Washington State Department of Transportation

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July 28, 2023

The Honorable Jake Fey
House Transportation Committee
PO Box 40600
Olympia, WA 98504-0600

The Honorable Mike Pellicciotti
Office of the State Treasurer
PO Box 40200
Olympia, WA 98504-0200

The Honorable Marko Liias
Senate Transportation Committee
PO Box 40444
Olympia, WA 98504-0444

Subject: Semi-Annual Practical Design Savings Report required by RCW 47.01.480

Dear Honorable Jake Fey, Marko Liias, and Mike Pellicciotti:

On behalf of the Washington State Department of Transportation (WSDOT), this letter summarizes practical design savings to date on Connecting Washington (CW) funded projects. This report was prepared in a manner consistent with the requirements outlined in RCW 47.01.480.

This report also identifies savings remaining at the completion of a Connecting Washington project for which the State Treasurer will transfer from the applicable account to the Transportation Future Funding Program Account. Once funding is transferred to the new account, beginning in fiscal year 2024, the Legislature may select additional projects to be delivered through the budget development process.

Since our last report in January 2023 five Connecting Washington projects in the Local Programs Division were completed within the reporting period. The completed projects were SR 520 Trail Grade Separation at 40th Street in King County, I-5/Port of Tacoma Road Interchange – Stage 1 in Pierce County, Issaquah-Fall City Road, in King County, Orchard Street Connector in Whatcom County, and South Lander Street in King County.

Total Project Savings were realized on two of these projects. The Orchard Street Connector in Whatcom County realized $2,032,668 in savings. The South Lander Street project in King County realized $4,500,518 in savings.

Based on the requirements in RCW 47.01.480, WSDOT has identified $6,533,186 project savings of Connecting Washington Account funds to be transferred by the State Treasurer's Office from the Connecting Washington Account to the Transportation Future Funding Program Account.

Report Details
Attachment A provides a summary of the conversion of the Legislative project budget to constant dollars for comparison to the engineer's project estimate at the time of construction advertisement also in constant dollars. If the Legislative project budget is larger than the engineer's project estimate, the difference is reported as practical design savings. To keep the report from becoming too lengthy, projects previously reported on this attachment have been removed and are listed in Attachment B. This Attachment A report includes projects advertised or authorized for construction between November 1st, 2022, and April 30th, 2023. Eight projects within the Highway Construction - Improvement Program went to ad within the reporting period. As a result of the calculations there were no practical design savings. Cumulative practical design savings are included in the report.

Attachment B provides a summary of the CW projects advertised and had practical design savings calculated. These projects are in construction and will have actual savings calculated when the projects are complete and closed. Five projects were completed and closed within the reporting period.

Attachment C provides background and assumptions used in preparation of this report.

Please contact Troy Suing, Director of Capital Program Development and Management Division at (360) 705-7121 or suingt@wsdot.wa.gov if you have any questions about this report.

Sincerely,

Roger Millar, P.E., FASCE, FAICP
Secretary of Transportation

RM:mw
Enclosure

Attachment A

Constant Dollar Conversion Assumptions
for Calculating Savings Attributable to Practical Design

Program	Legislative BIN[1]	Project Title[2]	Legislative Project Cost Estimate in YOE $ (inflated)[3]	Cost in 2014 $ (uninflated)[4]	Engineers Estimate at Advertisement in 2014 $ (uninflated)[5]	Practical Design Savings[6]
Highway Construction - Improvement Program						
	Previously Reported Practical Design Savings					62,268,000
	L2000061	**SR 28/SR 285, North Wenatchee Area Improvements**	**23,000,000**	**18,591,209**		
		US 2/97 Easy Street - Roundabout		4,261,000	5,930,000	0
		SR 28/SR 285, North Wenatchee Area Improvements (Additional construction packages yet to be determined)		14,330,209		
	L2000202	**SR 240/Richland Corridor Improvements**	**7,394,000[11]**	**5,422,000**		
		SR 240/Duportail Rd Intersection Improvements		48,000	48,000	0[8,10]
		SR 240/SR 225 Intersection - Construct Roundabout		1,501,000	1,411,000	0[8]
		SR 240/Richland Corridor Improvements (Additional construction packages yet to be determined)		3,873,000		
	M00800R	**US 395 North Spokane Corridor**	**878,900,000**	**713,567,000**		
		US 395/NSC Columbia to Freya		18,676,000	20,153,000	0[9]
		US 395/NSC BNSF - 2nd Railroad Realignment		44,348,000	63,639,000	0[9]
		US 395/NSC Wellesley Ave Improvements		25,148,000	31,993,199	0[9]
		US 395/NSC Spokane River to Columbia		31,987,000	41,011,000	0[9]
		US 395/NSC Spokane River to Columbia - Shared Use Path		13,898,000	11,433,000	2,465,000[9]
		US 395/NSC Spokane River Crossing		49,505,000	67,998,000	0
		US 395/NSC Sprague Ave to Spokane River - Phase 1		32,084,000	51,870,000	0[9]
		I-90/Magnolia Pedestrian Bridge - Emergency Removal		487,000	487,000	0[12]
		US 395 North Spokane Corridor (Additional construction packages yet to be determined)		497,921,000		
Highway Construction - Preservation Program						
	Previously Reported Practical Design Savings					2,399,000
	L2000174	**SR 241/Mabton Vicinity - Retrofit Bridges**	**12,000,000**	**10,885,000**	**15,316,000**	**0**
Ferry Capital Program						
	Previously Reported Practical Design Savings					578,000
	No projects advertised during this reporting period					
Facilities Capital Program						
	No projects advertised during this reporting period					
Rail Capital Program						
	Previously Reported Practical Design Savings					548,000

Attachment A

Program	Legislative BIN[1]	Project Title[2]	Legislative Project Contribution	Local Jurisdiction Self-Reported Savings[7]
Local Programs				
	L2000205	**I-5/Mellen Street Connector**	**10,000,000**	**0**
	L2000065	**SR 502 Main Street/Widening**	**7,700,000**	**0**
		SR 502/SR 503 Turn Lanes		
	NEDMOND	**SR 99 Revitalization in Edmonds**	**16,500,000**	**0**

Summary

Practical Design Savings in this Report	**0**
Cumulative Practical Design Savings by Program	
Highway Construction - Improvement Program	62,268,000
Highway Construction - Preservation Program	2,399,000
Ferry Capital Program	578,000
Facilities Capital Program	0
Rail Capital Program	548,000
Local Programs	0
Cumulative Practical Design Savings through April 30th, 2023	**65,793,000**

NOTE: This semi-annual report reflects delivery information for those projects advertised in the reporting cycle, November 1st, 2022 through April 30th, 2023. Summary Practical Design Savings will be reflected in each report.

Footnotes:

[1] Legislative project identification number.

[2] Project title from the 2015 Legislative Budget is shown in bold. The legislative project may be delivered using multiple construction projects. In this case, the construction projects are shown below the bolded legislative project. This additional detail is provided as construction projects are advertised.

[3] Total project cost from the 2015 Legislative project list in Year of Expenditure (YOE) dollars.

[4] Project cost portrayed in 2014 dollars deflated by the index in use by the department in December 2014.

[5] Engineer's estimate of total project cost at advertisement in 2014 dollars. Deflated using the index in use by the department at the time of project AD/RFP.

[6] Practical Design Savings are reported following construction advertisement in nominal dollars; prior to the completion of construction. Practical solutions are calculated by comparing the legislative uninflated project cost estimate with the uninflated project estimate at advertisement or release of a Request for Proposal (RFP) for design-build projects. The two uninflated project estimates are stated in the same year current dollars for calculating the practical design savings exclusive

[7] Information on Connecting WA projects managed by local jurisdictions is self-reported by the local jurisdiction.

[8] Connecting WA funded the construction phase only. No Practical Design Savings are calculated for construction only projects.

[9] Previously reported

[10] Prior to this report a larger contribution was provided towards this project. The City of Richland was able to utilize other fund sources to construct the improvements. Actual expenditures are being shown to properly indicate additional construction packages yet to be determined.

[11] The 23-25 Legislative Budget increased this projects total from $5 Million to $7.4 Million.

[12] The poor condition of the pedestrian structure required this projects work to be completed earlier than the original project provided. The scope on this project was removed from the original project.

Indicates new information to this report.

Attachment B

Semi-Annual Project Savings Report
to the State Treasurer and Legislative Transportation Committees
Active Projects

Program	Legislative BIN[1]	Project Title[2]	Practical Design Savings[3]	Unused Contingency[4]	Retired Risk Savings[5]	Total Savings Available[6]	Estimated Savings Available Date[7]
Highway Construction - Improvement Program							
	L1000110	**I-405/NE 132nd Interchange - Totem Lake**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2026
	L1000113	**I-90/SR 18 I/C to Deep Creek - Interchange Improvements &**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2026
	L1100110	**I-5/Marvin Road/SR 510 Interchange**	23,488,000	TBD[9]	TBD[9]	TBD[9]	1/1/2025
	L1100101	**SR 520/148th Ave NE Overlake Access Ramp**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2025
	L2000057	**SR 26/Dusty to Colfax - Add Climbing Lanes**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000058	**US 195/Colfax to Spangle - Add Passing Lane**					
		US 195/Colfax to Spangle - Add Passing Lane Stage 2	25,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000074	**SR 14/ Wind River Junction**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000094	**I-90/Medical Lake & Geiger Interchanges**					
		I-90/Medical Lake I/C to Geiger Field I/C - Reconstruction	394,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		I-90/Medical Lake I/C to Geiger Field I/C - Reconstruction - Phase 2	1,995,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000102	**SR 14/I-205 to SE 164th Avenue-Auxiliary Lanes**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000117	**SR 501/I-5 to Port of Vancouver**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000119	**I-5/Northbound on-ramp at Bakerview**	10,000,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000122	**I-90/Barker to Harvard - Improve Interchanges & Local Roads**					
		I-90/Barker to Harvard - Improve Interchanges and Local Roads	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		I-90/Barker to Harvard - WB on-Ramp Improvement	458,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		I-90/Barker to Harvard - Add Lane Harvard Rd Bridge	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		I-90/Barker to Harvard Phase 2 - Improve Interchanges and Local	0[8]	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000123	**I-82/ EB WB On and Off Ramps**	8,769,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024

Attachment B

Program	Legislative BIN[1]	Project Title[2]	Practical Design Savings[3]	Unused Contingency[4]	Retired Risk Savings[5]	Total Savings Available[6]	Estimated Savings Available Date[7]
	L2000127	**US 395/Ridgeline Intersection**	0[8]	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000128	**US 395/Safety Corridor Improvements**	1,340,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000170	**SR 125/9th Street Plaza - Intersection Improvements**					
		SR 125/Plaza Way - Intersection Improvements	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		SR 125/Plaza Way Vic Stage 2 - Sidewalk Improvements	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000201	**I-90/Eastgate to SR 900 - Corridor Improvements**	9,473,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	M00100R	**I-5 JBLM Corridor Improvements**					
		I-5/Steilacoom-Dupont Rd to Thorne Ln - Corridor Improvements	0	TBD[9]	TBD[9]	TBD[9]	7/1/2027
		I-5/Mounts Rd to Steilacoom-DuPont Rd - Corridor Improvements	0	TBD[9]	TBD[9]	TBD[9]	7/1/2027
	M00400R	**SR 520 Seattle Corridor Improvements - West End**					
		SR 520/Montlake to Lake Washington - I/C and Bridge Replacement	2,268,000	TBD[9]	TBD[9]	TBD[9]	7/1/2027
		SR 520/I-5 Interchange - Improvement	0	TBD[9]	TBD[9]	TBD[9]	7/1/2027
	M00500R	**I-90 Snoqualmie Pass - Widen to Easton**					
		I-90/Cabin Cr I/C to W Easton I/C Phase 3 - Add Lanes/Wildlife Bridges	0	TBD[9]	TBD[9]	TBD[9]	7/1/2029
		I-90/Stampede Pass I/C EB - Replace Concrete Panels	0	TBD[9]	TBD[9]	TBD[9]	7/1/2029
		I-90/Easton Hill to W Easton I/C WB - Replace Bridge and Build Detour	0[8]	TBD[9]	TBD[9]	TBD[9]	7/1/2029
		I-90/Cabin Creek I/C EB - Replace Concrete Panels	0	TBD[9]	TBD[9]	TBD[9]	7/1/2029
	M00600R	**SR 167/SR 509 Puget Sound Gateway**					
		SR 167/I-5 to SR 509 - Stage 1A	0	TBD[9]	TBD[9]	TBD[9]	7/1/2033
		SR 509/I-5 & SR 516 I/C to 28th/24th Ave S - SR 509 Completion Stage 1	0	TBD[9]	TBD[9]	TBD[9]	7/1/2033
		SR 509/28th/24th Ave S - City of SeaTac Lead	0	TBD[9]	TBD[9]	TBD[9]	7/1/2033
		SR 509/King County Trail (WSDOT Contribution)	0[11]	TBD[9]	TBD[9]	TBD[9]	7/1/2033
		SR 509/ST Stage 1 Elements (WSDOT Contribution)	0[11]	TBD[9]	TBD[9]	TBD[9]	7/1/2033

Attachment B

Program	Legislative BIN[1]	Project Title[2]	Practical Design Savings[3]	Unused Contingency[4]	Retired Risk Savings[5]	Total Savings Available[6]	Estimated Savings Available Date[7]
		SR 167/I-5 to SR 509 - Stage 1B	0	TBD[9]	TBD[9]	TBD[9]	7/1/2033
	M00800R	US 395 North Spokane Corridor					
		US 395/NSC Columbia to Freya	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		US 395/NSC BNSF - 2nd Railroad Realignment	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		US 395/NSC Wellesley Ave Improvements	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		US 395/NSC Spokane River to Columbia	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		US 395/NSC Spokane River to Columbia - Shared Use Path	2,465,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		US 395/NSC Sprague Ave to Spokane River - Phase 1	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	M00900R	**I-405 Renton to Lynwood - Corridor Widening**					
		SR 167 Toll Upgrade	0	TBD[9]	TBD[9]	TBD[9]	7/1/2029
		SR 167/SR 516 to S 277th St - Southbound Aux Lane	0	TBD[9]	TBD[9]	TBD[9]	7/1/2029
		I-405/Springbrook Creek Mitigation Bank - Long Term Management	0[8]	TBD[9]	TBD[9]	TBD[9]	7/1/2029
		I-405/SR 167 Direct Connector - Widening	0[8]	TBD[9]	TBD[9]	TBD[9]	7/1/2029
		I-405 Corridor - Wetland Mitigation Credits	0[8]	TBD[9]	TBD[9]	TBD[9]	7/1/2029
		I-405/Renton to Bellevue - Corridor Widening & ETL (Stage 2)	0	TBD[9]	TBD[9]	TBD[9]	7/1/2029
		I-405/SR 167 Interchange Catch Basins - Drainage Repair	0	TBD[9]	TBD[9]	TBD[9]	7/1/2029
		I-405/Toll Vendor for Renton to Bellevue - Toll System	0[8]	TBD[9]	TBD[9]	TBD[9]	7/1/2029
		I-405/Lakehurst Creek Culvert - Emergency Repair	0	TBD[9]	TBD[9]	TBD[9]	7/1/2029
	N92040R	**SR 9/SR 204 Intersection - Improvements**	3,935,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	T20700SC	**I-5/116th Street and 88th Street Interchanges - Improvements**					
		I-5/116th St NE Interchange - Tulalip Tribe Lead	0[11]	TBD[9]	TBD[9]	TBD[9]	7/1/2025
	T20900R	**US-12/Walla Walla Corridor Improvements**					
		US 12/Nine Mile Hill to Frenchtown Vic - Build New Highway	0	TBD[9]	TBD[9]	TBD[9]	7/1/2025
	T32800R	**SR 518 Des Moines Interchange Improvement**	259,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024

Highway Construction - Preservation Program

Attachment B

Program	Legislative BIN[1]	Project Title[2]	Practical Design Savings[3]	Unused Contingency[4]	Retired Risk Savings[5]	Total Savings Available[6]	Estimated Savings Available Date[7]
	G2000055	**Land Mobile Radio (LMR) Upgrade**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000075	**US 12/Wildcat Bridge Replacement**	2,399,000	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000116	**SR 107/Chehalis River Bridge - Structural Rehabilitation**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
Ferry Capital Program							
	L2000109	**#4 - 144 capacity vessel**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	900010L	**Seattle Tml Preservation**					
		SR 519/Seattle Trm - Terminal Bldg & N. Trestle Replacement	0	TBD[9]	TBD[9]	TBD[9]	7/1/2025
		SR 519/Seattle Trm Slip 3 - OHL & Transfer Span Replacement	578,000	TBD[9]	TBD[9]	TBD[9]	7/1/2025
		SR 339/Seattle Trm - Passenger-Only Ferry Facilities Replacement	0	TBD[9]	TBD[9]	TBD[9]	7/1/2025
	952515P	**Mukilteo Tml Improvement**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000166	**Clinton Tml Road Improvements**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
Facilities Capital Program							
	L1000151	**Olympic Region Maintenance and Administration Facility**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
Rail Capital Program							
	L1000146	**Grays Harbor Rail Corridor Safety Study**	0[12]	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L1000147	**South Kelso Railroad Crossing**	52,000	TBD[9]	TBD[9]	TBD[9]	7/1/2025
	L1100080	**Port of Moses Lake**	496,000	TBD[9]	TBD[9]	TBD[9]	7/1/2024
Local Programs[10]							
	G2000013	**SR 520 Trail Grade Seperation at 40th Street**	0	0	0	0	7/1/2023
	L1000081	**Community Facilities District Improvements (Redmond)**					
		Community Facilities District Improvements - Stage 1	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		Community Facilities District Improvements - Stage 2	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L1000087	**I-5/Port of Tacoma Road Interchange**					
		I-5/Port of Tacoma Road Interchange - Stage 1	0	0	0	0	7/1/2025
	L1000094	**Issaquah-Fall City Road**	0	0	0	0	7/1/2023
	L2000064	**Ridgefield Rail Overpass**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000065	**SR 502 Main Street/Widening**					

Attachment B

Program	Legislative BIN[1]	Project Title[2]	Practical Design Savings[3]	Unused Contingency[4]	Retired Risk Savings[5]	Total Savings Available[6]	Estimated Savings Available Date[7]
		SR 502/SR 503 Corridor - W 8th Ave / W Main St	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		SR 502/SR 503 Turn Lanes	0	TBD[9]	TBD[9]	TBD[9]	7/1/2023
	L2000066	**Lewis Street Bridge**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000104	**Covington Connector**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000120	**Orchard Street Connector**	0	0	0	2,032,668	7/1/2023
	L2000132	**Duportail Bridge**					
		Duportail Street Bridge - Stage 1	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
		Duportail Street Bridge - Stage 2	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000136	**Harbour Reach Extension**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000137	**Sammamish Bridge Corridor**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2000181	**South Lander Street**	0	0	0	4,500,518	7/1/2023
	L2000228	**Thornton Road Overpass**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	L2220059	**SR 516/Jenkins Creek to 185th**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024
	N52400R	**SR 524: 48th Ave W - 37th Ave W**	0	TBD[9]	TBD[9]	TBD[9]	1/1/2024

Funds to transfer to the Transportation Future Funding Program Account for this reporting period. **6,533,186**

Previously Identified Funds for Transfer **$5,750,337**

Cumulative funds identified for transfer to the Transportation Future Funding Program Account **$12,283,523**

NOTE: This semi-annual report reflects delivery information for those projects advertised in the reporting cycle, November 1st, 2022 through April 30th, 2023. Summary Practical Design Savings will be reflected in each report.

Footnotes:

[1] Legislative project identification number.

[2] Project title from the 2015 Legislative Budget is shown in bold. The legislative project may be delivered using multiple construction projects. In this case, the construction projects are shown below the bolded legislative project. This additional detail is provided as construction projects are advertised.

[3] Practical design savings are reported shortly following construction advertisement; prior to the completion of construction. Practical solutions are calculated by comparing the legislative uninflated project cost estimate with the uninflated project estimate at advertisement or release of a Request for Proposal (RFP) for design-build projects. The two uninflated project estimates are stated in the same year current dollars for calculating the practical design savings exclusive of inflationary impacts.

[4] Contingency funds established with each construction project consistent with WSDOT policy and standard industry practice. Unused contingency funds will be reported at the completion of the project.

[5] Risk reserves are established for larger construction projects for identified potential construction delivery risks, consistent with WSDOT policy and standard industry practice. Risks that are unrealized are retired and the funding remains on the legislative identified project until completion of the entire legislative scope of work is completed. Unused risk reserves will be reported at the completion of the project.

Attachment B

Program	Legislative BIN[1]	Project Title[2]	Practical Design Savings[3]	Unused Contingency[4]	Retired Risk Savings[5]	Total Savings Available[6]	Estimated Savings Available Date[7]

[6] Total savings available represents the unused funding available at the completion of the entire legislative scope of work on a project. This amount reflects the funding that the treasurer must transfer from the Connection Washington Account or the Multimodal Transportation Account to the Transportation Futures Funding Program Account.

[7] Estimate savings available date reflects the anticipated date in which the savings will be available for transfer. It is based on the date in which the project or BIN is anticipated to be complete.

[8] Connecting WA funded the construction phase only. No Practical Design Savings are calculated for construction only projects.

[9] The project is currently in construction. Actual savings for unused contingency, unused risk, and savings available to transfer will be known when project is completed for PINs. Actual savings for BINs will be known when all projects in the BIN are complete.

[10] Information on Connecting WA projects managed by local jurisdictions is self-reported by the local jurisdiction.

[11] Contribution to Local project. No Practical Design Savings are calculated for contribution only projects.

[12] Study only. Practical Design Savings are not calculated for studies.

Indicates updated information since last report.

Attachment C

Practical Design Report Background, Assumptions and WSDOT Efforts to Implement Practical Design

Background

As part of the Connecting Washington transportation revenue package passed by the Legislature and signed by the Governor in July 2015, Engrossed Substitute House Bill (ESHB) 2012 was enacted and codified as RCW 47.01.480 and RCW 47.01.485. This law provides direction on performance and reporting expectations on implementing practical design for CW-funded projects. The law requires two reports to be prepared; a semi-annual report submitted July 1 and January 1 identifying practical design savings, retired risk and unused contingencies. The second report is required annually with the department's budget submittal and includes the savings mentioned above plus the addition of savings generated through scope changes, associated impacts on risk and changes in the cost of materials.

This letter is in response to the semi-annual report, which requires information on practical design savings, unused risk reserves, unused contingency, and identification of savings for the State Treasurer to transfer from the Connecting Washington Account to the Transportation Future Funding Program Account. If no savings are identified to be transferred at the time of reporting, an estimated date for savings to materialize is provided. The specific language for the semi-annual report is as follows:

> RCW 47.01.480 (2)(b) - ***Beginning July 1, 2016, the department must submit a report to the state treasurer and the transportation committees of the legislature once every six months identifying the amount of savings attributable to the application of practical design, retired risk, and unused contingency funding, and report when the savings become available. The state treasurer must transfer the available amounts identified in the report to the transportation future funding program account created in RCW 46.68.396.***

Furthermore, the law outlines the basic methodology associated with how the practical design savings element of the report should be calculated. The following is an excerpt from the law:

> RCW 47.01.480 (1)(c) ***- To determine the savings attributable to practical design, each connecting Washington project must be evaluated. For design-bid-build projects, the evaluation must occur at the end of the project design phase. For design-build projects, the evaluation must occur at the completion of thirty percent design…***

Given the above direction, the reporting requirements associated with this semi-annual report include elements which are to be reported at the completion of the project design phase (savings attributable to practical design) and project construction (retired risk and unused contingency funding). Since WSDOT often delivers legislative line-item projects using multiple construction contracts, the final reporting element (savings

available to transfer) will not be available until the last construction contract to deliver the legislative line-item project has been completed.

It should be noted that this report does not convey a complete summary of events associated with the quality, efficiency, and/or challenges of project delivery. For example, the report does not include information comparing the winning project bid to the engineers estimate at contract award and the risks, which are either mitigated or materialized. WSDOT assumes that other existing reporting mechanisms will provide this additional information on project delivery.

The report includes Connecting Washington line-item projects in the following programs: Highway Construction Improvement and Preservation, Washington State Ferries Capital, Rail Capital, Facility Capital and Local Programs Capital as reflected on the latest legislative project list once design is completed. Programmatic items included in the legislative project list such as the Highway System Preservation, fish barrier removal, ferry vessel and terminal preservation, grant programs for bicycle/pedestrian, transit and rail projects are assumed to be fixed levels of investment intended to deliver as much of the identified work as possible over the 16-year period. Therefore, programmatic entries will not be included in this report. Additionally, to capture the savings attributable to practical design decisions, WSDOT will remove the impact of inflation from the calculation of project savings. The detailed information in these reports will capture practical design savings based on a constant dollar comparison between the original (uninflated) legislative project budget and the (uninflated) project estimate at the time of advertisement. Furthermore, WSDOT assumes that the issuance of the Request for Proposal (RFP) represents completion of 30 percent design for calculating the savings attributable to practical design on design-build projects. Additional assumptions associated with this report include:

- Projects that have already been designed using non-CW funding and have only construction funded through CW will not have any practical design savings reported. Savings from these projects will be reflected in other currently required reporting elements.
- Projects where CW does not complete the design will be reported at the end of the design phase, or when available funding is used. Other required reporting elements will not be reported on until construction funding becomes available.
- Planning studies for which there is unused funding will be included in this report at the conclusion of the study.
- Local projects will be "self-reported" by the local jurisdiction to WSDOT's Local Programs Office and will be compared to the most recent available project cost estimate.

Implementing Practical Solutions throughout WSDOT

Practical solutions strategies (which included practical design) are applied throughout the project development and delivery process. Where practical solution refinements are identified in the process will determine if savings are the result of cost avoidance (i.e. an

initial lower project estimate to be funded than otherwise anticipated) or a reduction to a project budget (i.e. project savings that occurred after the initial project estimate was funded). Practical design applications begin during the scoping and pre-design stage of project development. During this stage, agency pre-design efforts are funded from non-project resources rather than from a specific project budget. Practical design savings through cost avoidance are removed from the project estimate prior to establishing the initial project budget. After the initial project budget is established and design begins on that project, practical design can result in reduced costs to deliver the project. Assuming no inflationary increases on the project over its delivery schedule, and assuming no unforeseen project challenges, the reduced delivery cost should result in project savings. It is important to recognize that greater savings are often generated through practical solution and practical design efforts during the earlier stages of project development, prior to the project receiving funding. This concept has been documented, in part, in the 2010 JLARC report on WSDOT scoping and cost estimating for highway construction projects. As WSDOT continues to refine its approach to implementing practical solutions and practical design, we expect to observe a diminishing level of savings. This is due to future projects being developed from their inception utilizing these principles. In other words, we will not have potentially over-designed projects to compare to those projects that were developed using practical design. This will result in fewer savings being available over time from funded projects.