

Capital Needs Projection

HOOD RIVER - WHITE SALMON BRIDGE				SHORT TERM												LONG TERM																																		
Capital Improvements Plan			FISCAL	FY 17/18			FY 18/19			FY 19/20			FY 20/21			21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47								
			CALENDAR	2017	2018			2019			2020			2021			22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47								
Bridge Component Group	Project (Scope of Work)	Expected Duration	Estimated Cost (2017 Dollars)																																															
Approach Structures	OR Approach Spans - Phase 1 Seismic	18 mos.	\$ 219,000																																															
	WA Approach Spans - Phase 1 Seismic	24 mos.	\$ 702,000																																															
	OR Approach Spans Replacement	24 mos.	\$ 847,000																																															
	WA Approach Spans Replacement	36 mos.	\$ 4,117,000																																															
Foundations (Subsurface)	Foundation Scour Repairs	12 mos.	\$ 300,000																																															
	Pier Cap Concrete Rehabilitation	12 mos.	\$ 389,000																																															
Super-structure (Steel Trusses)	Auxiliary Truss Connection Repairs	9 mos.	\$ 400,000																																															
	Misc. Steel Repairs (w/ painting projects)	9 mos.	\$ 30,000																																															
	Repair Gusset Plate Wear at Rocker Bearings	9 mos.	\$ 80,000																																															
	Lift Span - Phase 1 Seismic	24 mos.	\$ 1,752,000																																															
	OR Deck Truss Spans - Phase 1 Seismic	24 mos.	\$ 6,000,000																																															
	WA Deck Truss Spans - Phase 1 Seismic	24 mos.	\$ 6,000,000																																															
Paint Systems	Bridge Painting - Lift Span	18 mos.	\$ 4,329,000																																															
	Deck Truss Repainting (4 projects)	24 mos.	\$ 7,400,000																																															
Deck Systems & Railing	Bridge Rail Replacement	18 mos.	\$ 2,730,000																																															
	Open Grid Steel Decking Replacement	24 mos.	\$ 10,523,000																																															
Lift Span M&E	Rehab Span Drive Motors & Control System	12 mos.	\$ 240,000																																															
	Lift Span Span Drive Machinery Rehabilitation	12 mos.	\$ 250,000																																															
Misc. Other	Comprehensive Signage Plan	4 mos.	\$ 100,000																																															
Tolling Systems	Violation Enforcement System	6 mos.	\$ 357,000																																															
	Weigh-In-Motion System	6 mos.	\$ 555,000																																															

Inspection & Maintenance Plan																																																		
Bridge Component Group	Project (Scope of Work)	Expected Duration	Estimated Cost (2017 Dollars)																																															
Approach Structures	Embankment Sloughing at S. Abutment	3 mos.	\$ 20,000																																															
	OR Appr - Deck Overlay and Joint Repair	4 mos.	\$ 20,000																																															
	WA Appr - Deck Overlay and Joint Repair	4 mos.	\$ 20,000																																															
	Misc. Maintenance & Repairs	bi-annual	\$ 20,000																																															
Foundations (Subsurface)	ODOT Undewater Inspections (3-yr cycle)	3 mos.	\$ -																																															
	3D Scanning of Pier Foundations	2 mos.	\$ 90,000																																															
Substructure (Piers)	Clean and Reset Bearings (4-yr cycle)	2 mos.	\$ 20,000																																															
Super-structure (Steel Trusses)	ODOT Routine & Fracture Critical Insp (2-yr cycle)	3 mos.	\$ -																																															
	Gusset Plate Load Rating (Desktop/Triage Method)	9 mos.	\$ 50,000																																															
	Monitor/Repair Floorbeam Knee Brace Cracks	3 mos.	\$ 10,000																																															
Paint Systems	Bridge Cleaning (4-yr cycle)	2 mos.	\$ 10,000																																															
Deck Systems & Railing	Grid Deck Crack Welding	Semi-annual	\$ 20,000																																															
	Replace Bolts & Guard Rail Segments	Annually	\$ 20,000																																															
Lift Span M&E	Counterweight Sheave Trunnion NDT	2 mos.	\$ 40,000																																															
	Biennial M&E Inspections	1 mos.	\$ 55,000																																															
	In-depth Inspection of Primary Reducer Gearing	2 mos.	\$ 50,000																																															
	Machinery Lubrication Rehab	1 mos.	\$ 20,000																																															
Misc. Other	Overweight Truck Enforcement Plan	4 mos.	\$ 10,000																																															
Tolling Systems	IDRIS controller Integration	6 mos.	\$ 56,000																																															
	System Maintenance	Annually	\$ 45,000																																															
	Installation, Testing and Commissioning	2 mos.	\$ 138,000																																															
	ETC Hardware Maintenance	5 mos.	\$ 42,000																																															
				\$ 920,000	\$ 570,000	\$ 5,511,000	\$ 3,094,000																																											

WORK IMPORTANCE KEY:		
Capital Impr	Insp & Maint	
<i>Essential</i>	<i>Essential</i>	High probability of occurrence required to continue safe and continuous bridge operation.
<i>Priority</i>	<i>Priority</i>	Medium to high probability needed to prevent bridge service disruption.
<i>Recommend</i>	<i>Recommend</i>	Low to medium probability needed to maintain operating efficiency and ensure safety.

\$ 376,000	\$ 6,272,500	\$ 10,042,500	\$ 3,890,000	\$ 774,500	\$ 466,000	\$ 7,080,500	\$ 7,100,000	\$ 401,750	\$ 536,500	\$ 4,116,750	\$ 7,045,000	\$ 4,121,167	\$ 1,487,333	\$ 5,277,333	\$ 4,486,167	\$ 190,000	\$ 115,000	\$ 190,000	\$ 85,000	\$ 190,000	\$ 115,000	\$ 190,000	\$ 85,000	\$ 190,000	\$ 115,000	\$ 190,000			
				\$ 16,743,500					\$ 38,997,000					\$ 58,199,000					\$ 73,761,000					\$ 74,456,000					\$ 75,226,000