

**Americans with Disabilities Act (ADA)
ADA Transition Plan for the Public Right-of-Way**



Appendix F

Cost Estimate and Financial Implementation Documentation

May 2024

Prepared by Transportation Solutions, Inc.



Exhibit 4-2 Cost Estimating Matrix

Project Development Phase	Percentage of Design Completed	Purpose of Estimate	Methodology	Tools	Estimate Range
Planning Washington Transportation Plan Highway System Plan Design Studies Route Dev. Plans Pre-Design	0% to 2%	Screening or Feasibility WTP/HSP (20-Year Plan) WTP – Washington Transportation Plan HSP – Highway Systems Plan	Parametric	PLCE and/orMP3	-50% to +200%
	1% to 15%	Concept Study or Feasibility Implementation Plan (10 Yr. Plan)	Parametric Risk-Based	PLCE and/orMPE Risk assessment models	-40% to 100%
Scoping Project Summary (PD, DDS)	10% to 30%	Budget Authorization or Control Capital Improvement & Preservation Plan (CIPP)	Parametric Historical Bid- Based Risk-Based	PLCE and/orMP3 UBA, BidTabsPro Risk assessment models	-30% to +50%
Design Design Documentation I/S Plans for Approval Design Approval	30% to 90%	Design Estimates (Project Control of Scope Schedule Budget)	Historical Bid - Based Cost-Based Risk-Based	UBA, BidTabsPro, Risk assessment models	-10% to +25%
PS&E Plans, Specs, Estimate (R/W Plans approved)	90% to 100%	Engineer's Estimate (prior to bid)	Historical Bid - Based Cost-Based Risk-Based	EBASE, UBA, BidTabs Pro, Risk assessment models	-5% to +10%

Planning Level Cost Estimate

Project:	<u>Skamania County</u>	Date:	<u>4/4/24</u>
Design Option:	<u>Typical Curb Ramp Removal and Replacement</u>	Prepared by:	<u>VLS</u>
Length:	<u>15 feet</u>		
Description:	<u>Replace non-compliant curb ramp</u>		
Assumptions:	<u>Drainage improvements not included. Undergrounding of utilities not included. ROW costs excluded.</u>		

Preparation		
1	Mobilization	\$1,300.00
2-4	Preparation Items	\$2,200.00
5-12	Removal Items	\$365.00
<i>Preparation Subtotal</i>		<u>\$3,865.00</u>

Structures		
50-53	Retaining Walls	\$0.00
54	Bridge Structure	\$0.00
<i>Structure Subtotal</i>		<u>\$0.00</u>

Grading		
13-14	Roadway Grading	\$155.00
15-18	Roadway Foundation	\$245.00
19-24	Utility Excavation	\$0.00
<i>Grading Subtotal</i>		<u>\$400.00</u>

TESC and Landscaping		
55-57	TESC	\$200.00
58-62	Plantings	\$0.00
63-64	Irrigation	\$0.00
<i>TESC and Landscaping Subtotal</i>		<u>\$200.00</u>

Storm Drainage		
25-36	Conveyance System	\$0.00
37	Culvert/Stream Crossing	\$0.00
38	Detention/Water Quality Facility	\$0.00
<i>Storm Drainage Subtotal</i>		<u>\$0.00</u>

Traffic		
65-74	Markings and Signing	\$0.00
75-78	Guardrail/Handrail	\$0.00
79-83	Traffic Signal System	\$0.00
84-86	Illumination System	\$0.00
87-92	Traffic Control	\$3,400.00
<i>Traffic Subtotal</i>		<u>\$3,400.00</u>

Paving		
39-41	Hot Mix Asphalt Pavement	\$1,550.00
<i>HMA Subtotal</i>		<u>\$1,550.00</u>

Other Items		
93-94	Utility Relocates	\$0.00
95-97	Misc. Construction	\$500.00
<i>Other Items Subtotal</i>		<u>\$500.00</u>

Concrete		
42-44	Sidewalks, Ramps, Driveways	\$3,500.00
45-47	Curbs and Gutters	\$0.00
48-49	Concrete Roadway/Roundabout	\$0.00
<i>Concrete Subtotal</i>		<u>\$3,500.00</u>

CONSTRUCTION SUBTOTAL		\$13,415.00
CONTINGENCY	40%	\$5,370.00
CONSTRUCTION (CN) SUBTOTAL		\$18,785.00

	Low	High
PE	\$5,000	\$10,000
ROW	\$0	\$0
CN	\$13,000	\$28,000
Total	\$18,000	\$38,000

DESIGN ENGINEERING	15%	\$2,820.00
CONSTRUCTION ENGINEERING	15%	\$2,820.00
PROJECT ADMINISTRATION	5%	\$940.00
ENGR. AND ADMIN. (PE) SUBTOTAL		\$6,580.00

ENVIRONMENTAL ENGINEERING (PE)	2%	\$380.00
ENVIRONMENTAL MITIGATION (CN)	1%	\$190.00
ENVIRONMENTAL SUBTOTAL		\$570.00

RIGHT-OF-WAY (ROW) SUBTOTAL		\$0.00
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TOTAL PROJECT COST	Year 2024	\$25,935.00
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Project Cost Summary includes a range of reported project costs for this planning level estimate, which is based upon 10% design information (scoping row). Low is 30% below and high is 50% above the estimated cost category. Reference: WSDOT Cost Estimating Manual for Projects, Page 4-10, January 2023.

Planning Level Cost Estimate

Project:	<u>Skamania County</u>	Date:	<u>4/4/24</u>
Design Option:	<u>Typical Sidewalk Removal and Replacement</u>	Prepared by:	<u>VLS</u>
Length:	<u>100 feet</u>		
Description:	<u>Construct curb, gutter, and sidewalk for the distance listed above.</u>		
Assumptions:	<u>Drainage improvements not included. Undergrounding of utilities not included. ROW costs excluded.</u>		

Preparation		
1	Mobilization	\$2,400.00
2-4	Preparation Items	\$2,400.00
5-12	Removal Items	\$1,840.00
<i>Preparation Subtotal</i>		\$6,640.00

Structures		
50-53	Retaining Walls	\$0.00
54	Bridge Structure	\$0.00
<i>Structure Subtotal</i>		\$0.00

Grading		
13-14	Roadway Grading	\$670.00
15-18	Roadway Foundation	\$1,015.00
19-24	Utility Excavation	\$0.00
<i>Grading Subtotal</i>		\$1,685.00

TESC and Landscaping		
55-57	TESC	\$400.00
58-62	Plantings	\$0.00
63-64	Irrigation	\$0.00
<i>TESC and Landscaping Subtotal</i>		\$400.00

Storm Drainage		
25-36	Conveyance System	\$0.00
37	Culvert/Stream Crossing	\$0.00
38	Detention/Water Quality Facility	\$0.00
<i>Storm Drainage Subtotal</i>		\$0.00

Traffic		
65-74	Markings and Signing	\$0.00
75-78	Guardrail/Handrail	\$0.00
79-83	Traffic Signal System	\$0.00
84-86	Illumination System	\$0.00
87-92	Traffic Control	\$7,000.00
<i>Traffic Subtotal</i>		\$7,000.00

Paving		
39-41	Hot Mix Asphalt Pavement	\$1,550.00
<i>HMA Subtotal</i>		\$1,550.00

Other Items		
93-94	Utility Relocates	\$0.00
95-97	Misc. Construction	\$500.00
<i>Other Items Subtotal</i>		\$500.00

Concrete		
42-44	Sidewalks, Ramps, Driveways	\$3,640.00
45-47	Curbs and Gutters	\$4,000.00
48-49	Concrete Roadway/Roundabout	\$0.00
<i>Concrete Subtotal</i>		\$7,640.00

CONSTRUCTION SUBTOTAL		\$25,415.00
CONTINGENCY	40%	\$10,170.00
CONSTRUCTION (CN) SUBTOTAL		\$35,585.00

	Low	High
PE	\$9,000	\$20,000
ROW	\$0	\$0
CN	\$25,000	\$54,000
Total	\$34,000	\$74,000

DESIGN ENGINEERING	15%	\$5,340.00
CONSTRUCTION ENGINEERING	15%	\$5,340.00
PROJECT ADMINISTRATION	5%	\$1,780.00
ENGR. AND ADMIN. (PE) SUBTOTAL		\$12,460.00

ENVIRONMENTAL ENGINEERING (PE)	2%	\$720.00
ENVIRONMENTAL MITIGATION (CN)	1%	\$360.00
ENVIRONMENTAL SUBTOTAL		\$1,080.00

RIGHT-OF-WAY (ROW) SUBTOTAL **\$0.00**

TOTAL PROJECT COST **Year 2024** **\$49,125.00**

Project Cost Summary includes a range of reported project costs for this planning level estimate, which is based upon 10% design information (scoping row). Low is 30% below and high is 50% above the estimated cost category. Reference: WSDOT Cost Estimating Manual for Projects, Page 4-10, January 2023.

Planning Level Cost Estimate

Project:	<u>Skamania County</u>	Date:	<u>4/4/24</u>
Design Option:	<u>Typical Sidewalk Removal and Replacement</u>	Prepared by:	<u>VLS</u>
Length:	<u>100 feet</u>		
Description:	<u>Construct curb, gutter, and sidewalk for the distance listed above.</u>		
Assumptions:	<u>Drainage improvements included. Undergrounding of utilities not included. ROW costs excluded.</u>		

Preparation		
1	Mobilization	\$3,500.00
2-4	Preparation Items	\$2,600.00
5-12	Removal Items	\$1,840.00
<i>Preparation Subtotal</i>		\$7,940.00

Structures		
50-53	Retaining Walls	\$0.00
54	Bridge Structure	\$0.00
<i>Structure Subtotal</i>		\$0.00

Grading		
13-14	Roadway Grading	\$670.00
15-18	Roadway Foundation	\$1,015.00
19-24	Utility Excavation	\$0.00
<i>Grading Subtotal</i>		\$1,685.00

TESC and Landscaping		
55-57	TESC	\$600.00
58-62	Plantings	\$0.00
63-64	Irrigation	\$0.00
<i>TESC and Landscaping Subtotal</i>		\$600.00

Storm Drainage		
25-36	Conveyance System	\$11,200.00
37	Culvert/Stream Crossing	\$0.00
38	Detention/Water Quality Facility	\$0.00
<i>Storm Drainage Subtotal</i>		\$11,200.00

Traffic		
65-74	Markings and Signing	\$0.00
75-78	Guardrail/Handrail	\$0.00
79-83	Traffic Signal System	\$0.00
84-86	Illumination System	\$0.00
87-92	Traffic Control	\$7,000.00
<i>Traffic Subtotal</i>		\$7,000.00

Paving		
39-41	Hot Mix Asphalt Pavement	\$1,550.00
<i>HMA Subtotal</i>		\$1,550.00

Other Items		
93-94	Utility Relocates	\$0.00
95-97	Misc. Construction	\$500.00
<i>Other Items Subtotal</i>		\$500.00

Concrete		
42-44	Sidewalks, Ramps, Driveways	\$3,640.00
45-47	Curbs and Gutters	\$4,000.00
48-49	Concrete Roadway/Roundabout	\$0.00
<i>Concrete Subtotal</i>		\$7,640.00

CONSTRUCTION SUBTOTAL		\$38,115.00
CONTINGENCY	40%	\$15,250.00
CONSTRUCTION (CN) SUBTOTAL		\$53,365.00

	Low	High
PE	\$14,000	\$30,000
ROW	\$0	\$0
CN	\$38,000	\$81,000
Total	\$52,000	\$111,000

DESIGN ENGINEERING	15%	\$8,010.00
CONSTRUCTION ENGINEERING	15%	\$8,010.00
PROJECT ADMINISTRATION	5%	\$2,670.00
ENGR. AND ADMIN. (PE) SUBTOTAL		\$18,690.00

ENVIRONMENTAL ENGINEERING (PE)	2%	\$1,070.00
ENVIRONMENTAL MITIGATION (CN)	1%	\$540.00
ENVIRONMENTAL SUBTOTAL		\$1,610.00

RIGHT-OF-WAY (ROW) SUBTOTAL **\$0.00**

TOTAL PROJECT COST **Year 2024** **\$73,665.00**

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Planning Level Cost Estimate

Project:	<u>Skamania County</u>	Date:	<u>4/4/24</u>
Design Option:	<u>Type 1 Driveway</u>	Prepared by:	<u>VLS</u>
Length:	<u>20 feet</u>		
Description:	<u>Construct Type 1 Driveway for the width listed above.</u>		
Assumptions:	<u>Drainage improvements not included. Undergrounding of utilities not included. ROW costs excluded.</u>		

Preparation		
1	Mobilization	\$1,300.00
2-4	Preparation Items	\$2,200.00
5-12	Removal Items	\$745.00
<i>Preparation Subtotal</i>		\$4,245.00

Structures		
50-53	Retaining Walls	\$0.00
54	Bridge Structure	\$0.00
<i>Structure Subtotal</i>		\$0.00

Grading		
13-14	Roadway Grading	\$290.00
15-18	Roadway Foundation	\$435.00
19-24	Utility Excavation	\$0.00
<i>Grading Subtotal</i>		\$725.00

TESC and Landscaping		
55-57	TESC	\$200.00
58-62	Plantings	\$0.00
63-64	Irrigation	\$0.00
<i>TESC and Landscaping Subtotal</i>		\$200.00

Storm Drainage		
25-36	Conveyance System	\$0.00
37	Culvert/Stream Crossing	\$0.00
38	Detention/Water Quality Facility	\$0.00
<i>Storm Drainage Subtotal</i>		\$0.00

Traffic		
65-74	Markings and Signing	\$0.00
75-78	Guardrail/Handrail	\$0.00
79-83	Traffic Signal System	\$0.00
84-86	Illumination System	\$0.00
87-92	Traffic Control	\$3,400.00
<i>Traffic Subtotal</i>		\$3,400.00

Paving		
39-41	Hot Mix Asphalt Pavement	\$1,550.00
<i>HMA Subtotal</i>		\$1,550.00

Other Items		
93-94	Utility Relocates	\$0.00
95-97	Misc. Construction	\$500.00
<i>Other Items Subtotal</i>		\$500.00

Concrete		
42-44	Sidewalks, Ramps, Driveways	\$3,000.00
45-47	Curbs and Gutters	\$0.00
48-49	Concrete Roadway/Roundabout	\$0.00
<i>Concrete Subtotal</i>		\$3,000.00

CONSTRUCTION SUBTOTAL		\$13,620.00
CONTINGENCY	40%	\$5,450.00
CONSTRUCTION (CN) SUBTOTAL		\$19,070.00

	Low	High
PE	\$5,000	\$11,000
ROW	\$0	\$0
CN	\$13,000	\$29,000
Total	\$18,000	\$40,000

DESIGN ENGINEERING	15%	\$2,870.00
CONSTRUCTION ENGINEERING	15%	\$2,870.00
PROJECT ADMINISTRATION	5%	\$960.00
ENGR. AND ADMIN. (PE) SUBTOTAL		\$6,700.00

ENVIRONMENTAL ENGINEERING (PE)	2%	\$390.00
ENVIRONMENTAL MITIGATION (CN)	1%	\$200.00
ENVIRONMENTAL SUBTOTAL		\$590.00

RIGHT-OF-WAY (ROW) SUBTOTAL **\$0.00**

TOTAL PROJECT COST **Year 2024** **\$26,360.00**

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Planning Level Cost Estimate

Project:	<u>Skamania County</u>	Date:	<u>4/4/24</u>
Design Option:	<u>Type 2 Driveway</u>	Prepared by:	<u>VLS</u>
Length:	<u>20 feet</u>		
Description:	<u>Construct Type 2 Driveway for the width listed above.</u>		
Assumptions:	<u>Drainage improvements not included. Undergrounding of utilities not included. ROW costs excluded.</u>		

Preparation		
1	Mobilization	\$1,300.00
2-4	Preparation Items	\$2,200.00
5-12	Removal Items	\$650.00
<i>Preparation Subtotal</i>		\$4,150.00

Structures		
50-53	Retaining Walls	\$0.00
54	Bridge Structure	\$0.00
<i>Structure Subtotal</i>		\$0.00

Grading		
13-14	Roadway Grading	\$245.00
15-18	Roadway Foundation	\$390.00
19-24	Utility Excavation	\$0.00
<i>Grading Subtotal</i>		\$635.00

TESC and Landscaping		
55-57	TESC	\$200.00
58-62	Plantings	\$0.00
63-64	Irrigation	\$0.00
<i>TESC and Landscaping Subtotal</i>		\$200.00

Storm Drainage		
25-36	Conveyance System	\$0.00
37	Culvert/Stream Crossing	\$0.00
38	Detention/Water Quality Facility	\$0.00
<i>Storm Drainage Subtotal</i>		\$0.00

Traffic		
65-74	Markings and Signing	\$0.00
75-78	Guardrail/Handrail	\$0.00
79-83	Traffic Signal System	\$0.00
84-86	Illumination System	\$0.00
87-92	Traffic Control	\$3,400.00
<i>Traffic Subtotal</i>		\$3,400.00

Paving		
39-41	Hot Mix Asphalt Pavement	\$1,550.00
<i>HMA Subtotal</i>		\$1,550.00

Other Items		
93-94	Utility Relocates	\$0.00
95-97	Misc. Construction	\$500.00
<i>Other Items Subtotal</i>		\$500.00

Concrete		
42-44	Sidewalks, Ramps, Driveways	\$3,800.00
45-47	Curbs and Gutters	\$0.00
48-49	Concrete Roadway/Roundabout	\$0.00
<i>Concrete Subtotal</i>		\$3,800.00

CONSTRUCTION SUBTOTAL		\$14,235.00
CONTINGENCY	40%	\$5,700.00
CONSTRUCTION (CN) SUBTOTAL		\$19,935.00

	Low	High
PE	\$5,000	\$11,000
ROW	\$0	\$0
CN	\$14,000	\$30,000
Total	\$19,000	\$41,000

DESIGN ENGINEERING	15%	\$3,000.00
CONSTRUCTION ENGINEERING	15%	\$3,000.00
PROJECT ADMINISTRATION	5%	\$1,000.00
ENGR. AND ADMIN. (PE) SUBTOTAL		\$7,000.00

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ENVIRONMENTAL ENGINEERING (PE)	2%	\$400.00
ENVIRONMENTAL MITIGATION (CN)	1%	\$200.00
ENVIRONMENTAL SUBTOTAL		\$600.00

RIGHT-OF-WAY (ROW) SUBTOTAL **\$0.00**

TOTAL PROJECT COST **Year 2024** **\$27,535.00**

Planning Level Cost Estimate

Project:	<u>Skamania County</u>	Date:	<u>4/4/24</u>
Design Option:	<u>Type 3 Driveway</u>	Prepared by:	<u>VLS</u>
Length:	<u>20 feet</u>		
Description:	<u>Construct Type 3 Driveway for the width listed above.</u>		
Assumptions:	<u>Drainage improvements not included. Undergrounding of utilities not included. ROW costs excluded.</u>		

Preparation		
1	Mobilization	\$1,200.00
2-4	Preparation Items	\$2,200.00
5-12	Removal Items	\$555.00
<i>Preparation Subtotal</i>		\$3,955.00

Structures		
50-53	Retaining Walls	\$0.00
54	Bridge Structure	\$0.00
<i>Structure Subtotal</i>		\$0.00

Grading		
13-14	Roadway Grading	\$245.00
15-18	Roadway Foundation	\$390.00
19-24	Utility Excavation	\$0.00
<i>Grading Subtotal</i>		\$635.00

TESC and Landscaping		
55-57	TESC	\$200.00
58-62	Plantings	\$0.00
63-64	Irrigation	\$0.00
<i>TESC and Landscaping Subtotal</i>		\$200.00

Storm Drainage		
25-36	Conveyance System	\$0.00
37	Culvert/Stream Crossing	\$0.00
38	Detention/Water Quality Facility	\$0.00
<i>Storm Drainage Subtotal</i>		\$0.00

Traffic		
65-74	Markings and Signing	\$0.00
75-78	Guardrail/Handrail	\$0.00
79-83	Traffic Signal System	\$0.00
84-86	Illumination System	\$0.00
87-92	Traffic Control	\$3,400.00
<i>Traffic Subtotal</i>		\$3,400.00

Paving		
39-41	Hot Mix Asphalt Pavement	\$1,550.00
<i>HMA Subtotal</i>		\$1,550.00

Other Items		
93-94	Utility Relocates	\$0.00
95-97	Misc. Construction	\$500.00
<i>Other Items Subtotal</i>		\$500.00

Concrete		
42-44	Sidewalks, Ramps, Driveways	\$2,800.00
45-47	Curbs and Gutters	\$0.00
48-49	Concrete Roadway/Roundabout	\$0.00
<i>Concrete Subtotal</i>		\$2,800.00

CONSTRUCTION SUBTOTAL		\$13,040.00
CONTINGENCY	40%	\$5,220.00
CONSTRUCTION (CN) SUBTOTAL		\$18,260.00

	Low	High
PE	\$5,000	\$10,000
ROW	\$0	\$0
CN	\$13,000	\$28,000
Total	\$18,000	\$38,000

DESIGN ENGINEERING	15%	\$2,740.00
CONSTRUCTION ENGINEERING	15%	\$2,740.00
PROJECT ADMINISTRATION	5%	\$920.00
ENGR. AND ADMIN. (PE) SUBTOTAL		\$6,400.00

ENVIRONMENTAL ENGINEERING (PE)	2%	\$370.00
ENVIRONMENTAL MITIGATION (CN)	1%	\$190.00
ENVIRONMENTAL SUBTOTAL		\$560.00

RIGHT-OF-WAY (ROW) SUBTOTAL **\$0.00**

TOTAL PROJECT COST **Year 2024** **\$25,220.00**

Project Cost Summary includes a range of reported project costs for this planning level estimate, which is based upon 10% design information (scoping row). Low is 30% below and high is 50% above the estimated cost category. Reference: WSDOT Cost Estimating Manual for Projects, Page 4-10, January 2023.

Planning Level Cost Estimate

Project:	<u>Skamania County</u>	Date:	<u>4/4/24</u>
Design Option:	<u>Typical RRFB Installation</u>	Prepared by:	<u>VLS</u>
Length:	<u>15 feet</u>		
Description:	<u>Construct New RRFB</u>		
Assumptions:	<u>Install RRFB and R&R two curb ramps, drainage improvements not included. Undergrounding of utilities not included. ROW costs excluded.</u>		

Preparation		
1	Mobilization	\$8,300.00
2-4	Preparation Items	\$3,300.00
5-12	Removal Items	\$635.00
<i>Preparation Subtotal</i>		\$12,235.00

Structures		
50-53	Retaining Walls	\$0.00
54	Bridge Structure	\$0.00
<i>Structure Subtotal</i>		\$0.00

Grading		
13-14	Roadway Grading	\$245.00
15-18	Roadway Foundation	\$390.00
19-24	Utility Excavation	\$0.00
<i>Grading Subtotal</i>		\$635.00

TESC and Landscaping		
55-57	TESC	\$1,300.00
58-62	Plantings	\$0.00
63-64	Irrigation	\$0.00
<i>TESC and Landscaping Subtotal</i>		\$1,300.00

Storm Drainage		
25-36	Conveyance System	\$0.00
37	Culvert/Stream Crossing	\$0.00
38	Detention/Water Quality Facility	\$0.00
<i>Storm Drainage Subtotal</i>		\$0.00

Traffic		
65-74	Markings and Signing	\$4,500.00
75-78	Guardrail/Handrail	\$0.00
79-83	RRFB	\$60,000.00
84-86	Illumination System	\$0.00
87-92	Traffic Control	\$3,400.00
<i>Traffic Subtotal</i>		\$67,900.00

Paving		
39-41	Hot Mix Asphalt Pavement	\$1,550.00
<i>HMA Subtotal</i>		\$1,550.00

Other Items		
93-94	Utility Relocates	\$0.00
95-97	Misc. Construction	\$500.00
<i>Other Items Subtotal</i>		\$500.00

Concrete		
42-44	Sidewalks, Ramps, Driveways	\$7,000.00
45-47	Curbs and Gutters	\$0.00
48-49	Concrete Roadway/Roundabout	\$0.00
<i>Concrete Subtotal</i>		\$7,000.00

CONSTRUCTION SUBTOTAL		\$91,120.00
CONTINGENCY	40%	\$36,450.00
CONSTRUCTION (CN) SUBTOTAL		\$127,570.00

	Low	High
PE	\$33,000	\$71,000
ROW	\$0	\$0
CN	\$90,000	\$193,000
Total	\$123,000	\$264,000

DESIGN ENGINEERING	15%	\$19,140.00
CONSTRUCTION ENGINEERING	15%	\$19,140.00
PROJECT ADMINISTRATION	5%	\$6,380.00
ENGR. AND ADMIN. (PE) SUBTOTAL		\$44,660.00

ENVIRONMENTAL ENGINEERING (PE)	2%	\$2,560.00
ENVIRONMENTAL MITIGATION (CN)	1%	\$1,280.00
ENVIRONMENTAL SUBTOTAL		\$3,840.00

RIGHT-OF-WAY (ROW) SUBTOTAL		\$0.00
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TOTAL PROJECT COST	Year 2024	\$176,070.00
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Project Cost Summary includes a range of reported project costs for this planning level estimate, which is based upon 10% design information (scoping row). Low is 30% below and high is 50% above the estimated cost category. Reference: WSDOT Cost Estimating Manual for Projects, Page 4-10, January 2023.

Planning Level Cost Estimate

Project:	<u>Skamania County</u>	Date:	<u>4/4/24</u>
Design Option:	<u>Bus Pad</u>	Prepared by:	<u>VLS</u>
Length:	<u>8 feet</u>		
Description:	<u>Construct 8x5 Bus Pad</u>		
Assumptions:	<u>Drainage improvements not included. Undergrounding of utilities not included. ROW costs excluded.</u>		

Preparation		
1	Mobilization	\$600.00
2-4	Preparation Items	\$1,100.00
5-12	Removal Items	\$155.00
<i>Preparation Subtotal</i>		<u>\$1,855.00</u>

Structures		
50-53	Retaining Walls	\$0.00
54	Bridge Structure	\$0.00
<i>Structure Subtotal</i>		<u>\$0.00</u>

Grading		
13-14	Roadway Grading	\$110.00
15-18	Roadway Foundation	\$145.00
19-24	Utility Excavation	\$0.00
<i>Grading Subtotal</i>		<u>\$255.00</u>

TESC and Landscaping		
55-57	TESC	\$100.00
58-62	Plantings	\$0.00
63-64	Irrigation	\$0.00
<i>TESC and Landscaping Subtotal</i>		<u>\$100.00</u>

Storm Drainage		
25-36	Conveyance System	\$0.00
37	Culvert/Stream Crossing	\$0.00
38	Detention/Water Quality Facility	\$0.00
<i>Storm Drainage Subtotal</i>		<u>\$0.00</u>

Traffic		
65-74	Markings and Signing	\$0.00
75-78	Guardrail/Handrail	\$0.00
79-83	Traffic Signal System	\$0.00
84-86	Illumination System	\$0.00
87-92	Traffic Control	\$2,200.00
<i>Traffic Subtotal</i>		<u>\$2,200.00</u>

Paving		
39-41	Hot Mix Asphalt Pavement	\$155.00
<i>HMA Subtotal</i>		<u>\$155.00</u>

Other Items		
93-94	Utility Relocates	\$0.00
95-97	Misc. Construction	\$500.00
<i>Other Items Subtotal</i>		<u>\$500.00</u>

Concrete		
42-44	Sidewalks, Ramps, Driveways	\$325.00
45-47	Curbs and Gutters	\$320.00
48-49	Concrete Roadway/Roundabout	\$0.00
<i>Concrete Subtotal</i>		<u>\$645.00</u>

CONSTRUCTION SUBTOTAL		\$5,710.00
CONTINGENCY	40%	\$2,290.00
CONSTRUCTION (CN) SUBTOTAL		\$8,000.00
DESIGN ENGINEERING	15%	\$1,200.00
CONSTRUCTION ENGINEERING	15%	\$1,200.00
PROJECT ADMINISTRATION	5%	\$400.00
ENGR. AND ADMIN. (PE) SUBTOTAL		\$2,800.00
ENVIRONMENTAL ENGINEERING (PE)	2%	\$160.00
ENVIRONMENTAL MITIGATION (CN)	1%	\$80.00
ENVIRONMENTAL SUBTOTAL		\$240.00
RIGHT-OF-WAY (ROW) SUBTOTAL		\$0.00
TOTAL PROJECT COST	Year 2024	\$11,040.00

	Low	High
PE	\$2,000	\$4,000
ROW	\$0	\$0
CN	\$6,000	\$12,000
Total	\$8,000	\$16,000

Project Cost Summary includes a range of reported project costs for this planning level estimate, which is based upon 10% design information (scoping row). Low is 30% below and high is 50% above the estimated cost category. Reference: WSDOT Cost Estimating Manual for Projects, Page 4-10, January 2023.

Planning Level Cost Estimate

Project:	<u>Skamania County</u>	Date:	<u>4/4/24</u>
Design Option:	<u>Bus Shelter and Pad</u>	Prepared by:	<u>VLS</u>
Length:	<u>10 feet</u>		
Description:	<u>Construct Bus Shelter and Pad</u>		
Assumptions:	<u>Install Bus Shelter and Pad, drainage improvements not included. Undergrounding of utilities not included. ROW costs excluded.</u>		

Preparation		
1	Mobilization	\$1,000.00
2-4	Preparation Items	\$2,200.00
5-12	Removal Items	\$180.00
<i>Preparation Subtotal</i>		\$3,380.00

Structures		
50-53	Retaining Walls	\$0.00
54	Bridge Structure	\$0.00
<i>Structure Subtotal</i>		\$0.00

Grading		
13-14	Roadway Grading	\$0.00
15-18	Roadway Foundation	\$235.00
19-24	Utility Excavation	\$0.00
<i>Grading Subtotal</i>		\$235.00

TESC and Landscaping		
55-57	TESC	\$500.00
58-62	Plantings	\$0.00
63-64	Irrigation	\$0.00
<i>TESC and Landscaping Subtotal</i>		\$500.00

Storm Drainage		
25-36	Conveyance System	\$0.00
37	Culvert/Stream Crossing	\$0.00
38	Detention/Water Quality Facility	\$0.00
<i>Storm Drainage Subtotal</i>		\$0.00

Traffic		
65-74	Markings and Signing	\$0.00
75-78	Guardrail/Handrail	\$0.00
79-83	RRFB	\$0.00
84-86	Illumination System	\$0.00
87-92	Traffic Control	\$3,400.00
<i>Traffic Subtotal</i>		\$3,400.00

Paving		
39-41	Hot Mix Asphalt Pavement	\$1,550.00
<i>HMA Subtotal</i>		\$1,550.00

Other Items		
93-94	Bus Shelter	\$22,000.00
95-97	Misc. Construction	\$500.00
<i>Other Items Subtotal</i>		\$22,500.00

Concrete		
42-44	Sidewalks, Ramps, Driveways	\$585.00
45-47	Curbs and Gutters	\$0.00
48-49	Concrete Roadway/Roundabout	\$0.00
<i>Concrete Subtotal</i>		\$585.00

CONSTRUCTION SUBTOTAL		\$32,150.00
CONTINGENCY	40%	\$12,860.00
CONSTRUCTION (CN) SUBTOTAL		\$45,010.00

	Low	High
PE	\$12,000	\$25,000
ROW	\$0	\$0
CN	\$32,000	\$68,000
Total	\$44,000	\$93,000

DESIGN ENGINEERING	15%	\$6,760.00
CONSTRUCTION ENGINEERING	15%	\$6,760.00
PROJECT ADMINISTRATION	5%	\$2,260.00
ENGR. AND ADMIN. (PE) SUBTOTAL		\$15,780.00

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ENVIRONMENTAL ENGINEERING (PE)	2%	\$910.00
ENVIRONMENTAL MITIGATION (CN)	1%	\$460.00
ENVIRONMENTAL SUBTOTAL		\$1,370.00

RIGHT-OF-WAY (ROW) SUBTOTAL		\$0.00
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TOTAL PROJECT COST	Year 2024	\$62,160.00
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**SIX-YEAR
TRANSPORTATION IMPROVEMENT PROGRAM (TIP)
2024 - 2029**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)												
TIP PROJECT NO.	PROJECT IDENTIFICATION A. Project Name (CRP) B. Road / Bridge Number and Name C. Description of Work D. Location From - To	PROJECT TYPE CODE	ENVIRONMENTAL TYPE	FUNCT CLASS	BEGIN MILEPOST	END MILEPOST	TOTAL LENGTH (MI)	PROJECT PHASE	EST. PROJECT COSTS IN DOLLARS						EST. EXPENDITURE SCHEDULE																			
									FUNDING SOURCE INFORMATION																									
									FEDERAL FUNDS		STATE FUNDS		LOCAL FUNDS	OTHER REVENUES	TOTAL	YEAR 1 2024	YEAR 2 2025	YEAR 3 2026	YEAR 4 2027	YEAR 5 2028	YEAR 6 2029	TOTAL 2024-2029												
									FEDERAL FUND TYPE	FEDERAL COST BY PHASE	STATE FUND TYPE	STATE COST BY PHASE																						
1	Washougal River Road (CRP 2018-04) 3011060 Washougal River Road Widen existing narrow roadway, correct deficiencies of the roadway structure, horizontal curves and clear zone hazards. Location: Approx. Salmon Falls Road Int. - Fanning Hill Slide.	3R, SAFETY	CE	8	11.62	12.96	1.34	PE	STBG(R)	RAP		150.0				249.4	24.9						424.3											
											R/W					250.0									250.0									
											CN					281.0																		
											TOTAL					431.0									3199.4	318.9							3949.3	
2	Wind River Road Slide Reconstruction Project (CRP 2022-02) 3092135 Wind River Road Stabilize subgrade, resurface and widen the roadway, improve drainage structures and install/upgrade traffic safety facilities. Project is fully funded with federal funds using Toll Credits as local match. Location Wind River Slide - Approx. Flint Way	RC, DR, SAFETY	DCE	6	0.20	0.40	0.20	PE	FLAP			558.1				558.1	254.0	300.1	4.0					558.1										
											R/W																							
											CN					4480.0																		4480.0
											TOTAL					5038.1									5038.1	254.0	300.1	4444.4	39.6					5038.1
3	Buck Creek Bridge Project (2022-03) 3033750 Big Buck Creek Road Repair scour critical buck creek bridge. Location Buck Creek Bridge - Buck Creek Bridge	FA	DCE	9	0.05	0.06	0.01	PE	BR			236.4				236.4	230.0	6.4						236.4										
											R/W					50.0																50.0		
											CN					131.0																		131.0
											TOTAL					417.4									417.4	280.0	127.4	10.0						417.4
4	Wind River Road Pavement Preservation Project (CRP 2023-01) 3092135 Wind River Road Resurface the road and improve roadside/traffic safety elements. Project is fully funded with federal funds using Toll Credits as local match. Location Approx. Willies Road - Fredrickson Avenue	2R, SAFETY	CE	6	0.40	0.88	0.48	PE	STBG(R)			147.4				147.4	143.0	4.4							147.4									
											R/W																							
											CN					549.0																		549.0
											TOTAL					696.4									696.4	143.0	4.4	539.0	10.0					696.4
5	2021 Speed Limit & Regulatory Signage Project (CRP 2022-01) Countywide Add speed limit feedback signs and add/upgrade regulatory signs. Location Countywide - Countywide	SAFETY	CE					PE	HSIP			6.3			6.3	4.4								4.4										
											R/W																							
											CN					502.2																	502.2	
											TOTAL					508.5									508.5	496.6	10.0							506.6
6	Washougal Slide Feasibility Study Project (CRP 2024-01) 3011060 Washougal River Road Conduct a geotechnical and stormwater analysis, slide monitoring, and engineered feasibility study. Project is fully funded with federal funds using Toll Credits as local match. Location Fanning Hill Slide - Fanning Hill Slide	OTHER	CE	8	12.96	13.34	0.38	PE	STBG(R)			340.0				340.0	225.0	20.0	20.0	75.0				340.0										
											R/W																							
											CN																							
											TOTAL					340.0									340.0	225.0	20.0	20.0	75.0					340.0
7	Wind River Road Pavement Preservation Project Phase 2 (CRP 2023-02) 3092135 Wind River Road Resurface the road, improve intersection, and roadside/traffic safety elements. Project is fully funded with federal funds using Toll Credits as local match. Location Fredrickson Avenue - Cloverdale Avenue	2R, IS, SW, SAFETY	CE	6	0.88	1.23	0.35	PE	STBG(R) / HSIP			295.0				295.0	10.0	280.0	5.0					295.0										
											R/W																					0.0		
											CN					835.0																		835.0
											TOTAL					1130.0									1130.0	10.0	280.0	405.0	425.0	10.0				1130.0
8	High Cost Bridge Inspections Project (CRP 2023-03) Perform bridge inspections. Project is fully funded with federal funds using Toll Credits as local match. Location 207 Conrad Lundy Jr. Bridge, 101 Washougal River Bridge, and other Countywide bridges.	FA	CE					PE	STBG(R)			255.0				255.0	75.0		85.0			95.0		255.0										
											R/W																							
											CN																							
											TOTAL					255.0									255.0	75.0		85.0			95.0			255.0
9	Bundled Bridges Preventative Maintenance Project (CRP 2024-02) Resurface and repair the superstructure elements and other bridge preventative maintenance on 104 Salmon Falls Bridge, 105 Hatchery Bridge, and 210 Moore Bridge. Location Countywide - Countywide	FA	DCE					PE	BR			383.4				383.4	195.0	178.4	10.0					383.4										
											R/W					0.0																		
											CN					1385.6																		1385.6
											TOTAL					1769.0									1769.0	195.0	178.4	1385.6	10.0					383.4

10	2023 Regulatory Signs & Guardrail Project (CRP 2024-03) Countywide Install and upgrade regulatory signs and guardrail. Location Countywide - Countywide	SAFETY	CE					HSIP	PE	1140.0				1140.0	660.4	464.6	15.0			1140.0				
									R/W															
									CN	2022.0					2022.0			2002.0	20.0			2022.0		
									TOTAL	3162.0					3162.0	660.4	464.6	2017.0	20.0			3162.0		
11	Fanning Hill Reconstruction Project 3011060 Washougal River Road Stabilize subgrade, resurface the road, improve drainage and install/upgrade traffic safety elements. Project is funded with federal funds using Toll Credits as local match. Location Fanning Hill Slide - Fanning Hill Slide	RC, DR, SAFETY	DCE	8	12.96	13.34	0.38	STBG(R) / HSIP	PE	65.0	500.0			565.0						300.0	300.0			
									R/W															
									CN	500.0					2700.0			3200.0						
									TOTAL	565.0					3200.0			3765.0				300.0	300.0	
12	Butler Eddy Bridge Replacement Project 3010160 Skamania Landings Road Replace Butler Eddy Bridge Location Butler Eddy Bridge - Butler Eddy Bridge	FA	EIS	8	0.92	0.95	0.03	BR	PE	462.5				462.5			300.0	162.5			462.5			
									R/W															
									CN	2100.0					1600.0			3700.0			50.0	3625.0	25.0	3700.0
									TOTAL	2562.5					1600.0			4162.5			300.0	212.5	3625.0	25.0
13	Wind River Road Slide Reconstruction Project Phase 2 3092135 Wind River Road Stabilize subgrade, resurface and widen the roadway, improve drainage structures and install/upgrade traffic safety facilities. Location WSDOT ROW limit on Wind River Road - Wind River Slide	RC, DR, SAFETY	DCE	6	0.05	0.40	0.35	FLAP	PE	910.0				910.0							250.0	250.0		
									R/W															
									CN	5200.0							5200.0							
									TOTAL	6110.0							6110.0						250.0	250.0
14	Wind River Road & Metzger Road Intersection Feasibility Study Project 3092135 Wind River Road Conduct an intersection and ADA analysis and engineered feasibility study. Location Wind River Road & Metzger Road Int. - Wind River Road & Metzger Road Int.	OTHER	CE	6	1.80	2.30	0.50	STBG(R) / HSIP	PE	275.0				275.0					250.0	25.0	275.0			
									R/W															
									CN															
									TOTAL	275.0							275.0					250.0	25.0	275.0
15	Jessup Road Preservation Project 3030850 Jessup Road Resurface the road, improve drainage and roadside/traffic safety elements. Project is fully funded with federal funds using Toll Credits as local match. Location Cook-Underwood Road - Cook-Underwood Road	2R, SW, SAFETY	CE	9	0.00	1.33	1.33	STBG(R) / HSIP	PE	270.0				270.0					45.0	45.0	90.0			
									R/W															
									CN	950.0							950.0							
									TOTAL	1220.0							1220.0					45.0	45.0	90.0
16	Bundled Bridges Preventative Maintenance Project 2 Countywide Improve the scour, weight limit and load capacity of bridges with repairs. Location Countywide - Countywide	FA	DCE					BR	PE	540.0				540.0					300.0	240.0	540.0			
									R/W															
									CN	2100.0							2100.0							
									TOTAL	2640.0							2640.0					300.0	240.0	540.0
17	Surface Treatments Project Countywide Surface treatments to maintain road. Location Countywide - Countywide	2R	CE					WA Misc.	PE		50.0			50.0						10.0	10.0			
									R/W		0.0													
									CN		450.0						450.0							
									TOTAL		500.0						500.0					10.0	10.0	
18	Boyd Street Culvert Replacement Project 3022860 Boyd Street Replace culvert and improve fish passage Location Boyd Street Culvert - Boyd Street Culvert	DR	EIS	9	0.05	0.08	0.03	SRF	PE					325.0						10.0	10.0			
									R/W															
									CN								1050.0							
									TOTAL								1375.0					10.0	10.0	
19	Wind River Road & Old State Road Intersection Project 3092135 Wind River Road and 3021480 Old State Road Improve Intersection and roadside/traffic safety elements. Project is fully funded with federal funds using Toll Credits as local match. Location Wind River Road & Old State Road Int. - Wind River Road & Old State Road Int.	IS, HMA, SAFETY	DCE	6	4.35	4.40	0.05	Fed Misc.	PE	312.5				312.5						10.0	10.0			
									R/W															
									CN	837.5							837.5							
									TOTAL	1250.0							1250.0					10.0	10.0	
20	Resurface and Restore Project Countywide Restore and resurface roads and address maintenance activities to prevent further structural damage to the road bases. Project is fully funded with federal funds using Toll Credits as local match. Location Countywide - Countywide	2R	CE					STBG(R)	PE	125.0				125.0						10.0	10.0			
									R/W															
									CN	625.0							625.0							
									TOTAL	750.0							750.0					10.0	10.0	
TOTALS							5.43		29119.8		9874.4	318.9	0.0	39313.1	2569.0	1799.2	9246.0	4027.1	4355.0	925.0	21535.6			