

Transportation Building 310 Maple Park Avenue S.E. P.O. Box 47300 Olympia, WA 98504-7300 360-705-7000 TTY: 1-800-833-6388 www.wsdot.wa.gov

January 3, 2022

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 40421 Olympia, WA 98504-0421

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 July 2021, one Connecting Washington project was completed within the Highway Construction - Improvement Program. The project closure did not realize any total project savings. After the July 2021 report was created, an additional \$55,000 was realized within the right-of-way phase of the SR 20/Sharpes Corner Vicinity Intersection project (L1000112). The original total project savings reported was \$79,464. The revised total project savings is now \$134,464.

Based on the requirements in RCW 47.01.480, WSDOT has identified project savings totaling \$55,000 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

Honorable Fey, Liias, and Pellicciotti January 3, 2022 Page 2

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 May 1st, 2021 and October 31st, 2021. Three projects within the Highway Construction - Improvement Program, and one Local Programs project have gone to ad within the reporting period and had no calculated 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. One project was completed within the reporting period. The project was in the Highway Construction – Improvement Program, L2000202, SR 240/Duportail Rd Intersection Improvements in Benton County. This project has closed, expending less than originally planned. However, this project is within a Legislative BIN and the savings have been transferred to another project within the corridor. Total savings within the Legislative BIN will be reported when all projects are complete.

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

Please contact Jay Alexander, Director of Capital Program Development and Management at (360) 705-7121 or <u>alexanja@wsdot.wa.gov</u> if you have any questions about this report.

Sincerely,

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

RM:jd Enclosure

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 | | Improvement Program | | | | |
| | Previously Rep | ported Practical Design Savings | | | | 58,333,000 |
| | M00600R | SR 167/SR 509 Puget Sound Gateway | 1,875,500,000 | 1,474,652,000 | | |
| | | SR 167/I-5 to SR 509 - Stage 1A | | 51,092,000 | 51,092,000 | 0 ^{8,9} |
| | | SR 509/I-5 & SR 516 I/C to 28th/24th Ave S - SR 509 Completion Stage 1 | | 366,671,000 | 415,367,000 | 0 ⁹ |
| | | SR 509/28th/24th Ave S - City of SeaTac Lead | | 3,340,000 | 3,340,000 | 0 ⁹ |
| | | SR 509/King County Trail (WSDOT Contribution) | | 8,922,000 | 8,548,000 | 0 ⁸ |
| | | SR 509/ST Stage 1 Elements (WSDOT Contribution) | | 43,614,000 | 43,614,000 | 08 |
| | | SR 167/I-5 to SR 509 - Stage 1B | | 410,336,000 | 422,388,000 | 0 |
| | | SR 167/SR 509 Puget Sound Gateway | | 590,677,000 | | |
| | | (Additional construction packages yet to be determined) | | | | |
| lighway | Construction - | Preservation Program | | | | |
| | Previously Rep | ported Practical Design Savings | | | | 2,399,000 |
| | No projects ac | lvertised during this reporting period | | | | |
| erry Cap | pital Program | | | | | 570.000 |
| | | ported Practical Design Savings | | | | 578,000 |
| | No projects ac | lvertised during this reporting period | | | | |
| Facilities | Capital Progra | ım | | | | |
| | No projects ad | lvertised during this reporting period | | | | |
| Rail Capi | tal Program | | | | | |
| | - | autod Prosting Design Cavings | | | | 548,000 |
| | Previously Rep | ported Practical Design Savings | | | | 548,000 |
| | | | | | | Local |
| | | | Legislative | | | Jurisdiction |
| Program | Legislative BIN ¹ | Project Title ² | Project Contribution | | | Self-Reported Savings ⁷ |
| | | Project fille | contribution | | | Savings |
| ocal Pro | - | | | | | |
| | L2220059 | SR 516/Jenkins Creek to 185th Avenue - Widening | 12,600,000 | | | 0 |
| | | | | | | |
| | 6 | | | | | |
| | Summary | Design Sovings in this Deposit | | | | 0 |
| | | l Design Savings in this Report | | | | 0 |
| | Practica Cumulat | ive Practical Design Savings by Program | | | | |
| | Practica Cumulat _{Hig} i | ive Practical Design Savings by Program hway Construction - Improvement Program | | | | 58,333,000 |
| | Practica Cumulat ^{Higl} Higl | ive Practical Design Savings by Program hway Construction - Improvement Program hway Construction - Preservation Program | | | | 58,333,000 2,399,000 |
| | Practica Cumulat Hig Hig Fer | ive Practical Design Savings by Program hway Construction - Improvement Program hway Construction - Preservation Program ry Capital Program | | | | 58,333,000 2,399,000 578,000 |
| | Practica Cumulat Higi Higi Ferr Faci | ive Practical Design Savings by Program hway Construction - Improvement Program hway Construction - Preservation Program ry Capital Program lities Capital Program | | | | 58,333,000 2,399,000 578,000 0 |
| | Practica Cumulat Higi Higi Fern Faci Rail | ive Practical Design Savings by Program hway Construction - Improvement Program hway Construction - Preservation Program ry Capital Program | | | | 58,333,000 2,399,000 578,000 |

NOTE: This semi-annual report reflects delivery information for those projects advertised in the reporting cycle, May 1st, 2021 through October 31st, 2021. Summary Practical Design Savings will be reflected in each report.

Footnotes:

¹Legislative 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 of inflationary impacts.

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.

⁹Previously reported

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

| | Active Hojects | | | | | | |
|-----------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------------|--------------------------------------------------------|
| Program | Legislative BIN ¹ | Project Title ² | Practical Design Savings ³ | Unused Contingency ⁴ | Retired Risk Savings⁵ | Total Savings Available ⁶ | Estimated Savings Available Date ⁷ |
| Highway (| Construction · | - Improvement Program | | | | | |
| | L1000112 | SR 20/Sharpes Corner Vicinity Intersection | 1,942,000 | 0 | 79,464 | 55,000 ¹³ | |
| | L1000157 | SR 14 Access Improvements | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 1/31/2022 |
| | L1000110 | I-405/NE 132nd Interchange - Totem Lake | 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 |
| | 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 | 7/1/2022 |
| | L2000074 | SR 14/ Wind River Junction | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2022 |
| | L2000094 | I-90/Medical Lake & Geiger Interchanges I-90/Medical Lake I/C to Geiger Field I/C - Reconstruction I-90/Medical Lake I/C to Geiger Field I/C - Reconstruction - Phase 2 | 394,000 1,995,000 | TBD ⁹ TBD ⁹ | TBD ⁹ TBD ⁹ | tbd ⁹ tbd ⁹ | 7/1/2023 7/1/2023 |
| | L2000117 | SR 501/I-5 to Port of Vancouver | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 1/1/2023 |
| | L2000119 | I-5/Northbound on-ramp at Bakerview | 10,000,000 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| | 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 | 1/1/2023 |
| | | I-90/Barker to Harvard - WB on- Ramp Improvement | 458,000 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 1/1/2023 |
| | | I-90/Barker to Harvard - Add Lane Harvard Rd Bridge I-90/Barker to Harvard Phase 2 - | 0 0 ⁸ | TBD ⁹ TBD ⁹ | TBD ⁹ | TBD ⁹ TBD ⁹ | 1/1/2023 1/1/2023 |
| | | Improve Interchanges and Local | U | | IBD | IBD | 1, 1, 2023 |
| | L2000123 | I-82/ EB WB On and Off Ramps | 8,769,000 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2022 |
| | 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 | 7/1/2022 |
| | L2000170 | SR 125/9th Street Plaza - Intersection Improvements SR 125/Plaza Way - Intersection | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| | | Improvements | 0 | IBD | IBD | UBU | 77172025 |

| | Legislative | | Practical Design | Unused | Retired Risk | Total Savings | Estimated Savings Available |
|---------|------------------|-------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----------------------------------|
| Program | BIN ¹ | Project Title ² | Savings ³ | Contingency ⁴ | Savings⁵ | Available ⁶ | Date ⁷ |
| | L2000201 | I-90/Eastgate to SR 900 - Corridor Improvements | 9,473,000 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| | L2000202 | SR 240/Richland Corridor Improvements | 44 | | | 2 | |
| | | SR 240/Duportail Rd Intersection Improvements | 0 ¹¹ | 0 | 0 | 0 ⁹ | 7/1/2025 |
| | L2000223 | I-5/Rebuild Chamber Way Interchange Improvements | | | | | |
| | | I-5/Chamber Way Bridge - Emergency Repair and Replacement | 0 ⁸ | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2027 |
| | 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 |
| | 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/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 |
| | | Concrete Panels | | | | | |
| | 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 |
| | M00800R | US 395 North Spokane Corridor | | | | | |
| | | US 395/NSC Columbia to Freya | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| | | US 395/NSC BNSF - 2nd Railroad Realignment | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| | | US 395/NSC Spokane River to Columbia | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| | | US 395/NSC Spokane River to Columbia - Shared Use Path US 395/NSC Sprague Ave to Spokane River - Phase 1 | 2,465,000 0 | TBD ⁹ TBD ⁹ | TBD ⁹ TBD ⁹ | TBD ⁹ TBD ⁹ | 7/1/2023 7/1/2023 |
| | M00900R | I-405 Renton to Lynwood - Corridor | | | | | |
| | | Widening I-405/SR 167 Direct Connector - Widening | 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 |

| Program | Legislative BIN ¹ | Project Title ² | Practical Design Savings ³ | Unused Contingency ⁴ | Retired Risk Savings⁵ | Total Savings Available ⁶ | Estimated Savings Available Date ⁷ |
|------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------------|--------------------------------------------------------|
| | | I-405/SR 167 Interchange Catch Basins - Drainage Repair | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2029 |
| | 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 | 7/1/2022 |
| Highway | Construction G2000055 | - Preservation Program Land Mobile Radio (LMR) Upgrade | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| | L2000075 | US 12/Wildcat Bridge Replacement | 2,399,000 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2022 |
| | L2000116 | SR 107/Chehalis River Bridge - Structural Rehabilitation | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| erry Cap | ital Program L2000109 | #4 - 144 capacity vessel | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2022 |
| | 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 SR 339/Seattle Trm - Passenger- | 578,000 | TBD ⁹ TBD ⁹ | TBD ⁹ TBD ⁹ | TBD ⁹ | 7/1/2025 |
| | 952515P | Only Ferry Facilities Replacement Mukilteo Tml Improvement | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| | | - | | | | | |
| | | Clinton Tml Road Improvements | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| acilities | Capital Progra L1000151 | am Olympic Region Maintenance and Administration Facility | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| Rail Capit | al Program | | | | | | |
| | L1000146 | Grays Harbor Rail Corridor Safety Study | 0 ¹² | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/2023 |
| | 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 |
| ocal Pro | grams ¹⁰ | | | | | | |
| | L1000081 | Community Facilities District Improvements (Redmond) Community Facilities District Improvements - Stage 1 Community Facilities District | 0 0 | tbd ⁹ TBD ⁹ | tbd ⁹ tbd ⁹ | TBD ⁹ TBD ⁹ | 7/1/2022 7/1/2022 |
| | L1000087 | Improvements - Stage 2 I-5/Port of Tacoma Road Interchange | | | | | |

| ram | Legislative BIN ¹ | Project Title ² | Practical Design Savings ³ | Unused Contingency ⁴ | Retired Risk Savings⁵ | Total Savings Available ⁶ | Estimate Savings Availabl Date ⁷ |
|----------|---------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------------|------------------------------------------------------|
| | | I-5/Port of Tacoma Road Interchange - Stage 1 | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L1000092 | SR 99/Burlington N Overpass Replacement | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L1000094 | Issaquah-Fall City Road | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L2000064 | Ridgefield Rail Overpass | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L2000065 | SR 502 Main Street/Widening SR 502 Main Street/Widening Stage | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L2000066 | Lewis Street Bridge | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L2000104 | Covington Connector | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L2000120 | Orchard Street Connector | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L2000132 | Duportail Bridge Duportail Street Bridge - Stage 1 Duportail Street Bridge - Stage 2 | 0 0 | TBD ⁹ TBD ⁹ | TBD ⁹ TBD ⁹ | TBD ⁹ TBD ⁹ | 7/1/202 7/1/202 |
| | L2000133 | 228th & Union Pacific Grade Separation (City of Kent) 228th & Union Pacific Grade Separation - Stage 1 | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | | 228th & Union Pacific Grade Separation - Stage 2 228th & Union Pacific Grade | 0 | TBD ⁹ TBD ⁹ | TBD ⁹ TBD ⁹ | TBD ⁹ TBD ⁹ | 7/1/202 7/1/202 |
| | | Separation - Stage 4 228th & Union Pacific Grade Separation - Stage 5 | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L2000136 | Harbour Reach Extension | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L2000137 | Sammamish Bridge Corridor | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L2000164 | Brady Way | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L2000181 | South Lander Street | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | L2000228 | Thornton Road Overpass | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| | N52400R | SR 524: 48th Ave W - 37th Ave W | 0 | TBD ⁹ | TBD ⁹ | TBD ⁹ | 7/1/202 |
| ds to t | ransfer to the | e Transportation Future Funding Pro | ogram Account | t for this reporting | g period. | 55,000 | |
| den el 1 | Identified E | unds for Transfer | | | | \$5,660,147 | |

NOTE: This semi-annual report reflects delivery information for those projects advertised in the reporting cycle, May 1st, 2021 through October 31st, 2021. Summary Practical Design Savings will be reflected in each report.

Footnotes:

¹Legislative 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.

| | | | | | | | Estimated |
|---------|------------------|----------------------------|----------------------|---------------------------------|----------|------------------------|-------------------|
| | | | Practical | | Retired | Total | Savings |
| | Legislative | | Design | Unused | Risk | Savings | Available |
| Program | BIN ¹ | Project Title ² | Savings ³ | Contingency ⁴ | Savings⁵ | Available ⁶ | Date ⁷ |

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.

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.

¹³After the July 2021 report was created an additional \$55,000 was realized within the Right-of-Way phase of the SR 20/Sharpes Corner Vicinity Intersection project (L1000112). The original total project savings of \$79,464 was reported and transferred in the July 2021 report. The new Total Project Savings for this project is now \$134,464.

Indicates updated information since last report.

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-bidbuild 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 nonproject 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 overdesigned 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.