoon GNW anchor gallery

Original Engineers Estimate	\$600,000,006
Bid Price	\$367,330,000
Change Orders to date	\$81,855,340
<b>Current Contract Value</b>	<b>\$449,185,340</b>

Pontoon tracking on Lake Washington, 6/10/14



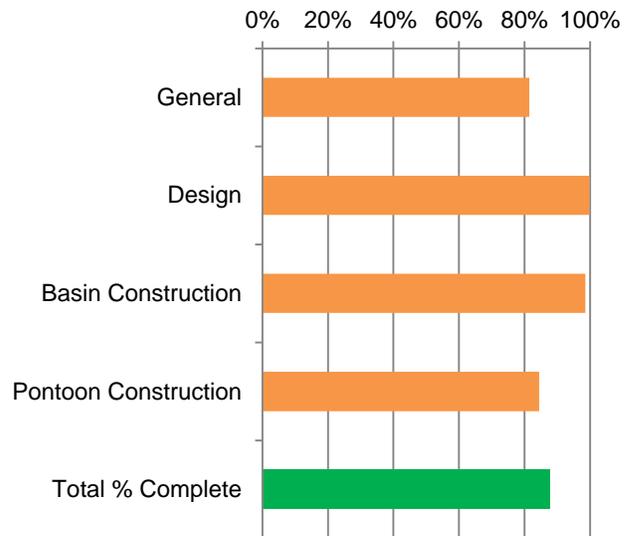
Note: not to scale

<b>Pontoon status:</b>	<span style="display:inline-block; width:15px; height:15px; background-color:darkgreen; border:1px solid black;"></span> On Lake Washington	<span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span> Temporarily moored	<span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span> In transit / pending transit
	<span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span> Under construction	<span style="display:inline-block; width:15px; height:15px; background-color:white; border:1px solid black;"></span> Future construction	

### JUNE ACCOMPLISHMENTS

Crews completed forms, rebar, and poured exterior walls and closure pours for pontoons in Cycle 5 of 6. Crews continued forming exterior walls and top decks for pontoons.

#### Pontoon Complete by Area



### RISK

- Changes to design, materials or construction methods
- Materials price escalation
- Weather impacts
- Tidal or tribal fishing season restrictions on float-out



Aberdeen: Pontoon I upper boltbeam falsework at wall 1T

## JUNE COSTS

Preliminary engineering is complete. The right of way budget is complete. The total actual cost to date from the contractor is 89 percent of the budget.

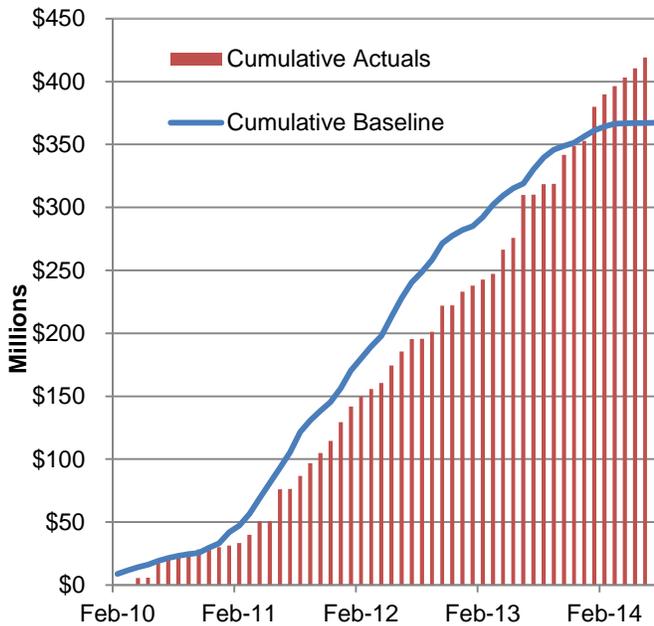
	Current Budget	Actuals to Date	Remaining Budget
<b>Pontoon Construction Project Totals</b>	<b>\$511,604,014</b>	<b>\$457,186,042</b>	<b>\$54,417,972</b>
<b>Preliminary Engineering</b>	<b>\$32,568,750</b>	<b>\$32,568,750</b>	<b>\$0</b>
<b>Right of Way</b>	<b>\$5,789,554</b>	<b>\$5,611,771</b>	<b>\$177,783</b>
<b>Construction</b>	<b>\$473,245,710</b>	<b>\$419,005,521</b>	<b>\$54,240,189</b>
<i>Current Contract Value</i>	<i>\$449,185,340</i>	<i>\$402,188,715</i>	<i>\$46,996,626</i>
<i>Agreements</i>	<i>\$9,380,478</i>	<i>\$7,690,641</i>	<i>\$1,689,838</i>
<i>Construction Engineering</i>	<i>\$14,679,891</i>	<i>\$9,126,166</i>	<i>\$5,553,726</i>
<i>State Force Work</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
<i>State Materials</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
<i>Vendor Supplied Materials</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>

Cost information through June 30, 2014

## JUNE CHANGE ORDER SUMMARY

Two (2) change orders were executed in June at no cost. All PCP change orders total \$81,855,340.00 at the time of this report.

### JUNE PERFORMANCE



Aberdeen: Pouring a closure on Pontoon K

The Schedule Performance Index (SPI) to date for the contractor is 1.1. This indicates the contractor is a little ahead of schedule due to change order 111's adjusted completion milestones.

### SUMMARY SCHEDULE

The current contractor schedule shows project physical completion 97 days earlier than the contract date established in Change Order 111. The projected delivery dates for the remainder of the project are as follows:

Milestone	Contract Date	Actual/Trend
Notice to Proceed 1 - Design Initiated	2/18/2010	2/18/2010
Notice to Proceed 2 - Site Construction Start	1/10/2011	1/10/2011
Pontoon Cycle 2 Segment Complete	3/15/2013	5/4/2013
Pontoon Cycle 3 Segment Complete	10/10/13	10/10/2013
Pontoon Cycle 4 Segment Complete	4/28/2014	4/21/2014
Pontoon Cycle 5 Segment Complete	10/14/2014	Early
Pontoon Cycle 6 Segment Complete	4/14/2015	Early
Physical Completion	8/12/2015	Early
Final Completion	12/10/2015	Early

### JUNE QUALITY SUMMARY

“Audits – Actual” are audits performed by WSDOT Quality Verification staff on the design-builder’s compliance with contract requirements.

“Nonconformance Reports” are incidents recorded by the design-builder’s quality inspection staff that do not appear to be constructed in accordance with the approved drawings and specifications.

“Nonconformance Issues” are incidents recorded by WSDOT’s Quality Verification staff due to an audit finding based on their observance of the work.

	Previous Total	Current Period	Project Total	Open	Closed
Audits - Actual	1086	47	1133	0	1086

	Previous Total	Open	Current Period	Avg. Time Open
Nonconformance Reports (NCR)	691	36	26	36 days
Nonconformance Issues (NCI)	156	4	3	37 days

No major concerns with NCIs for June 2014 were identified.

### JUNE SAFETY SUMMARY

“Recordable Incidents” are job-related safety incidents that have been recorded.

“Lost Time Incidents” are job-related safety incidents that result in personnel not being able to work.

“Contract Days without an Incident” are the number of days since a lost-time incident has occurred.

Design-Builder	Previous Total	Current Period	Project Total
Recordable Incidents	11	1	12
Lost Time Incidents	1	0	1
Contract Days without an Incident	112	12	12

6/18: A worker was removing a hole saw from a right angle drill, using the drill motor to help, when the drill rotated and the handle of the drill impacted the worker’s arm. The worker was given pain medication.

### JUNE ENVIRONMENTAL SUMMARY

“Noncompliance Event (ECAP)” is an action not in compliance with environmental standards, permits or laws.

“Minor Environmental Event” is an environmental impact that does not meet the requirements to become an ECAP.

	Previous Total	Current Period	Project Total
Noncompliance Event (ECAP)	37	2	39
Minor Environmental Event	27	0	27

6/16: An ECAP event occurred. A representative of the Grays Harbor County Noxious Weed Control Board conducted a site visit at the invitation of KG, pursuant to KG’s “Noxious Weed Control Plan.” The representative did not find any “Class A” weeds (which require removal), but several Class B and C weeds were identified. Removal/control of these weeds is not required, but was recommended by Grays Harbor County in certain areas. KG is reviewing the findings and determining its plan for herbicide application/control, and will provide documentation for WSDOT.

6/17: An ECAP event occurred. KG sent a final response letter to the Washington Department of Natural Resources addressing the non-compliance resulting from over-dredge of the launch channel. The letter described KG’s corrective measures to prevent

reoccurrence (if dredging is necessary again). This closes out action items required by agencies stemming from the March non-compliance.

## Eastside Transit and HOV

### EASTSIDE OVERVIEW

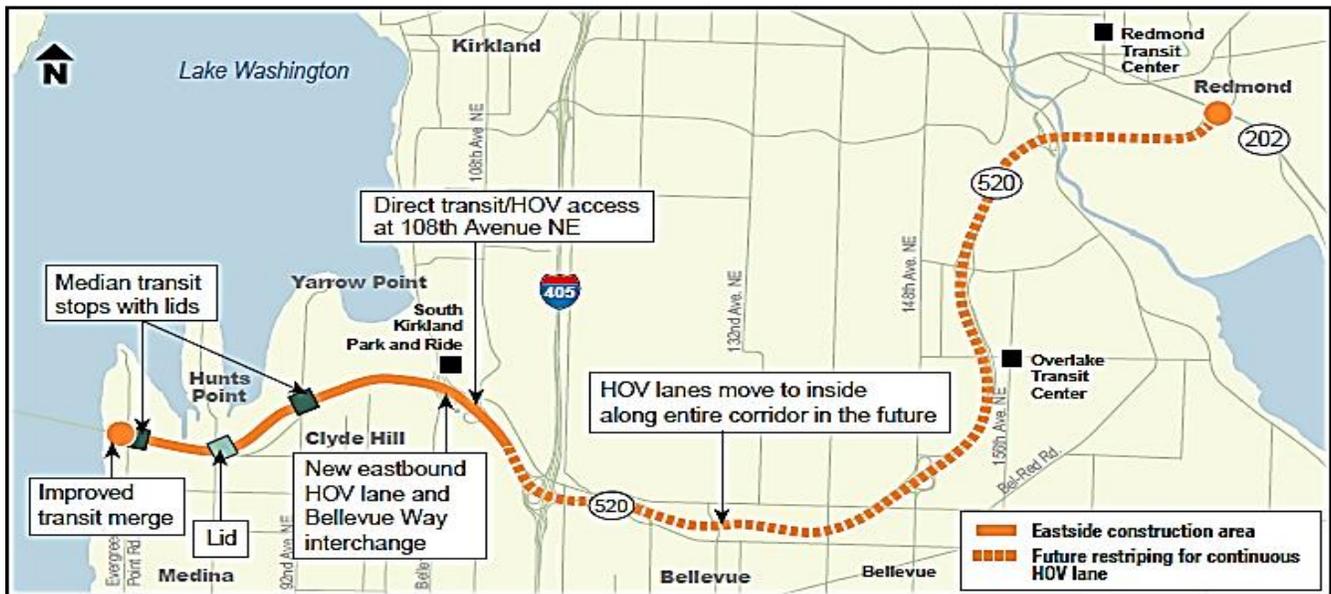
The Eastside Transit and HOV Project will complete and improve the 2.5-mile HOV system from Evergreen Point Road to the I-405 interchange. The improved six-lane corridor will include two general-purpose lanes and one transit/HOV lane in each direction, as well as two new transit station facilities, three community-connecting lids, and eight new fish-passage culverts.

Original Engineers Estimate	422,064,082
Bid Price	306,278,000
Change Orders to date	\$30,366,150
<b>Current Contract Value</b>	<b>\$336,644,150</b>



92nd Avenue Northeast transit station, eastbound platform

Eastside Project Area Map



### JUNE ACCOMPLISHMENTS

**Evergreen Point Road:** WSDOT opened the new median transit station. Crews continued construction of walls on the north and south of SR 520.

**84th Avenue Northeast:** Crews formed and poured the sidewalk at Northeast 28th Street, opened 84th Avenue's new roundabout, and opened the interchange's new on- and off-ramps.

**92nd Avenue Northeast:** Crews continued working on lid finishes and pier railings, and closed the south end of the lid to construct local street connections. At the transit station, crews worked steel, finish coatings, glazing, wall panels, elevators, and finish punch list items.

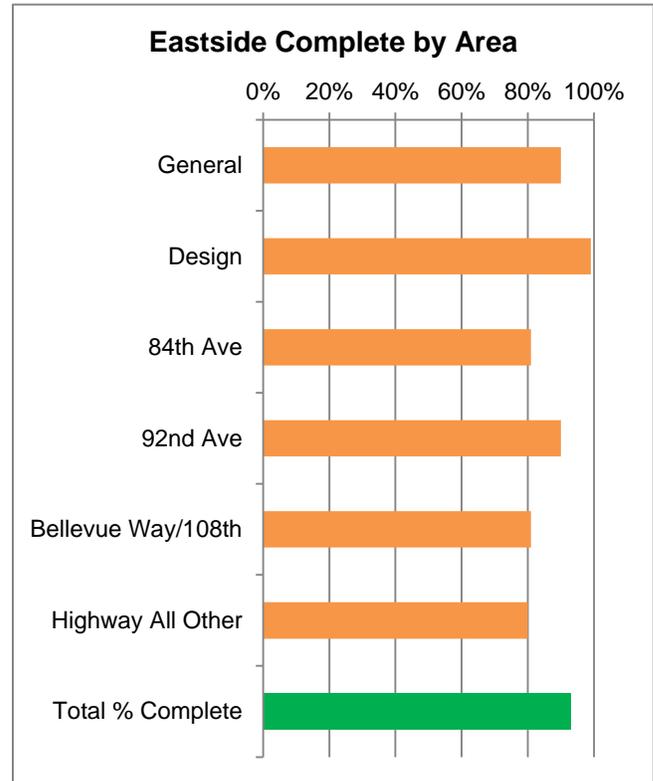
**Bellevue Way:** Crews worked on installing the underdrain and liner at ponds E3 and E2. Construction of noise walls along the eastbound off-ramp to Bellevue Way continued.

**108th Avenue Northeast:** Crews continued retrofitting the existing bridge deck for widening. Crews paved the eastbound direct-access off-ramp to 108th.

### JUNE RISK

As reported in Gray Notebook 48 (p. 59), WSDOT and the design-builder, Eastside Corridor Constructors (ECC), continue to discuss budget and schedule risks that developed after the contract was awarded. Potential schedule and budget effects will be determined after further consultation with ECC.

WSDOT continues to work with ECC to resolve geotechnical design-dispute issues for the Bellevue Way interchange. ECC and WSDOT are reviewing the claim ECC submitted regarding additional design, construction and schedule impact costs.



*Eastside: 92nd Avenue Northeast lid, facing west*

### JUNE COSTS

Preliminary engineering is complete. The right of way budget is 89 percent complete. The total actual cost to date from the contractor is 92 percent of the budget.

	Current Budget	Actuals to Date	Remaining Budget
<b>Eastside Construction Project Totals</b>	<b>\$427,937,512</b>	<b>\$394,450,346</b>	<b>\$33,487,166</b>
<b>Preliminary Engineering</b>	<b>\$31,694,510</b>	<b>\$31,694,510</b>	<b>\$0</b>
<b>Right of Way</b>	<b>\$31,879,512</b>	<b>\$27,180,846</b>	<b>\$4,698,666</b>
<b>Construction</b>	<b>\$364,363,490</b>	<b>\$335,574,990</b>	<b>\$28,788,499.73</b>
<i>Current Contract Value</i>	<i>\$336,644,150</i>	<i>\$311,487,055</i>	<i>\$25,157,095</i>
<i>Agreements</i>	<i>\$13,429,837</i>	<i>\$9,771,759</i>	<i>\$3,658,078</i>
<i>Construction Engineering</i>	<i>\$11,249,691</i>	<i>\$11,942,441</i>	<i>-\$692,749</i>
<i>State Force Work</i>	<i>\$345,626</i>	<i>\$343,149</i>	<i>\$2,477</i>
<i>State Materials</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
<i>Vendor Supplied Materials</i>	<i>\$2,694,187</i>	<i>\$2,030,587</i>	<i>\$663,599</i>

*Cost information through June 30, 2014*

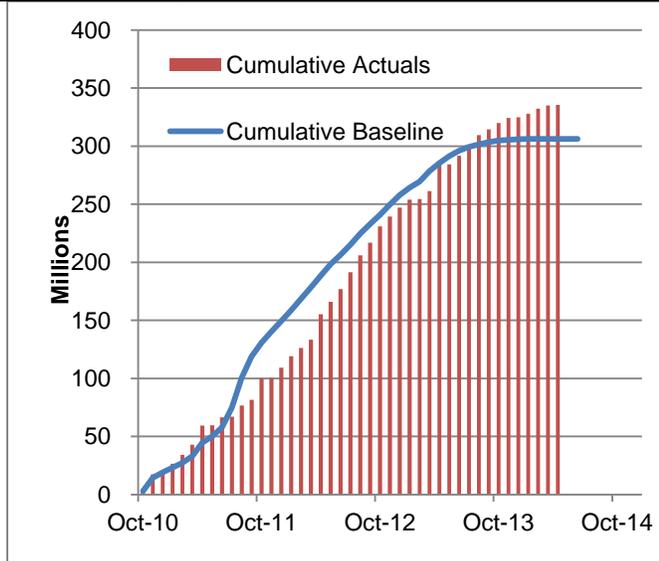
### JUNE CHANGE ORDER SUMMARY

No change orders were executed in June. All Eastside change orders total \$30,366,150.00 at the time of this report.

### JUNE PERFORMANCE

**Milestone**

Notice to Proceed
East Approach & Maintenance Facility Area Work Completion
Evergreen Point Area Phase I Work Completion
Evergreen Point Area Phase II Work Completion
Construction Substantial Completion
Construction Physical Completion



The Schedule Performance Index (SPI) to date for the contractor is .88 on the current budget value. This signifies the contractor is behind schedule for substantial completion.

Eastbound off-ramp to 84th Avenue Northeast, facing west

**SUMMARY SCHEDULE**

The current contractor schedule estimates construction completion in fall 2014. This completion forecasted date is part of the ongoing discussions between WSDOT and ECC.

### JUNE QUALITY SUMMARY

“**Audits – Actual**” are audits performed by WSDOT Quality Verification staff on the design-builder’s compliance with contract requirements.

“**Nonconformance Reports**” are incidents recorded by the design-builder’s quality inspection staff that do not appear to be constructed in accordance with the approved drawings and specifications.

“**Nonconformance Issues**” are incidents recorded by WSDOT’s Quality Verification staff due to an audit finding based on their observance of the work.

	Previous Total	Current Period	Project Total	Open	Closed
Audits - Actual	2955	38	2993	53	2940

	Previous Total	Open	Current Period	Avg. Time Open
Nonconformance Reports (NCR)	549	65	8	142 days
Nonconformance Issues (NCI)	293	53	5	292 days

No major concerns with NCIs for June 2014 were identified.

### JUNE SAFETY SUMMARY

“**Recordable Incidents**” are job-related safety incidents that have been recorded.

“**Lost Time Incidents**” are job-related safety incidents that result in personnel not being able to work.

“**Contract Days without an Incident**” are the number of days since a lost-time incident has occurred.

	Previous Total	Current Period	Project Total
_____			

### Design-Builder

Recordable Incidents	12	0	12
Lost Time Incidents	0	0	0
Contract Days without an Incident	112	30	142

No safety incidents occurred in June 2014.

### JUNE ENVIRONMENTAL SUMMARY

“**Noncompliance Event (ECAP)**” is an action not in compliance with environmental standards, permits or laws.

“**Minor Environmental Event**” is an environmental impact that does not meet the requirements to become an ECAP.

	Previous Total	Current Period	Project Total
Noncompliance Event (ECAP)	68	0	68
Minor Environmental Event	212	0	212

No ECAP events occurred in June 2014.

**Floating Bridge and Landings Construction Project**

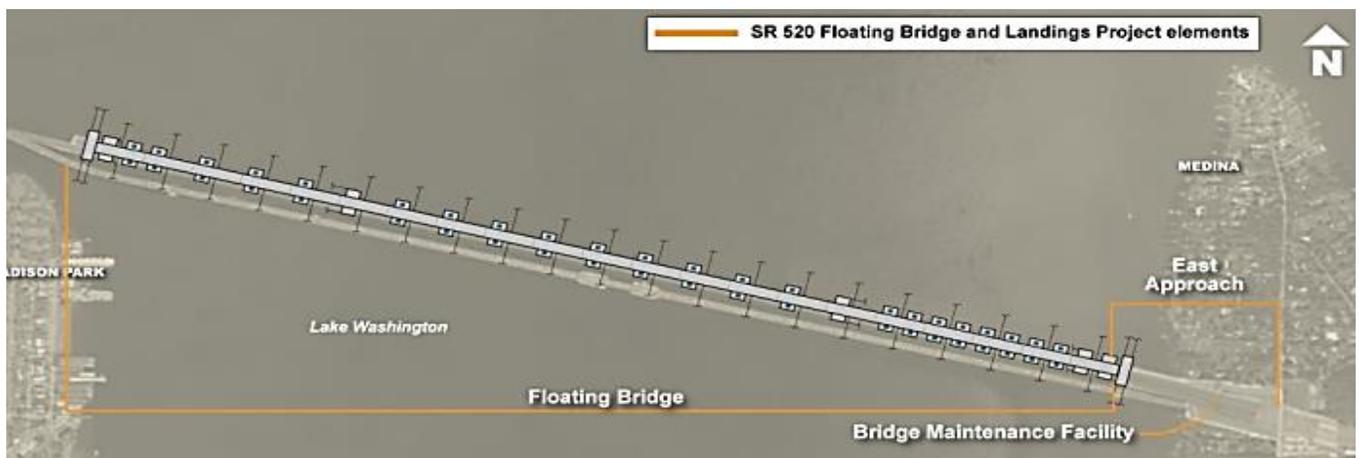
**FLOATING BRIDGE AND LANDINGS**

The SR 520 Floating Bridge and Landings (FB&L) Project will replace the existing, vulnerable four-lane structure with a new six-lane bridge that can withstand windstorms of up to 89 mph. The new six-lane facility will include a bicycle/pedestrian path and a bridge maintenance facility on the east end. The project includes construction of 44 supplemental stability pontoons in Tacoma.

Original Engineers Estimate	\$640,769,000
Bid Price	\$586,561,000
Change Orders to date	\$165,750,511
<b>Current Contract Value</b>	<b>\$752,311,511</b>



*FB&L: Concrete placement on Pontoon V high-rise column*



*Floating bridge area map*

## JUNE ACCOMPLISHMENTS

Concrete Technology Corp. (CTC): Crews completed and floated out Cycle 3 pontoons (5th of 6 cycles) on 6/5/14. Crews started work on Cycle 4 (6th of 6 cycles, the last cycle of pontoons that will be constructed at CTC).

Floating Bridge: Crews installed permanent ballast rock and temporary water ballast to Pontoon P. They demobilized scaffolding from Pontoon R. At Pontoon V, crews poured five columns of V2 bent, completed joining of longitudinal pontoons T to U and continued construction of high-rise columns and crossbeams on pontoons V & U. The design builder is continuing to deliver pontoons to Lake Washington.

East Approach Bridge: Crews set transition span girders and grouted segmental post-tension tendons eastbound at Pier 1. The traveler system was installed at Pier 2 westbound to begin segment construction.

Medina Vicinity: Crews placed eastbound tolling gantry structure and electrical and ITS junction boxes on the westbound mainline. Crews placed structural steel at the maintenance facility.

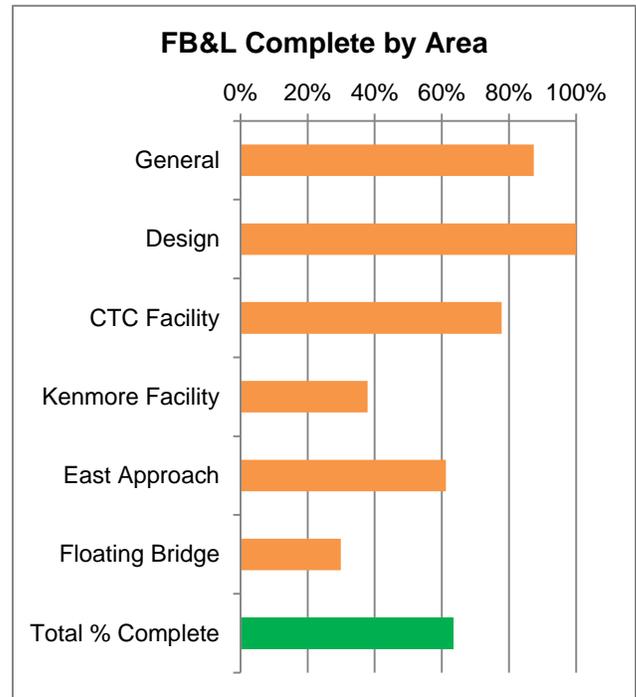
Kenmore: Crews worked on reinforcement, concrete and post-tensioning for pontoon precast deck panels.

## RISK

There have been environmental concerns regarding project use of the Kenmore site. WSDOT is not currently a party to any lawsuit, but is monitoring the situation.

Due to variations in the shape of the pontoon face and alignment of joining bolt holes, joining of pontoons could be more difficult than assumed.

Because of the interface between two contracts (Floating Bridge and Landings, and Eastside Transit and HOV), there are continued concerns with the coordination of the overlapping areas of work in the vicinity of Evergreen Point Road.



18 *FB&L: Concrete pour at Kenmore*

### JUNE COSTS

Preliminary engineering is complete. The right of way budget is complete. The total actual cost to date from the contractor is 64 percent of the budget.

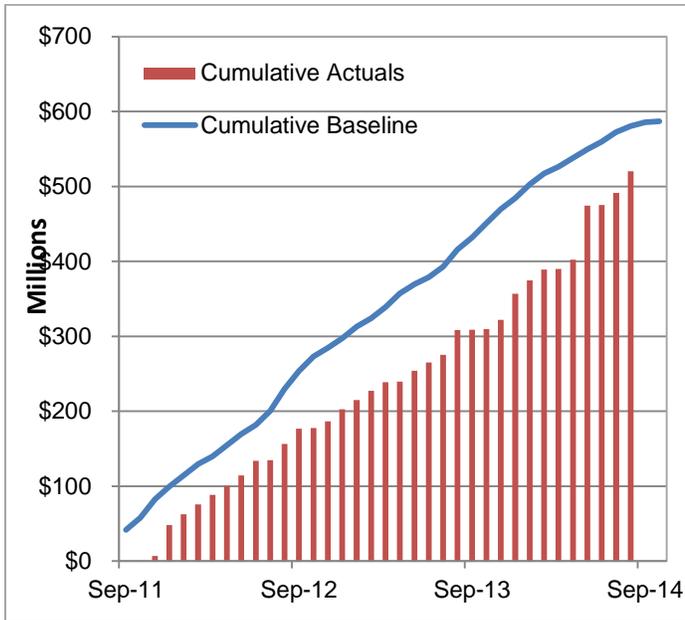
	Current Budget	Actuals to Date	Remaining Budget
<b>Floating Bridge and Landings Construction Project</b>			
<b>Totals</b>	<b>\$836,024,908</b>	<b>\$534,444,412</b>	<b>\$301,580,496</b>
Preliminary Engineering	\$10,659,063	\$10,659,063	\$0
Right of Way	\$4,893,334	\$3,360,743	\$1,532,591
Construction	\$820,472,511	\$520,424,606	\$300,047,905
<i>Current Contract Value</i>	\$752,311,511	\$472,177,976	\$280,133,535
<i>Agreements</i>	\$36,028,311	\$28,831,927	\$7,196,384
<i>Construction Engineering</i>	\$21,392,689	\$12,706,868	\$8,685,821
<i>State Force Work</i>	\$60,000	\$2,979	\$57,022
<i>State Materials</i>	\$0	\$0	\$0
<i>Vendor Supplied Materials</i>	\$10,680,000	\$6,704,857	\$3,975,143

Cost information through June 30, 2014

### JUNE CHANGE ORDER SUMMARY

Four (4) change orders were executed in June for a total of \$586,385.00. Change orders total \$165,750,511.00 for the FB&L project at the time of this report.

### JUNE PERFORMANCE



FB&L: Columns on Pontoon V on Lake Washington

The Schedule Performance Index (SPI) is at 0.92 through June 2014. The variance is caused by recent revisions to the baseline schedule.

### SUMMARY SCHEDULE

The contractor's current schedule submittal is showing on-time substantial completion by April 28, 2016, consistent with the revised contract date.

Milestone	Revised Contract Date	Actual/Trend
Notice to Proceed 1 - Design Initiated	9/1/2011	9/1/2011
Notice to Proceed 2 - Site Construction Start	9/1/2011	9/1/2011
Pier 36 Construction	11/15/13	8/23/2014
Substantial Completion	4/28/2016	On Time
Physical Completion	2/22/2017	Early

### JUNE QUALITY SUMMARY

“Audits – Actual” are audits performed by WSDOT Quality Verification staff on the design-builder’s compliance with contract requirements.

“Nonconformance Reports” are incidents recorded by the design-builder’s quality inspection staff that do not appear to be constructed in accordance with the approved drawings and specifications.

“Nonconformance Issues” are incidents recorded by WSDOT’s Quality Verification staff due to an audit finding based on their observance of the work.

	Previous Total	Current Period	Project Total	Open	Closed
Audits - Actual	1791	152	1943	14	1929
	Previous Total	Open	Current Period	Avg. Time Open	
Nonconformance Reports (NCR)	240	58	9	209 days	
Nonconformance Issues (NCI)	515	23	13	137 days	

No major concerns with NCIs for June 2014 were identified.

### JUNE SAFETY SUMMARY

“Recordable Incidents” are job-related safety incidents that have been recorded.

“Lost Time Incidents” are job-related safety incidents that result in personnel not being able to work.

Design-Builder	Previous Total	Current Period	Project Total
Recordable Incidents	25	0	25
Lost Time Incidents	1	0	1
Contract Days without an Incident	14	30	44

No safety incidents occurred in June 2014.

### JUNE ENVIRONMENTAL SUMMARY

“Noncompliance Event (ECAP)” is an action not in compliance with environmental standards, permits or laws.

“Minor Environmental Event” is an environmental impact that does not meet the requirements to become an ECAP.

	Previous Total	Current Period	Project Total
Noncompliance Event (ECAP)	26	2	28
Minor Environmental Event	30	4	34

6/20 - Non Compliance Event - While performing a tensioning cable operation, grout sprayed out the end of the tube. Some of the grout sprayed past the containment and entered Lake Washington. The amount was estimated to be less than ¼ cup. While correcting this issue, a bucket containing grout slurry was knocked over and less than a ¼ cup of the slurry seeped through a hole in the bridge deck and dripped into the lake.

6/23 – Non-Compliance Event - During a tensioning cable operation at Medina, a fitting on a grout hose failed, causing pressurized grout to spray out of the hose, over the containment bucket and into the lake. Approximately 6 ounces of grout entered the lake. The appropriate resource agencies were notified and KGM implemented mitigation measures.

6/4 - Minor Environmental Event - A small quantity of process water flowed from the decks of two pontoons at CTC and entered the casting basin while the gate was open. KGM will be developing a prevention strategy to avoid this from occurring in the future.

6/11- Minor environmental event - At Kenmore, a hydraulic hose ruptured on a gantry crane, releasing approximately ½ gallon of hydraulic fluid to the ground. None of the material entered waters of the state and it was immediately cleaned up.

6/17 – Minor Environmental Event - While fueling a tank at Kenmore, the tank was overfilled with diesel. It overflowed the secondary containment and 2 to 3 gallons discharged to the ground. The contaminated soil was removed and none of the fuel entered waters of the state.

6/25 - Minor Environmental Event - A hydraulic hose ruptured on the Liebherr crane at Kenmore, discharging approximately 30 gallons of hydraulic fluid onto a concrete pad. All of the fluid was cleaned up and recovered.

## West Connection Bridge

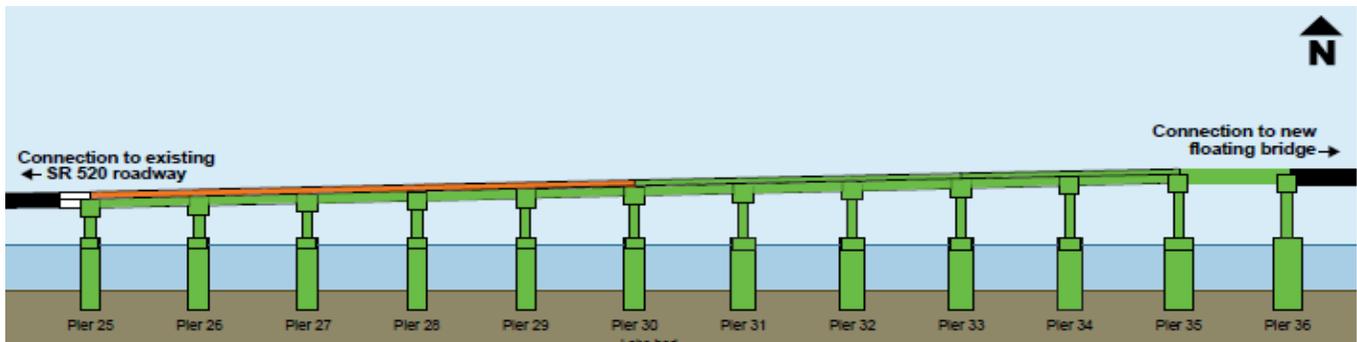
### CONSTRUCTION OVERVIEW

The West Connection Bridge (WCB) project builds an interim four-lane structure that connects the new SR 520 floating bridge to the existing west approach bridge.

Original Engineers Estimate	\$20,639,667
Bid Price	\$22,129,243
Change Orders to date	\$2,594,750
<b>Current Contract Value</b>	<b>\$24,723,993</b>



WCB: Span 35 deck construction



West Connection Bridge progress tracker, as of June 25, 2014

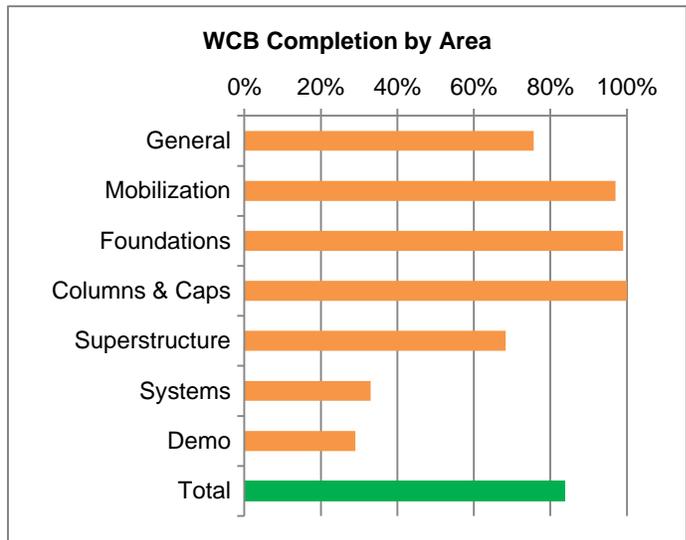
#### Legend



### JUNE ACCOMPLISHMENTS

Superstructure: Crews poured bridge deck on spans 32 and 30, placed deck rebar on span 29 and formed soffit on spans 28 and 27.

Electrical: Crews started installing ITS hangers and boxes on span 35.



### RISK

- Pier 36 west-end transition turnover
- Community concerns: noise, property damage
- Existing SR 520 weekend closure coordination



WCB: Finish work on span 35 barrier

### JUNE COSTS

Preliminary engineering is complete. The total actual cost to date from the contractor is 85 percent of the budget.

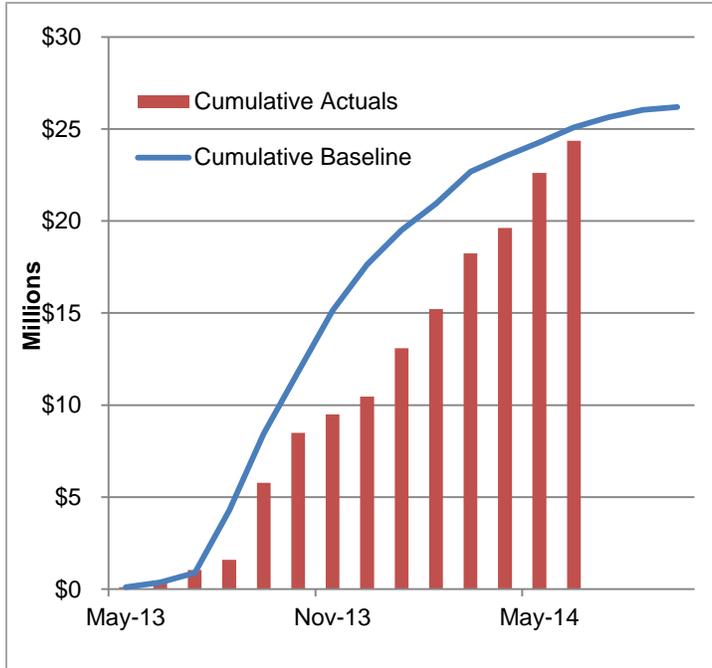
	Current Budget	Actuals to Date	Remaining Budget
<b>West Connection Bridge Project Totals</b>	<b>\$33,505,555</b>	<b>\$28,436,921</b>	<b>\$5,068,634</b>
<b>Preliminary Engineering</b>	<b>\$5,560,002</b>	<b>\$4,823,351</b>	<b>\$736,651</b>
<b>Construction</b>	<b>\$27,945,553</b>	<b>\$23,613,570</b>	<b>\$4,331,983</b>
<i>Current Contract Value</i>	\$24,723,993	\$21,985,683	\$2,738,311
<i>Agreements</i>	\$665,000	\$523,010	\$141,990
<i>Construction Engineering</i>	\$2,556,560	\$1,104,877	\$1,451,683
<i>State Force Work</i>	\$0	\$0	\$0
<i>State Materials</i>	\$0	\$0	\$0
<i>Vendor Supplied Materials</i>	\$0	\$0	\$0

Cost information through June 30, 2014

### JUNE CHANGE ORDER SUMMARY

No change orders were executed in June. All West Connection Bridge change orders total \$2,594,750.00 at the time of this report.

**JUNE PERFORMANCE**



Span 29 bridge deck construction

The cumulative Schedule Performance Index (SPI) is 0.97 because the contractor is still recovering from a slower-than-planned duration for drilled shaft construction.

**SUMMARY SCHEDULE**

The latest contractor schedule submitted in June shows project physical completion in alignment with the contractually defined milestones.

Milestone	Contract Date	Actual/Trend
First Charged Working Day	6/17/2014	6/17/2014
Pier 36 - Area 1A & 1B Available To M-A	11/16/2014	11/16/2014
Pier 36 - Area 1B All Work Complete	5/14/2014	5/10/14
Pier 36 - Area 1B Turnover to FB&L	5/15/2014	5/15/14
Pier 36 - Area 1A All Work Complete	7/31/2014	On Time
Pier 36 - Area 1A Turnover to FB&L	8/1/2014	On Time
End of Contract Working Days	8/11/2014	Late
Physical Completion	8/29/2014	Late

### JUNE SAFETY SUMMARY

“**Recordable Incidents**” are job-related safety incidents that have been recorded.

“**Lost Time Incidents**” are job-related safety incidents that result in personnel not being able to work.

Design-Builder	Previous Total	Current Period	Project Total
Recordable Incidents	9	1	10
Lost Time Incidents	0	0	0
Contract Days without an Incident	36	27	27

On 6/3 a worker got a hernia and will be on light duty for up to 6 weeks.

### JUNE ENVIRONMENTAL SUMMARY

	Previous Total	Current Period	Project Total
Noncompliance Event (ECAP)	13	0	13
Minor Environmental Event	0	0	0

There were no environmental issues in June 2014.

### DBE/Apprenticeship/Training

#### DISADVANTAGE BUSINESS ENTERPRISE (DBE) PROGRAM

In 1982 the U.S. Congress established the Disadvantage Business Enterprise (DBE) program to ensure nondiscrimination in the award and administration of USDOT-assisted contracts; help remove barriers to the participation of DBEs in USDOT-assisted contracts; and assist the development of firms that can compete successfully in the marketplace outside of the DBE program. The table below is paid-to-date amounts as reported by SR 520 contractors through their quarterly reports for DBE participation amounts credited.

CONTRACT	CONTRACT REQUIRED DBE PERCENTAGE	TOTAL DBE PAID TO DATE 12/31/2013	TOTAL CONTRACT PAID TO DATE 12/31/2013	CURRENT DBE %
Contract 7826 (Pontoon)	6% (\$22,039,800)	\$24,250,957.65	\$356,885,295.28	6.8%
Contract 7963 (Eastside)	11% (\$33,690,580)	\$33,837,352.71	\$299,192,586.34++	11.3%
Contract 8066 (FB&L)	7% (\$41,059,270)	\$9,395,966.15	\$344,559,796.08++	2.7%
Contract 8288 (Evans Creek)	0% - not required	\$0	\$2,767,348.99++	0%
Contract 8432 (WCB)	3% (\$663,877.30)	\$174,547.81*	\$9,176,391.13	1.9%

\* This includes \$134,215.56 from a subcontractor that has not been submitted for approval. ++ Payment made through November 30, 2013.

#### APPRENTICESHIP

As required under RCW 39.04.300, WSDOT reports apprenticeship participation. Each SR 520 WSDOT contract requires 15 percent apprenticeship participation. These hours are reported by the contractor through the OEO Apprentice/Journeyman Reporting form.

CONTRACT	AS OF (12/31/2013)	APPRENTICE HOURS REPORTED	JOURNEYMAN HOURS REPORTED	APPRENTICE HOURS PERCENT
Contract 7826 (Pontoon)	11/30/2013	214,292	1,100,027	16.3%
Contract 7963 (Eastside)	11/30/2013	103,319	626,220	14.2%
Contract 8066 (FB&L)	11/30/2013	10,616	827,118	11.5%
Contract 8288 (Evans Creek)	12/31/2013	994	3,129	24.1%
Contract 8432 (WCB)	12/1/2013	2,790	18,429	15.1%

#### TRAINING

The Federal Highway Administration's On-the-Job Training (OJT) Program requires WSDOT to establish apprenticeship and training program targeted to advance women, minorities and disadvantaged individuals into journey-level positions.

CONTRACT	CONTRACT REQUIRED TRAINING HOURS	# OF APPROVED TRAINEE HOURS 12/31/2013	# OF TRAINEE HOURS ACHIEVED
Contract 7826* (Pontoon)	50,000	50,000	50,000
Contract 7963 (Eastside)	58,500	35,860	28,597**
Contract 8066 (FB&L)	74,600	29,050	29,177.50
Contract 8288 (Evans Creek)	0 - not required	0	0
Contract 8432 (WCB)	1,200	0	0

\* Contract 7826 has reached its target of 50,000 training hours. Training hours over 50,000 are not required to be tracked.

\*\* Total hours reported are 33,506. However, 10,209 hours are excess laborer hours that can't be counted toward the goal. These hours are taken from the Statement of Apprentice/Journeyman Participation and the approved Apprentice/Trainee Approval Requests.

## Right of Way

### RIGHT OF WAY

WSDOT Real Estate Services performs and coordinates all real estate transactions for the SR 520 Program for activities covered by the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

Area	Total Parcels	Fee Acquisition	Permanent Easements	Temporary Construction Easements	Limited Access	Temporary Construction Easement Renewals
Contract 7826 (Pontoon)	4	1 / 1	2 / 2	1 / 1	0 / 0	0 / 0
Contract 7863 (Eastside)	105	18 / 18	13 / 12	28 / 27	45 / 39	1 / 1
Contract 8066 (FB&L)	7	3 / 3	1 / 1	2 / 2	1 / 0	None
Contract 8288 (Evans Creek)	4	1 / 1	None	3 / 3	None	None
Contract 8432 (WCB)	3	None	1 / 1	1 / 1	1 / 0	None
<b>Totals</b>	123	23 / 23	17 / 16	35 / 34	47 / 36	1 / 1

Figures show need / remaining work. Information as of June 30, 2014

## Drawbridge Openings

### FLOATING BRIDGE DRAWSPAN OPENINGS

Due to construction activities, the east navigation channel under the SR 520 east approach bridge is currently obstructed. The channel is cleared and opened to boaters during specific weekends and holidays. When the channel is open, it is operating with reduced clearance. Navigational clearances are higher on the east side of the channel, but obstructions north of the channel reduce the navigational height to 59 feet. Owners of vessels with masts or other aerial equipment more than 59 feet tall *and which cannot be lowered* may request a drawspan opening with two hours advance notice.

#### Total Openings since April 1, 2012

Weekday Daytime Opening	323
Weekday Nighttime Opening	27
Weekend Opening	146
<b>Totals</b>	496

## Sustainability

### SR 520 GOALS

The SR 520 program is employing four sustainability goals (the Golden Thread) across all elements of corridor design and construction. The goals are supported by specific strategies. This quarter's report focuses on the construction implementation of the first three goals. Each of these goals has specific strategies for implementation:

- ❖ Reduce, reuse and recycle
- ❖ Reduce greenhouse gases throughout construction and the life of the corridor
- ❖ Reclaim existing sites and facilities
- ❖ Improve access

On the Eastside project, the contractor, Eastside Corridor Constructors, is recycling and reusing materials such as:

- ❖ Incorporating of up to 40 percent reclaimed asphalt pavement into the hot mix asphalt.
- ❖ Incorporating ground asphalt into embankments through the design of a "pulverized hot mix asphalt sub base."
- ❖ Using recycled concrete debris to make aggregate products.

On the Floating Bridge & Landings Project, the contractor, KGM, is using an upgraded Kenmore industrial site to fabricate bridge components, which are then floated to the final construction site. This approach reduces CO<sub>2</sub> emissions, traffic congestion, and neighborhood noise associated with trucks travelling to the final construction site. Additionally, KGM has a recycling and regional sourcing program to further reduce CO<sub>2</sub> emissions.



*Eastside: Pond E2 site*

### TRIPLE BOTTOM LINE - SUSTAINABILITY

In the design of the West Approach Bridge North, designers are reducing potential greenhouse gases by:

- ❖ Minimizing the use of walls and concrete for the new storm-water treatment facility.
- ❖ Building as much of the permanent facility as possible to eliminate tear-out and additional construction.
- ❖ Reducing bridge columns and column size, which represents a potential savings of 12.5 million pounds of CO<sub>2</sub>.

## Communications and Outreach

(APRIL 1, 2014 – JUNE 30, 2014)

### Constituent Correspondence

#### Public emails / phone calls

- 292 received
- 224 WSDOT responses (note: lower response total reflects multiple email / calls to some constituents)
- Prevalent themes:
  - ✓ Traffic impacts / closures
  - ✓ Program costs
  - ✓ Drawspan openings
  - ✓ WABN design / impacts
  - ✓ Eastside construction
  - ✓ Future construction on west side

### WSDOT Email Update

- 16 sent to the 9,000 plus subscribers within the SR 520 corridor
  - ✓ Represents more than 144,000 individual communiques
  - ✓ Email Update topics cover noteworthy program activities, construction milestones, traffic restrictions, neighborhood impacts, etc.

### Media Outreach

- 22 news releases and media advisories
- 20 media interviews
- 5 media tours/events

### Fairs and Festivals

- Communications and Program staff attended three community fairs in Q2, providing SR 520 Program information to more than 1,400 fair-goers who stopped by the SR 520 booth

### Stakeholder Briefings / Tours / Presentations

- 4 project-site tours for elected officials and other stakeholders
- 9 briefings with local elected officials and organizations
- 4 briefings with state and federal elected officials and organizations
- 9 meetings / presentations with community groups

### Communications Materials

- 10 new or updated program folios, fact sheets, PowerPoint presentations, fliers, display boards, direct mail, etc.

### SR 520 Website Visits

- 177,723 page views this period
- The most-visited pages, in order, were Highway Closures, Floating Bridge & Landings, home page, and Eastside Transit & HOV



*Crews in June lower into place a 190-foot-long transition span for connecting the new SR 520 floating bridge's eastbound lanes to land in Medina.*

## Jobs

### CONSTRUCTION UPDATE – JUNE 2014

Project	Total Jobs
Eastside Transit and HOV Project:	484
Floating Bridge and Landings Project:	566
Pontoon Construction Project:	340
West Connection Bridge:	70

*Jobs information includes current skilled construction trade counts for carpenters, concrete workers, crane operators, electricians, iron workers, laborers, machine operators, painters, truck drivers and welders based on project information provided by WSDOT contractors for June 30, 2014.*

**GLOSSARY – LIST OF FREQUENTLY-USED PROJECT AND INDUSTRY ACRONYMS**

ATM	Active Traffic Management
CCMP	Community Construction Management Plan
CIP	Cast-in-Place
CTC	Concrete Technology Corporation (SSP production site)
D-B	Design-Builder
DBIC	Design-Builder Initiated Change
Eastside	Eastside Transit and HOV Project
ECAP	Environmental Compliance Assurance Procedure
ECC	Eastside Corridor Constructors (Eastside Design-Builder)
ESA	Endangered Species Act
FB&L	Floating Bridge & Landings
FONSI	Finding of No Significant Impact
GH	Grays Harbor (Pontoon construction site)
HQ	WSDOT Headquarters
ITS	Intelligent Transportation System
K-G	Kiewit General, A Joint Venture (PCP Design-Builder)
K-GM	Kiewit General Manson, A Joint Venture (FB&L Design-Builder)
M-A	Mowat American, A Joint Venture (WCB Contractor)
NCI	Non-Conformance Incident
NCR	Non-Conformance Report
NEPA	National Environmental Policy Act
NTP	Notice to Proceed
NWR	WSDOT Northwest Region
PCI	Potential Change Issue
PCO	Potential Change Order
PCP	Pontoon Construction Project
PT	Post-Tensioning
QA	Quality Assurance
QC	Quality Control
RFI	Request for Information
RFP	Request for Proposal
ROD	Record of Decision
SPI	Schedule Performance Index is a performance index which equals
SSP	Supplemental Stability Pontoon
TCE	Temporary Construction Easement
TIFIA	Transportation Infrastructure Finance and Innovation Act
WABN	West Approach Bridge North
WCB	West Connection Bridge
WSDOT	Washington State Department of Transportation

### For more information

Visit: [www.wsdot.wa.gov/projects/SR520Bridge](http://www.wsdot.wa.gov/projects/SR520Bridge)  
E-mail: [SR520Bridge@wsdot.wa.gov](mailto:SR520Bridge@wsdot.wa.gov)  
Call: 1-888-520-NEWS (6397)  
Mail: Washington State Department of Transportation  
SR 520 Bridge Replacement and HOV Program  
999 3rd Avenue, Suite 900  
Seattle, WA 98104

**Americans with Disabilities Act (ADA):** This material can be made available in an alternate format by emailing the WSDOT Diversity/ADA Affairs team at [wsdotada@wsdot.wa.gov](mailto:wsdotada@wsdot.wa.gov) or by calling toll free, 855-362-4ADA(4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

**Title VI Information:** It is the Washington State Department of Transportation's (WSDOT) policy to assure that no person shall, on the grounds of race, color, national origin or sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its federally funded programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For additional information regarding Title VI complaint procedures and/or information regarding our non-discrimination obligations, please contact OEO's Title VI Coordinators, George Laue at (509) 324-6018 or Jonte' Sulton at (360) 705-7082.