P2 Bridge Preservation - Replacement/Rehab Projects

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Length	Future work Description
1	002/005N	SNOHOMISH RIVER BRIDGE	0.18	Northwest	2,980	Rehabilitate Bridge
1	002/006N	EBEY ISLAND VIADUCT	0.75	Northwest	6,923	Rehabilitate Bridge
2	097/106	SATUS CR 2ND CROSSING	45.84	South Central	133	Replace Bridge
3	303/004A	MANETTE BRIDGE CS1841	1.47	Olympic	1,573	Replace Bridge
4	010/143	BRISTOL FILL	90.10	South Central	430	Replace Deck
5	005/670W	STILLAGUAMISH R	209.35	Northwest	859	Replace Deck
6	090/322S	SR 261 OC	221.95	Eastern	169	Replace Bridge
7	090/322N	SR 261 OC	221.95	Eastern	169	Replace Bridge
8	097/020	SATUS CR	30.80	Southwest	101	Replace Bridge
9	101/354	MCDONNELL CR	258.21	Olympic	179	Replace Bridge
10	548/010	DAKOTA CR	11.54	Northwest	182	Replace Bridge
11	241/005	MABTON-SUNNYSIDE #650	1.34	South Central	521	Replace Bridge
12	167/020E	PUYALLUP R	6.40	Olympic	477	Replace Bridge
13	302/105	PURDY BR	15.65	Olympic	550	Replace Bridge
14	012/720	WHETSTONE CR	372.57	South Central	21	Replace Bridge
15	022/007	SLOUGH OF YAKIMA R	1.39	South Central	115	Replace Bridge
16	012/012S	WISHKAH R HERON CS1415	0.08	Olympic	235	Rehabilitate Bridge
17	107/006	SLOUGH	7.79	Olympic	279	Replace Bridge
18	107/005	SLOUGH	7.59	Olympic	294	Replace Bridge
19	508/012	S FK NEWAUKUM R	13.65	Southwest	197	Replace Bridge
20	300/001	MISSION CR	0.28	Olympic	51	Replace Bridge
21	506/106	LACAMAS CR	8.05	Southwest	170	Replace Bridge
22	508/025	CREEK - west	24.08	Southwest	26	Replace Bridge
23	508/023	ALDER CR	22.65	Southwest	88	Replace Bridge
24	005/036E	E FK LEWIS R	18.21	Southwest	852	Replace Bridge

Total Number of Bridges = 25

P2 Bridge Preservation - Replacement/Rehab Projects

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Length	Future work Description
1	002/005N	SNOHOMISH RIVER BRIDGE	0.18	Northwest	2,980	Rehabilitate Bridge
1	002/006N	EBEY ISLAND VIADUCT	0.75	Northwest	6,923	Rehabilitate Bridge
24	005/036E	E FK LEWIS R	18.21	Southwest	852	Replace Bridge
5	005/670W	STILLAGUAMISH R	209.35	Northwest	859	Replace Deck
4	010/143	BRISTOL FILL	90.10	South Central	430	Replace Deck
16	012/012S	WISHKAH R HERON CS1415	0.08	Olympic	235	Rehabilitate Bridge
14	012/720	WHETSTONE CR	372.57	South Central	21	Replace Bridge
15	022/007	SLOUGH OF YAKIMA R	1.39	South Central	115	Replace Bridge
7	090/322N	SR 261 OC	221.95	Eastern	169	Replace Bridge
6	090/322S	SR 261 OC	221.95	Eastern	169	Replace Bridge
8	097/020	SATUS CR	30.80	Southwest	101	Replace Bridge
2	097/106	SATUS CR 2ND CROSSING	45.84	South Central	133	Replace Bridge
9	101/354	MCDONNELL CR	258.21	Olympic	179	Replace Bridge
18	107/005	SLOUGH	7.59	Olympic	294	Replace Bridge
17	107/006	SLOUGH	7.79	Olympic	279	Replace Bridge
12	167/020E	PUYALLUP R	6.40	Olympic	477	Replace Bridge
11	241/005	MABTON-SUNNYSIDE #650	1.34	South Central	521	Replace Bridge
20	300/001	MISSION CR	0.28	Olympic	51	Replace Bridge
13	302/105	PURDY BR	15.65	Olympic	550	Replace Bridge
3	303/004A	MANETTE BRIDGE CS1841	1.47	Olympic	1,573	Replace Bridge
21	506/106	LACAMAS CR	8.05	Southwest	170	Replace Bridge
19	508/012	S FK NEWAUKUM R	13.65	Southwest	197	Replace Bridge
23	508/023	ALDER CR	22.65	Southwest	88	Replace Bridge
22	508/025	CREEK - west	24.08	Southwest	26	Replace Bridge
10	548/010	DAKOTA CR	11.54	Northwest	182	Replace Bridge

Total Number of Bridges = 25

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
2 / 5N	0008266B	SNOHOMISH RIVER BRIDGE	0.18	Northwest

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1968	SG CBox CS	5 / 33	67.12

Bridge Width (curb-curb):	Bridge Length:	Max Span:
30.0 ft	2,980 ft	204 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
32,660	8%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	2	30.0 ft

Design Load: HS 20

Op Rating: 58.00

Inv Rating: 35.00

HS: 1.15 A1: 1.97 A2: 1.51 A3: 1.48

Load Restricted Bridge? ☐

BL Load:

CL-8 Load:

SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	8/9/2008	Structr Adequacy:	5
Superstr Code:	5	Safe Load:	5
Substr Code:	6	Deck Geometry:	4
Deck Code:	6	Underclearance:	8
Scour:	5	Waterway:	8

Proposed Bridge Replacement Information

New Bridge Width: ft.

New Bridge Length: ft.

Bridge $'s:

Total $'s:

Priority Array #: 1

PIN Number: 100205E

WIN Number:

Repl/Rehab Year:

Contract Number:

Ad Date: 8/9/2010

Bridge Profile View

Bridge 2/5N has 15 spans of precast concrete girder (PRC) units near Home Acres Road (piers 18 to 33) in need of rehabilitation. There are 6 units across the width of the bridge in each span.

These PRC units were designed with a 1 inch concrete cover around the main reinforcing steel in the stem. Some of these units have rebar that is corroding causing the concrete cover to crack and debond.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
2 / 6N	0008378E	EBEY ISLAND VIADUCT	0.75	Northwest

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1968	PRCB PCG	1 / 178	23.35SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
30.0 ft	6,923 ft	82 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
34,331	8%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	2	30.0 ft

Design Load: HS 20

Op Rating: 27.00

Inv Rating: 17.00

HS: 0.84 A1: 1.06 A2: 1.12 A3: 1.30

Load Restricted Bridge? ☑

BL Load: 20,000

CL-8 Load: 21,000

SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	7/12/2008	Structr Adequacy:	4
Superstr Code:	4	Safe Load:	5
Substr Code:	6	Deck Geometry:	4
Deck Code:	6	Underclearance:	4
Scour:	8	Waterway:	8

Proposed Bridge Replacement Information

New Bridge Width: ft.

New Bridge Length: ft.

Bridge $'s:

Total $'s:

Priority Array #: 1

PIN Number: 100205E

WIN Number: A00205C

Contract Number:

Repl/Rehab Year: 2010

Ad Date: 8/9/2010

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" DUE TO A SUPERSTRUCTURE CONDITION.

Bridge 2/6N has 170 spans of precast concrete girder (PRC) units. These units were designed with a 1 inch concrete cover around the main reinforcing steel in the stem. There are 4 - #10 reinforcing bars located at the bottom of the stems. An in-depth inspection was performed in 1986. Approximately 82% of the T-beam spans have cracks parallel to the #10 bars in the stem. Approximately 34% of the spans have moderate to severe cracking with the main #10 bars exposed. Eight spans of bridge 2/6N were repaired in 1999 (Contract 5550). The deck was repaired and overlaid with an ACP w/membrane in 2001 (C#6157).

The concrete superstructure of the bridge from span 60 to bridge 2/7N limits (121 spans) was repaired in 2007 as part of contract 7304. The next project will repair the remaining deteriorated spans 1 to 60.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 36E	0002473A	E FK LEWIS R	18.21	Southwest

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1936	STrus CTB	1 / 12	30.35SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
48.0 ft	852 ft	248 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
33,747	35%	3	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
17 FT 02 in	2	52.0 ft

Design Load: H 15
Op Rating: 31.00
Inv Rating: 18.00

HS: 0.70
A1: 1.02
A2: 1.06
A3: 1.16

Load Restricted Bridge? ☑
BL Load: 20,000
CL-8 Load: 20,000
SA Load: 35,500

Bridge Deck View

Bridge Inspection Information

Date Inspected:	8/18/2009	Structr Adequacy:	4
Superstr Code:	4	Safe Load:	5
Substr Code:	6	Deck Geometry:	4
Deck Code:	6	Underclearance:	3
Scour:	3	Waterway:	8

Proposed Bridge Replacement Information

New Bridge Width: 48 ft.
New Bridge Length: 860 ft.
Priority Array #: 24
PIN Number:
WIN Number:
Contract Number:

Bridge $'s:
Total $'s:
Repl/Rehab Year: 2020
Ad Date:

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" BASED ON THE SUPERSTRUCTURE CODE.
Many of the steel stringers have cracks. A repair project for the cracked stringers was completed by contract in 2006.
There are 48 locations with bolts, drilled holes, or welded plates. Some of the stringer ends at the floorbeam connections are showing laminar rust and starting to lift the deck off the stringer top flanges. Approximately 8% section loss typical.

This bridge was added to the Bridge Replacement Priority Array due to the existing load restrictions and it is cost prohibitive to rehabilitate the bridge to meet current truck load standards.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 670W	0001652A	STILLAGUAMISH R	209.35	Northwest

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1933	STrus CTB	3 / 5	44.56SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
48.0 ft	859 ft	200 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
39,247	13%	3	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
16 FT 05 in	2	58.0 ft

Design Load: H 15

Op Rating: 35.00

Inv Rating: 21.00

HS: 1.04 Load Restricted Bridge? ☐

A1: 1.38 BL Load:

A2: 1.52 CL-8 Load:

A3: 1.64 SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	#########	Structr Adequacy:	4
Superstr Code:	5	Safe Load:	5
Substr Code:	6	Deck Geometry:	4
Deck Code:	4	Underclearance:	2
Scour:	3	Waterway:	8

Bridge Profile View

Proposed Bridge Replacement Information

New Bridge Width: ft. Bridge $'s:

New Bridge Length: ft. Total $'s:

Priority Array #: 5

PIN Number:

WIN Number: Repl/Rehab Year: 2013

Contract Number: Ad Date:

THIS BRIDGE IS CLASSIFIED "SD" BASED ON THE DECK CONDITION.
A modified concrete overlay was applied in 1992. The length of the 3 truss spans is 606 feet.
Transverse hairline cracks in most panel points. Soffit: Transverse and map cracking in soffit, some were leaching or had rust stains throughout all steel truss spans of bridge; see photos #5 and #21. Some movement in the deck was observed under heavy traffic in areas of all truss spans, most notably between Panel Points L0 and L1. There are exposed rusty transverse bars with section loss, up to 6 ft. in length with 2"" deep spalls; Some areas of delaminated and honeycombed concrete were observed between the stringers. Spalls, up to 10 ft. long, and longitudinal cracks were observed along the east edge of the deck. Spalls were also observed at the interface of the floorbeams and deck. A future project will replace the concrete deck on the three steel truss spans.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
10 / 143	0002222A	BRISTOL FILL	90.10	South Central

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1937	SB	15 / 0	41.75SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
24.0 ft	430 ft	33 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
1,115	11%	2	No

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	34	34.0 ft

Design Load: H 15

Op Rating: 32.00

Inv Rating: 19.00

HS: 0.97 Load Restricted Bridge? ☐

A1: 1.52 BL Load:

A2: 1.46 CL-8 Load:

A3: 1.62 SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	6/16/2009	Structr Adequacy:	4
Superstr Code:	5	Safe Load:	5
Substr Code:	6	Deck Geometry:	4
Deck Code:	3	Underclearance:	9
Scour:	N	Waterway:	9

Bridge Profile View

Proposed Bridge Replacement Information

New Bridge Width: ft. Bridge $'s:

New Bridge Length: ft. Total $'s:

Priority Array #: 4

PIN Number:

WIN Number: Repl/Rehab Year: 2012

Contract Number: Ad Date:

THIS BRIDGE IS CLASSIFIED "SD" BASED ON THE DECK CONDITION.
Deck replacement is needed based on the 80% delams found when the ACP was removed during contract 6286 in May, 2002. The cement appears to be breaking down in the concrete deck allowing aggregate to debond.

There is 8700 sq.ft. in Condition State 3 due to the chain drag survey completed in 2002, see Element 376. Map cracking and heavy leaching with stalactites in soffit dripping down on to the stringers and columns. Areas of rock pockets scattered throughout the soffit of the deck. Many areas of efflorescence and light pattern cracks near the floorbeams throughout.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
12 / 12S	000000LM	WISHKAH R HERON CS1415	0.08	Olympic

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1949	SSwS SG	2 / 1	45.97SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
28.0 ft	235 ft	93 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
13,707	12%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	2	30.0 ft

Design Load: H 20

Op Rating: 64.00

Inv Rating: 39.00

HS: 1.21 Load Restricted Bridge? ☐

A1: 1.41 BL Load:

A2: 1.42 CL-8 Load:

A3: 1.71 SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	5/20/2009	Structr Adequacy:	4
Superstr Code:	5	Safe Load:	5
Substr Code:	4	Deck Geometry:	3
Deck Code:	4	Underclearance:	9
Scour:	5	Waterway:	8

Proposed Bridge Replacement Information

New Bridge Width: ft. Bridge $'s:

New Bridge Length: ft. Total $'s:

Priority Array #: 16

PIN Number:

WIN Number: Repl/Rehab Year:

Contract Number: Ad Date:

Bridge Profile View

THE BRIDGE IS CLASSIFIED "SD" DUE TO THE SUBSTRUCTURE CONDITION.
This is a steel swing span bridge that was built with untreated timber piles. The bridge sags during operation due to additional weight added after the grid deck was replaced in 1990.

A previous review has determined that the center pier should be reinforced with four new shaft foundations to reinforce this bridge against future seismic activity.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
12 / 720	0000307A	WHETSTONE CR	372.57	South Central

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1919	CS	2 / 0	30.99SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
25.7 ft	21 ft	10 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
2,538	18%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	11	37.0 ft

Design Load: Unknown

Op Rating: 33.00

Inv Rating: 20.00

HS: 0.56 Load Restricted Bridge? ☐

A1: 1.00 BL Load:

A2: 1.00 CL-8 Load:

A3: 1.00 SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	2/25/2009	Structr Adequacy:	4
Superstr Code:	7	Safe Load:	5
Substr Code:	4	Deck Geometry:	2
Deck Code:	7	Underclearance:	9
Scour:	5	Waterway:	6

Proposed Bridge Replacement Information

New Bridge Width: 40 ft. Bridge $'s:

New Bridge Length: 40 ft. Total $'s:

Priority Array #: 14

PIN Number:

WIN Number: Repl/Rehab Year:

Contract Number: Ad Date:

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" DUE TO THE SUBSTRUCTURE CODE.

Calculations show the bridge to be scour critical. Very old bridge with 2 feet of ACP over the bridge deck. The channel is almost all silted in which makes it difficult to inspect under the bridge. The waterway opening is too restrictive and allows water over the approach roadway during high flows. The1996 flood flow water splashed over concrete rail at upstream side.

This bridge has been added to the 2009-11 P2 Bridge Replacement Priority Array.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
22 / 7	0001942A	SLOUGH OF YAKIMA R	1.39	South Central

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1935	CTB	3 / 0	40.22SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
24.0 ft	115 ft	50 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
7,905	9%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	13	30.0 ft

Design Load: H 15

Op Rating: 37.00

Inv Rating: 22.00

HS: 0.90 Load Restricted Bridge? ☐

A1: 1.23 BL Load:

A2: 1.14 CL-8 Load:

A3: 1.25 SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	5/7/2009	Structr Adequacy:	5
Superstr Code:	7	Safe Load:	5
Substr Code:	5	Deck Geometry:	2
Deck Code:	4	Underclearance:	9
Scour:	3	Waterway:	5

Bridge Profile View

Proposed Bridge Replacement Information

New Bridge Width: 40 ft. Bridge $'s:

New Bridge Length: 120 ft. Total $'s:

Priority Array #: 15

PIN Number:

WIN Number: Repl/Rehab Year:

Contract Number: Ad Date:

A Nickel funded project to widen SR 22 between I-82 and McDonald Road in Toppenish, almost totally within the Yakama Nation Reservation. Safety improvements include widening the lanes and shoulders, flattening the slope, and installing guardrail. Design on this safety improvement project will begin in late 2007. Construction is scheduled to begin in 2009, and be completed in 2011.

The Yakima River Bridge and the Slough Bridge have been excluded from this project due to the cost of replacement.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 322N	0005761B	SR 261 OC	221.95	Eastern

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1952	CVS	3 / 0	45.01SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
31.7 ft	169 ft	66 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
7,800	28%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	2	40.0 ft

Design Load: HS 15
Op Rating: 36.00
Inv Rating: 22.00

HS: 1.25
A1: 1.75
A2: 1.59
A3: 1.63

Load Restricted Bridge? ☐
BL Load:
CL-8 Load:
SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	#########	Structr Adequacy:	4
Superstr Code:	4	Safe Load:	5
Substr Code:	6	Deck Geometry:	2
Deck Code:	7	Underclearance:	8
Scour:	N	Waterway:	9

Proposed Bridge Replacement Information

New Bridge Width: 40 ft.
New Bridge Length: 175 ft.
Priority Array #: 7
PIN Number:
WIN Number:
Contract Number:

Bridge $'s:
Total $'s:
Repl/Rehab Year:
Ad Date:

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" BASED ON THE SUPERSTRUCTURE CONDITION.

Superstructure is coded as a "4" due to the longitudinal rusty cracks in the soffit of the hollow slab. note Top of slab covered with ACP. Edge of slab Leaching at slab to barrier interface. Vertical and diagonal hairline cracks on both edges of slab. Longitudinal crack in edge of slab at the NW corner approximately 15 ft. long. Soffit. Longitudinal cracks in soffit. Leaching along longitudinal joint at bottom centerline of slab in all spans. Longitudinal rust stained and leaching cracks, almost the full lengths of Span 1 and Span 2 (Photos #4 and #5). The northeast corner of Span 3 has a spall 4"" x 4"" x 1/2"" deep.

This bridge has been added to the 2009-11 P2 Program Replacement List.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 322S	0005761A	SR 261 OC	221.95	Eastern

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1958	CVS	3 / 0	39.68SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
31.7 ft	169 ft	66 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
8,026	28%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	2	40.0 ft

Design Load: HS 20
Op Rating: 32.00
Inv Rating: 19.00

HS: 0.79
A1: 1.07
A2: 1.10
A3: 1.10

Load Restricted Bridge? ☐
BL Load:
CL-8 Load:
SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	8/11/2008	Structr Adequacy:	4
Superstr Code:	4	Safe Load:	5
Substr Code:	6	Deck Geometry:	2
Deck Code:	7	Underclearance:	8
Scour:	N	Waterway:	9

Proposed Bridge Replacement Information

New Bridge Width: 40 ft.
New Bridge Length: 175 ft.
Priority Array #: 6
PIN Number:
WIN Number:
Contract Number:

Bridge $'s:
Total $'s:
Repl/Rehab Year:
Ad Date:

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" BASED ON THE SUPERSTRUCTURE and DECK CONDITION.
Superstructure is coded as a "4" due to the longitudinal rusty cracks in the soffit of the hollow slab.
Top of slab covered with ACP, see note 801. Edge of slab longitudinal crack, approximately 20 ft. long in north edge of Span 1; crack starts near west abutment. Another rust stained crack that is approximately 8 ft. long along north edge of the slab in Span 1. Vertical cracks in edges of the deck. 2005 interim inspection: There were no apparent changes to the overall delamination characteristics.All spans have a rusty leaching crack about 12"" from the north edge. Transverse leaching cracks, some are rust stained. Random small spalls in the bottom of the slab, some are rust stained. A 4"" diameter x 1/2"" deep rust stained spall at the south end of Span 1 near midspan. There is a 25ft. long delamination with a rusty area on the north face of Span 3.

This bridge has been added to the 2009-11 P2 Program Replacement List.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
97 / 20	0006113A	SATUS CR	30.80	Southwest

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1959	CVS	3 / 0	20.25SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
38.0 ft	101 ft	40 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
3,917	26%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	45	45.0 ft

Design Load: HS 20

Op Rating: 33.00

Inv Rating: 19.00

HS: 0.71 Load Restricted Bridge? ☐

A1: 1.00 BL Load:

A2: 0.98 CL-8 Load:

A3: 1.04 SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	7/15/2009	Structr Adequacy:	4
Superstr Code:	4	Safe Load:	5
Substr Code:	5	Deck Geometry:	5
Deck Code:	3	Underclearance:	9
Scour:	3	Waterway:	6

Proposed Bridge Replacement Information

New Bridge Width: 40 ft. Bridge $'s:

New Bridge Length: 120 ft. Total $'s:

Priority Array #: 8

PIN Number:

WIN Number: Repl/Rehab Year:

Contract Number: Ad Date:

Bridge Profile View

THE BRIDGE IS CLASSIFIED "SD" DUE TO A SUPERSTRUCTURE AND DECK CONDITION.

This is a cast-in-place hollow concrete slab. The bridge was constructed with little or no cover over the top mat of steel reinforcing in the deck. The top surface of the slab was first overlaid with a membrane and asphalt in 1974. The deck was repaired extensively and overlaid with asphalt in 1989. The bottom side of the slab has significant cracking with rust staining.

Bridge Replacement is warranted since there is no cost effect way of addressing the bridge scour problem and the concrete slab deterioration.

This bridge has been added to the 2009-11 P2 Program Replacement List.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
97 / 106	0002689B	SATUS CR 2ND CROSSING	45.84	South Central

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1942	SRB TTC	1 / 4	42.48 SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
29.6 ft	133 ft	60 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
3,253	29%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	63	32.0 ft

Design Load: H 15	HS: 1.10	Load Restricted Bridge? ☑	
Op Rating: 40.00	A1: 1.35	BL Load:	20,500
Inv Rating: 27.00	A2: 1.48	CL-8 Load:	20,500
	A3: 1.64	SA Load:	42,000

Bridge Deck View

Bridge Inspection Information

Date Inspected:	4/14/2008	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Deck Geometry:	4
Deck Code:	4	Underclearance:	9
Scour:	3	Waterway:	3

Bridge Profile View

Proposed Bridge Replacement Information

New Bridge Width:	36 ft.	Bridge $'s:	$1,700,000
New Bridge Length:	180 ft.	Total $'s:	$5,982,400
Priority Array #:	2		
PIN Number:	509703L		
WIN Number:	E09703L	Repl/Rehab Year:	2011
Contract Number:		Ad Date:	10/15/2010

THE BRIDGE IS CLASSIFIED "SD" DUE TO A DECK CONDITION.

The waterway opening under the bridge is very restricted. Region maintenance typically removes drift debris every spring.
The steel beams have areas of rust blooms and top flange rust. The timber sawn girders 1M, 2J and 2L have a horizontal split in the web for approx 1/2 length near mid span. Three feet of east end of pier no. 2 timber cap has a 1 inch shell (Red Tagged). Pier 5 cap under stringer "D" has center rot. Four feet of east end of pier 6 cap has center rot.

Bridge Replacement project currently scheduled to go to contract in October 2010.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
101 / 354	0002437A	MCDONNELL CR	258.21	Olympic

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1939	TTC	9 / 0	18.91SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
28.0 ft	179 ft	36 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
18,956	10%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	13	40.0 ft

Design Load: H 15

Op Rating: 50.00

Inv Rating: 31.00

HS: 1.38 A1: 1.68 A2: 1.85 A3: 2.04

Load Restricted Bridge? ☐

BL Load:

CL-8 Load:

SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	6/28/2009	Structr Adequacy:	3
Superstr Code:	7	Safe Load:	5
Substr Code:	3	Deck Geometry:	2
Deck Code:	6	Underclearance:	9
Scour:	3	Waterway:	8

Bridge Profile View

Proposed Bridge Replacement Information

New Bridge Width: 40 ft.

New Bridge Length: 185 ft.

Priority Array #: 9

PIN Number:

WIN Number:

Contract Number:

Bridge $'s:

Total $'s:

Repl/Rehab Year:

Ad Date:

THIS BRIDGE IS CLASSIFIED "SD" DUE TO A SUBSTRUCTURE / SCOUR CONDITION.

Substructure rated a 3 based on embedment depths of piles at Piers 5 through 8 being five foot or less. There are also yellow tagged caps and previously red tag piles that now have helper piles. Even before scour is considered, the pile tips of Piers 5 - 8 are only 4 to 7 ft below the ground surface. If the banks erode and the stream reaches Piers 4 or 9, they will be undermined. Scour code changed from 2 to 3 by HDR 2/24/2004. SCOUR - Pile 9D is 1'-9"" from embankment and Pile 9E is 1'-0"" from embankment.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
107 / 5	0004381A	SLOUGH	7.59	Olympic

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1953	TTC	16 / 0	36.79SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
22.4 ft	294 ft	19 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
4,113	17%	2	No

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	40	28.0 ft

Design Load: HS 15

Op Rating: 46.00

Inv Rating: 32.00

HS: 1.27 A1: 1.51 A2: 1.65 A3: 1.83

Load Restricted Bridge? ☑

BL Load: 20,000

CL-8 Load:

SA Load: 40,000

Bridge Deck View

Bridge Inspection Information

Date Inspected:	5/20/2008	Structr Adequacy:	4
Superstr Code:	6	Safe Load:	5
Substr Code:	4	Deck Geometry:	2
Deck Code:	6	Underclearance:	9
Scour:	5	Waterway:	6

Proposed Bridge Replacement Information

New Bridge Width: 40 ft.

New Bridge Length: 295 ft.

Priority Array #: 18

PIN Number: 310708A

WIN Number: C10708D

Contract Number:

Bridge $'s:

Total $'s:

Repl/Rehab Year: 2008

Ad Date: 1/7/2008

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" DUE TO A SUBSTRUCTURE CONDITION.
Substructure coded a "4" due to extensive rot in piles and caps. This bridge was added to the Bridge Replacement Priority Array in 1990.

There are 28 of the 48 interior timber piles that are "Yellow Tagged" due to splits or rot within 3 inches of their center. The timber cap @ piers 8 and 11 are "Red Tagged" and have a 1 inch shell in selected locations.
The new replacement bridge will be a prestressed concrete hollow slab. The Bridge$'s include: $1,640,000 for the new bridge, $310,000 for the detour bridge, $140,000 for the soldier pile walls at the ends of the new bridge.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
107 / 6	0004381B	SLOUGH	7.79	Olympic

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1953	TTC	15 / 0	36.79SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
22.5 ft	279 ft	19 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
4,113	17%	2	No

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	40	28.0 ft

Design Load: HS 15
Op Rating: 45.00
Inv Rating: 32.00

HS: 1.26
A1: 1.50
A2: 1.64
A3: 1.82

Load Restricted Bridge? ☑
BL Load: 21,000
CL-8 Load:
SA Load: 41,000

Bridge Deck View

Bridge Inspection Information

Date Inspected:	5/20/2008	Structr Adequacy:	4
Superstr Code:	6	Safe Load:	5
Substr Code:	4	Deck Geometry:	2
Deck Code:	6	Underclearance:	9
Scour:	5	Waterway:	8

Proposed Bridge Replacement Information

New Bridge Width: 40 ft.
New Bridge Length: 280 ft.
Priority Array #: 17
PIN Number: 310708A
WIN Number: C10708D
Contract Number:

Bridge $'s:
Total $'s:
Repl/Rehab Year: 2008
Ad Date: 1/7/2008

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" DUE A SUBSTRUCTURE CONDITION.
Substructure coded a "4" due to extensive rot in piles and caps.

There are 5 of the 40 interior timber piles that are "Yellow Tagged" due to splits and have been temporarily repaired with steel rings. The new replacement bridge will be a prestressed concrete hollow slab. The Bridge$'s include: $1,640,000 for the new bridge, $310,000 for the detour bridge, $140,000 for the soldier pile walls at the ends of the new bridge.

The Bridge PS&E has been completed.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
167 / 20E	0003960A	PUYALLUP R	6.40	Olympic

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1925 / 1951	STrus TTC PRCB	1 / 5	33.04SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
21.0 ft	477 ft	371 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
17,936	5%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
18 FT 07 in	2	24.0 ft

Design Load: H 15

Op Rating: 28.00

Inv Rating: 17.00

HS: 0.69 Load Restricted Bridge? ☑

A1: 0.93 BL Load:

A2: 0.97 CL-8 Load:

A3: 1.07 SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	7/12/2009	Structr Adequacy:	2
Superstr Code:	5	Safe Load:	5
Substr Code:	6	Deck Geometry:	2
Deck Code:	5	Underclearance:	2
Scour:	7	Waterway:	8

Proposed Bridge Replacement Information

New Bridge Width:	75 ft.	Bridge $'s:	
New Bridge Length:	480 ft.	Total $'s:	$45,000,000
Priority Array #:	12		
PIN Number:			
WIN Number:		Repl/Rehab Year:	
Contract Number:		Ad Date:	

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" DUE TO THE STRUCTURAL ADEQUACY CODE.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
241 / 5	08336200	MABTON-SUNNYSIDE #650	1.34	South Central

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1954	CBOX	5 / 0	10.84SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
24.0 ft	521 ft	114 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
4,150	5%	2	No

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	19	32.0 ft

Design Load: HS 20
Op Rating: 13.00
Inv Rating: 8.00

HS: 0.43
A1: 0.58
A2: 0.51
A3: 0.57

Load Restricted Bridge? ☑
BL Load:
CL-8 Load:
SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	#########	Structr Adequacy:	2
Superstr Code:	5	Safe Load:	0
Substr Code:	6	Deck Geometry:	2
Deck Code:	7	Underclearance:	9
Scour:	5	Waterway:	8

Proposed Bridge Replacement Information

New Bridge Width: 40 ft.
New Bridge Length: 525 ft.
Priority Array #: 11
PIN Number:
WIN Number:
Contract Number:

Bridge $'s:
Total $'s:
Repl/Rehab Year:
Ad Date:

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" DUE TO THE STRUCTURAL ADEQUACY CODE.

The capacity of the bridge to carry vehicular traffic is low because of its age and poor shear strength design. This bridge is currently load posted with the following ratings - Truck 14 tons , Truck/Semitrailer 18 tons , Truck/Trailer 22 tons. This bridge was built by Yakima County and transferred to the Department in 1992. It was designed for HS-15 loads but used design standards that resulted in very light shear reinforcement and low shear capacity. The cracking in the girder webs is evidence of this low shear capacity.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
300 / 1	0007342A	MISSION CR	0.28	Olympic

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1963	TS	3 / 0	32.72SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
26.0 ft	51 ft	17 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
6,584	5%	2	No

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	50	28.0 ft

Design Load: HS 20

Op Rating: 38.00

Inv Rating: 28.00

HS: 1.05 Load Restricted Bridge? ☐

A1: 1.32 BL Load:

A2: 1.39 CL-8 Load:

A3: 1.60 SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	3/5/2008	Structr Adequacy:	4
Superstr Code:	7	Safe Load:	5
Substr Code:	4	Deck Geometry:	2
Deck Code:	7	Underclearance:	9
Scour:	3	Waterway:	6

Proposed Bridge Replacement Information

New Bridge Width: 40 ft. Bridge $'s:

New Bridge Length: 60 ft. Total $'s:

Priority Array #: 20

PIN Number:

WIN Number: Repl/Rehab Year:

Contract Number: Ad Date:

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" BASED ON A SUBSTRUCTURE / SCOUR CONDITION.
This is a 3 span Treated Timber bridge built in 1963 with 2 intermediate piers in the waterway. The intermediate pierwalls are on spread footings. Bridge has been closed due to scour failure in the past.

Substructure coded a "4" due to scour where Pier 3 has previously experienced settlement. A Scour report says The calculated scour depth is well below the bottom of the foundations shown on the original layout sheet and notes in the file indicate the bridge has experienced a failure due to scour in 1966 and was repaired. The previous recommend scour repair of riprap placement around the piers has been completed.

This bridge has been added to the P2 Program Replacement List for the 2009-11 biennium.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
302 / 105	000000JQ	PURDY BR	15.65	Olympic

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1936 / 1966	CBOX	5 / 0	23.45SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
20.0 ft	550 ft	190 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
21,346	3%	2	No

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	50	26.0 ft

Design Load: H 15

Op Rating: 37.00

Inv Rating: 22.00

HS: 0.88 A1: 1.21 A2: 1.09 A3: 1.06

Load Restricted Bridge? ☑

BL Load: 19,500

CL-8 Load:

SA Load: 32,500

Bridge Deck View

Bridge Inspection Information

Date Inspected:	6/22/2008	Structr Adequacy:	4
Superstr Code:	6	Safe Load:	5
Substr Code:	4	Deck Geometry:	2
Deck Code:	5	Underclearance:	9
Scour:	5	Waterway:	8

Bridge Profile View

Proposed Bridge Replacement Information

New Bridge Width: 40 ft.

New Bridge Length: 550 ft.

Priority Array #: 13

PIN Number:

WIN Number:

Contract Number:

Bridge $'s:

Total $'s:

Repl/Rehab Year:

Ad Date:

THIS BRIDGE IS CLASSIFIED "SD" DUE TO THE SUBSTRUCTURE CODE.
The capacity of the bridge to carry vehicular traffic is low because of its age and poor shear strength design.

Substructure coded "4" based on Piers 3 and 4 pier walls heavily spalled in all four corners with rebar that is corroded through and missing, and other areas where exposed rebar is heavily corroded and covered with marine life. The pier walls are box structures with interior voids, and the corner spalls have reduced the wall thickness in areas from 16" to about 7" thick. The reduced wall thickness near and below the water surface increases the likelihood of local failure of the submerged pier walls.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
303 / 4A	0003531A	MANETTE BRIDGE CS1841	1.47	Olympic

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1930 / 1949	STrus SG SRB	1 / 12	16.80SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
18.4 ft	1,573 ft	243 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
7,300	3%	2	YES

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
14 FT 07 in	5	22.0 ft

Design Load: HS 15
Op Rating: 37.00
Inv Rating: 22.00

HS: 1.03
A1: 1.23
A2: 1.33
A3: 1.49

Load Restricted Bridge? ☑
BL Load:
CL-8 Load:
SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	11/17/2008	Structr Adequacy:	2
Superstr Code:	4	Safe Load:	3
Substr Code:	4	Deck Geometry:	2
Deck Code:	5	Underclearance:	9
Scour:	3	Waterway:	8

Bridge Profile View

Proposed Bridge Replacement Information

New Bridge Width: 54 ft.
New Bridge Length: 1,550 ft.
Priority Array #: 3
PIN Number: 330311A
WIN Number: C30311A
Contract Number:

Bridge $'s:
Total $'s: $82,854,344

Repl/Rehab Year: 2010
Ad Date: 3/1/2010

THIS BRIDGE IS CLASSIFIED "SD" DUE TO A SUBSTRUCTURE CONDITION.
This bridge was added to the Priority Array in 1990 as a bridge rehabilitation project.
A review of information obtained during the rehab contracts determined that further rehabilitation of the concrete in the piers is not feasible thus, this bridge is in need of replacement.

Core testing of the substructure concrete in the piers indicates the presence of alkali-silica reaction. Bridge Inspections indicate continuing deterioration in the underwater footings. The footings at pier 5 was repaired under Contract 4038 in 1992. The footings at piers 4 and 6 were repaired under Contract 4658 in 1995. A decision was made in 1993 to complete necessary repairs until the bridge could be replaced.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
506 / 106	0003928A	LACAMAS CR	8.05	Southwest

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1951	TTC	9 / 0	41.84SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
24.0 ft	170 ft	19 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
1,956	12%	2	No

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	11	30.0 ft

Design Load: H 15

Op Rating: 30.00

Inv Rating: 19.00

HS: 0.84 A1: 0.99 A2: 1.08 A3: 1.20

Load Restricted Bridge? ☑

BL Load: 16,500

CL-8 Load: 21,000

SA Load: 41,000

Bridge Deck View

Bridge Inspection Information

Date Inspected:	5/7/2009	Structr Adequacy:	4
Superstr Code:	5	Safe Load:	5
Substr Code:	4	Deck Geometry:	4
Deck Code:	3	Underclearance:	9
Scour:	5	Waterway:	8

Bridge Profile View

Proposed Bridge Replacement Information

New Bridge Width: 40 ft.

New Bridge Length: 175 ft.

Priority Array #: 21

PIN Number: 450607A

WIN Number: D50607A

Contract Number:

Bridge $'s:

Total $'s:

Repl/Rehab Year: 2015

Ad Date:

THIS BRIDGE IS CLASSIFIED "SD" DUE TO A DECK AND SUBSTRUCTURE CONDITION.
This bridge was added to the Bridge Replacement Priority Array in 2000.

The Bridge Inspection Report says the deck has a 6" thick ACP overlay has many cracks and patches. Many timber lams in deck (3"x4") have center rot starting from the North edge and continuing 2' to 8' into the deck. The Stringer 1O has been replaced; Stringer 2O and 3O are Red Tagged and have 2" and 1/2" shell on 5" section under scupper. The Piles are checked, weathered, and split. Pile 3D has a 2" shell and a 6" rot pocket near the top (Y.T.); Pile 4D has a 1/4" wide check - 16 feet long; Pile 6D has a 2" shell with a 4" rot pocket ranging from 6' - 15' from the ground and has bug borer holes throughout (Y.T.); Pile 7D has a 2" shell with 4" rot pocket along the top 6 feet (Y.T.).

P2 Bridge Replacement funding will likely be available in 2013-15.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
508 / 12	000000IJ	S FK NEWAUKUM R	13.65	Southwest

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1930	STrus TTC	1 / 7	27.89SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
20.0 ft	197 ft	90 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
1,652	14%	2	No

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	23	26.0 ft

Design Load: Unknown

Op Rating: 37.00

Inv Rating: 22.00

HS: 0.79 Load Restricted Bridge? ☑

A1: 1.09 BL Load: 16,000

A2: 0.91 CL-8 Load: 18,000

A3: 0.91 SA Load: 34,000

Bridge Deck View

Bridge Inspection Information

Date Inspected:	2/27/2008	Structr Adequacy:	4
Superstr Code:	5	Safe Load:	2
Substr Code:	5	Deck Geometry:	2
Deck Code:	3	Underclearance:	9
Scour:	3	Waterway:	8

Bridge Profile View

Proposed Bridge Replacement Information

New Bridge Width: 40 ft. Bridge $'s:

New Bridge Length: 200 ft. Total $'s:

Priority Array #: 19

PIN Number:

WIN Number: Repl/Rehab Year: 2015

Contract Number: Ad Date:

THIS BRIDGE IS CLASSIFIED "SD" BASED ON THE DECK CONDITION.
The ACP was removed in 2001 as part of contract 6020. The concrete deck is very deteriorated and has over 60% delaminations.

There is 15% section loss in the floorbeam webs near the connections to the truss, and 10% section loss in the bottom flanges near the ends. Exterior stringers: Top flanges up to 15% section loss and bottom flanges up to 30% section loss. Worst case is Stringer 7-1A near north truss panel point L1 with about 10 ft. of bottom flange showing laminar rusting and 30% section loss. Floor system lateral bracing between L4-L5 is bent 4"" over 9 ft.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
508 / 23	000000CQ	ALDER CR	22.65	Southwest

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1937	TTT	3 / 0	49.01SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
19.6 ft	88 ft	29 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
1,331	14%	2	No

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	50	21.0 ft

Design Load: Unknown

Op Rating: 37.00

Inv Rating: 26.00

HS: 1.03 Load Restricted Bridge? ☐

A1: 1.29 BL Load:

A2: 1.31 CL-8 Load:

A3: 1.58 SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	2/27/2008	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Deck Geometry:	2
Deck Code:	3	Underclearance:	9
Scour:	5	Waterway:	8

Proposed Bridge Replacement Information

New Bridge Width: 38 ft.

New Bridge Length: 95 ft.

Priority Array #: 23

PIN Number: 450804A

WIN Number: D50804A

Contract Number:

Bridge $'s:

Total $'s:

Repl/Rehab Year:

Ad Date:

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" DUE TO A DECK, SUPER AND SUBSTRUCTURE CONDITION.

The inspection report indicates the timber deck was repaired in 1993 by maintenance forces. During the repair the timber deck was found to have many rotten areas. The maintenance forces indicated that more areas will need to be repaired in the future. There are numerous pot holes in the existing ACP. Column 2D is red tagged due to rot found in the bottom 4'. Column 3D has a helper column next to the original column.

P2 Bridge Replacement funding will likely be available in 2015-17.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
508 / 25	000000JV	CREEK	24.08	Southwest

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1937	TTC	1 / 0	53.00FO

Bridge Width (curb-curb):	Bridge Length:	Max Span:
19.7 ft	26 ft	24 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
1,331	14%	2	No

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	50	20.0 ft

Design Load: Unknown

Op Rating: 41.00

Inv Rating: 28.00

HS: 1.14 | A1: 1.29 | A2: 1.37 | A3: 1.57

Load Restricted Bridge? ☑

BL Load: 18,000

CL-8 Load: 21,500

SA Load: 39,000

Bridge Deck View

Bridge Inspection Information

Date Inspected:	10/20/2009	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Deck Geometry:	2
Deck Code:	6	Underclearance:	9
Scour:	3	Waterway:	3

Proposed Bridge Replacement Information

New Bridge Width:	36 ft.	Bridge $'s:	
New Bridge Length:	30 ft.	Total $'s:	
Priority Array #:	22		
PIN Number:	450807A		
WIN Number:	D50807A	Repl/Rehab Year:	
Contract Number:		Ad Date:	

Bridge Profile View

THIS BRIDGE IS CLASSIFIED "SD" DUE TO A DECK, SUPER AND SUBSTRUCTURE CONDITION.

The ACP is breaking up in the east bound lane with open alligator cracking. Water leaks through the deck before it can run off the bridge. The deck planks are wet, spongy and starting to rot in the area of the breaking up ACP. There are 12 lines of stringers, most of them are wet. Most stringers are mud stained with weather checks in a few locations. The north section of the timber cap @ Pier 2 has a 1.5 inch shell over pile 2A and a 1 inch shell over pile 2C. It has been red tagged and needs to be replaced. Pile 1A is wet, soft and punky. Pile 1B has a vertical split on the NW corner with surface insect infestation. Pile 1D has a vertical split on the south face with surface insect rot up to 1/2 inch deep. Pile 2E is red tagged today with a 1.5 inch shell.

P2 Bridge Replacement funding will likely be available in 2011-13.

2011-13 Bien P2 Bridge Replacements/Rehab Candidate

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
548 / 10	08061500	DAKOTA CR	11.54	Northwest

Year Built / YR Widened:	Bridge Type:	Number of Main/Appr span	Sufficiency Rating:
1930 / 1951	SRB TTC	1 / 4	34.67SD

Bridge Width (curb-curb):	Bridge Length:	Max Span:
23.7 ft	182 ft	80 ft

Average Daily Traffic:	Truck%	Number of Lanes:	NHS:
7,152	14%	2	No

Vertical Clearance:	Detour Length (miles):	Appr Rdway Width:
NA	3	27.0 ft

Design Load: H 15

Op Rating: 24.00

Inv Rating: 14.00

HS: 0.44
A1: 0.60
A2: 0.53
A3: 0.54

Load Restricted Bridge? ☑

BL Load: 21,500

CL-8 Load: 21,500

SA Load:

Bridge Deck View

Bridge Inspection Information

Date Inspected:	7/22/2009	Structr Adequacy:	2
Superstr Code:	5	Safe Load:	0
Substr Code:	5	Deck Geometry:	2
Deck Code:	6	Underclearance:	9
Scour:	5	Waterway:	8

Bridge Profile View

Proposed Bridge Replacement Information

New Bridge Width:	40 ft.	Bridge $'s:	
New Bridge Length:	190 ft.	Total $'s:	
Priority Array #:	10		
PIN Number:	154816A		
WIN Number:	A54816A	Repl/Rehab Year:	2010
Contract Number:		Ad Date:	

THIS BRIDGE IS CLASSIFIED "SD" DUE TO THE STRUCTURAL ADEQUACY CODE.

The ownership of this bridge was transferred from Whatcom County to the state as part of the 1992 Route Jurisdictional Transfer.

This bridge has a posted 15 ton weight limit due to the design of the steel and timber girders. The steel beams are rusty with some pitted areas. There are two yellow tagged piles in the treated timber approach spans.

P2 Bridge Preservation - Bridge Repair

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Region	Repair Description	Bridge Item$'s
1	167/38	24TH ST E OVER SR 167	Olympic	Replace damaged PCG	$500,000
1	2/39	ANDERSON CR	Northwest	Replace East side Br Rail	$200,000
1	16/110E	TACOMA NARROWS	Olympic	Replace Finger Exp Jnt at Tower #4	$300,000
2	16/110E	TACOMA NARROWS	Olympic	Replace Maintenance Traveler	$3,000,000
3	5/104W	DIKE ACCESS RD & RR	Southwest	Replace Steel Exp Joint	$104,000
4	395/40	PIONEER MEM. BR	South Central	Replace Exp Joint	$470,000
5	5/537S	EB LANES I-5 OC	Northwest	Repair Conc Box Girder	$100,000
6	5/537S	EB LANES I-5 OC	Northwest	Replace Exp Jnt	$40,000
7	5/535E	NB VIADUCT STA 2032	Northwest	Replace Exp Jnt	$50,000
8	5/536N-W	NB I5 to WB W SEA FRW	Northwest	Replace Exp Jnt	$15,000
9	5/537E-S	E-S RAMP BR	Northwest	Replace Exp Jnt	$120,000
10	5/537N	S-E RAMP WB LANES	Northwest	Replace Exp Jnt	$42,000
11	5/537N-W	N-6TH RAMP BRIDGE	Northwest	Replace Exp Jnt	$63,000
12	5/538E	NB VIADUCT STA 2075	Northwest	Replace Exp Jnt	$140,000
13	5/543E	KING-JACKSON ST OC	Northwest	Replace Exp Jnt	$58,000
14	5/543NCD	NBCD KING JACKSON S	Northwest	Replace Exp Jnt	$113,000
15	5/543SCD	SBCD KING JACKSON S	Northwest	Replace Exp Jnt	$150,000
16	5/543W	KING-JACKSON ST OC	Northwest	Replace Exp Jnt	$56,000
17	5/545NCD	NBCD VIADUCT STA 219	Northwest	Replace Exp Jnt	$96,000
18	5/545SCD	SBCD VIADUCT STA 219	Northwest	Replace Exp Jnt	$180,000
19	5/562E	NB LANES VIADUCT	Northwest	Replace Exp Jnt	$90,000
20	104/5.1	HOOD CANAL-W.A. BUG	Olympic	Replace 18 anchor cables	$3,000,000
21	90/25N	HOMER M. HADLEY	Northwest	Replace 10 Anchor Cables	$2,430,000
22	90/25S	LACEY V. MURROW BR	Northwest	Replace 10 Anchor Cables	$2,430,000
23	5/232W	SKOOKUMCHUCK R	Southwest	Repair damage Truss	$716,705
24	5/647E	UNION SLOUGH	Northwest	Replace Exp Jnt	$120,000
25	5/647W	UNION SLOUGH	Northwest	Replace Exp Jnt	$120,000
26	5/648W	STEAMBOAT SLOUGH	Northwest	Replace Exp Jnt	$144,000
27	5/650E	EBEY SL BN RY SR 529	Northwest	Replace Exp Jnt	$900,000
28	5/650W	EBEY SL BN RY SR 529	Northwest	Replace Exp Jnt	$470,000
29	5/342W-S	MCALLISTER CR	Olympic	Repair Concrete Columns	$200,000
30	18/9	NP RY OC	Northwest	Replace Exp Jnts @ 6 locations	$250,000
31	18/9	NP RY OC	Northwest	ı and Paint Steel Hanger and Pin asse	$309,750

P2 Bridge Preservation - Bridge Repair

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Region	Repair Description	Bridge Item$'s
32	90/10W-S	I-5 OC, W-S RAMP	Northwest	Replace Exp Joints	$164,000
33	90/540N	HANGMAN CR	Eastern	Repair deteriorated conc in CBOX	$150,000
34	90/540S	HANGMAN CR	Eastern	Repair deteriorated conc in CBOX	$100,000
35	405/70E	SR 522 OC SAMMAMISH	Northwest	Replace Exp Joints	$100,000
36	405/70N-E	N-E RAMP SAMMAMISH	Northwest	Replace Exp Joints	$34,500
37	405/70N-W	N-W RAMP SAMMAMISH	Northwest	Replace Exp Joints	$60,000
38	405/70S-E	S-E RAMP BR	Northwest	Replace Exp Joints	$25,000
39	405/70W	SR 522 OC SAMMAMISH	Northwest	Replace Exp Joints	$100,000
40	5/102E	SR 503 OC	Southwest	Replace Exp Jnt	$27,900
41	5/102W	SR 503 OC	Southwest	Replace Exp Jnt	$27,900
42	153/16	METHOW R	North Central	Concrete Bridge Rail	$190,000
43	153/17	METHOW R	North Central	Concrete Bridge Rail	$125,000
44	90/25N	HOMER M. HADLEY	Northwest	Replace 10 Anchor Cables	$2,430,000
45	101/269	FULTON CR	Olympic	Repair Concrete Columns	$320,000
46	101/432E	KENNEDY CR	Olympic	Repair Concrete Columns	$720,000
47	101/432W	KENNEDY CR	Olympic	Repair Concrete Columns	$720,000
48	167/32E	VALLEY AVE & UPRR O'	Olympic	Replace Expansion Joint	$100,000
49	290/4.7E-E	3RD AVE & E-E RAMP O	Eastern	Repair deteriorated Conc	$200,000
50	395/40	PIONEER MEM. BR	South Central	Replace Exp Joint	$156,675
51	5/570	LAKE WASH SHIP CANA	Northwest	Replace Exp Jnt	$360,000
52	20/204	DECEPTION PASS	Northwest	Replace deteriorated steel truss braces	$250,000
53	90/40N	EAST CHANNEL-LK WAS	Northwest	Install new seals in Modular Joints	$75,000
54	167/40E	8TH ST E O'XING	Olympic	Repair Bridge Rail	$25,000
55	195/24	S FK PALOUSE R CT HO	Eastern	Repair deteriorated Conc	$100,000
56	410/31	WHITE R (STUCK R)	Olympic	Replace Exp Joints	$108,000
57	500/6	I-205 OC	Southwest	Replace Exp Joints	$111,000
58	12/12N	WISHKAH R CS1413	Olympic	Rehab deteriorated Conc	$100,000
59	18/17S	GREEN R (NEELEY BRID	Northwest	Repair cracking in steel stringers	$250,000
60	90/180	COLUMBIA R VANTAG	South Central	Repl poured rubber in deck jnts	$168,000
61	20/207	CANOE PASS	Northwest	Replace deteriorated steel truss braces	$200,000
62	90/545E-E	FOURTH-E RAMP	Eastern	Repair deteriorated conc in CBOX	$200,000
63	107/4	CHEHALIS R	Olympic	Replace Timber Deck	$1,600,000
64	409/10	JULIA BUTLER HANSEN	Southwest	Replace Timber Deck	$1,500,000

P2 Bridge Preservation - Bridge Repair

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Region	Repair Description	Bridge Item$'s
65	529/15E	UNION SL	Northwest	Repair deteriorated concrete columns	$3,000,000
66	529/15E	UNION SL	Northwest	Repair deteriorated concrete columns	$3,000,000
67	530/124	N FK STILLAGUAMISH R	Northwest	Repair cracks in steel elements	$200,000
68	12/512S	SNAKE RIVER AT BURBA	South Central	Repair cracks in Steel Stringers	$400,000
69	99/507E	SR 599 OC	Northwest	Replace Exp Jnt	$74,000
70	99/507S-S	PACIFIC HWY OC	Northwest	Replace Exp Jnt	$95,000
71	99/507W	S 116TH PL OC	Northwest	Replace Exp Jnt	$54,000
72	99/508	PACIFIC HWY OC	Northwest	Replace Exp Jnt	$113,500
73	101/115N-W	N-W RAMP	Olympic	Replace Exp Jnt	$40,000
74	4/230	COWLITZ R-P CRAWFOR	Southwest	Steel Truss Deck Joints	$54,600
75	5/553	I-5 OC, DENNY WAY	Northwest	Replace Exp Jnt	$42,000
76	6/118	CHEHALIS R ADNA	Southwest	Replace Exp Jnt	$40,000
77	9/360	JOHNSON CR	Northwest	Add Sheet Pile Wall	$100,000
78	12/306	INDIAN CR	Southwest	Replace Conc Bridge Rail	$45,000
79	2/601	STEVENS CR UPPER X-I	Eastern	Replace Bridge Rail	$25,000
80	12/713	NP RY OC	South Central	Replace Conc Bridge Rail	$110,000
81	12/915	SNAKE R CLARKSTON	South Central	Bridge Rail	$300,000
82	21/321	W FK SAN POIL	Eastern	Replace Conc Bridge Rail	$50,000
83	21/323	SAN POIL R	Eastern	Replace Conc Bridge Rail	$50,000
84	26/2SP	N FK PALOUSE-WEST W	Eastern	Replace Conc Bridge Rail	$50,000
85	90/332	I-90 OC, TOKIO RD	Eastern	Replace Expansion Joint	$80,000
86	195/27	N FK PALOUSE R	Eastern	Concrete Bridge Railing	$96,000
87	5/40W	LEWIS R	Southwest	Steel Truss Repair	$250,000
88	20/651	BONAPARTE CR	North Central	Replace Bridge Rail	$250,000

Total Number of Bridges = 90

Totals $ = $36,294,530

P2 Bridge Preservation - Bridge Repair

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Region	Repair Description	Bridge Item$'s
1	2/39	ANDERSON CR	Northwest	Replace East side Br Rail	$200,000
79	2/601	STEVENS CR UPPER X-I	Eastern	Replace Bridge Rail	$25,000
74	4/230	COWLITZ R-P CRAWFOR	Southwest	Steel Truss Deck Joints	$54,600
87	5/40W	LEWIS R	Southwest	Steel Truss Repair	$250,000
40	5/102E	SR 503 OC	Southwest	Replace Exp Jnt	$27,900
41	5/102W	SR 503 OC	Southwest	Replace Exp Jnt	$27,900
3	5/104W	DIKE ACCESS RD & RR	Southwest	Replace Steel Exp Joint	$104,000
23	5/232W	SKOOKUMCHUCK R	Southwest	Repair damage Truss	$716,705
29	5/342W-S	MCALLISTER CR	Olympic	Repair Concrete Columns	$200,000
7	5/535E	NB VIADUCT STA 2032	Northwest	Replace Exp Jnt	$50,000
8	5/536N-W	NB I5 to WB W SEA FRW	Northwest	Replace Exp Jnt	$15,000
9	5/537E-S	E-S RAMP BR	Northwest	Replace Exp Jnt	$120,000
10	5/537N	S-E RAMP WB LANES	Northwest	Replace Exp Jnt	$42,000
11	5/537N-W	N-6TH RAMP BRIDGE	Northwest	Replace Exp Jnt	$63,000
5	5/537S	EB LANES I-5 OC	Northwest	Repair Conc Box Girder	$100,000
6	5/537S	EB LANES I-5 OC	Northwest	Replace Exp Jnt	$40,000
12	5/538E	NB VIADUCT STA 2075	Northwest	Replace Exp Jnt	$140,000
13	5/543E	KING-JACKSON ST OC	Northwest	Replace Exp Jnt	$58,000
14	5/543NCD	NBCD KING JACKSON S	Northwest	Replace Exp Jnt	$113,000
15	5/543SCD	SBCD KING JACKSON S	Northwest	Replace Exp Jnt	$150,000
16	5/543W	KING-JACKSON ST OC	Northwest	Replace Exp Jnt	$56,000
17	5/545NCD	NBCD VIADUCT STA 219	Northwest	Replace Exp Jnt	$96,000
18	5/545SCD	SBCD VIADUCT STA 219	Northwest	Replace Exp Jnt	$180,000
75	5/553	I-5 OC, DENNY WAY	Northwest	Replace Exp Jnt	$42,000
19	5/562E	NB LANES VIADUCT	Northwest	Replace Exp Jnt	$90,000
51	5/570	LAKE WASH SHIP CANA	Northwest	Replace Exp Jnt	$360,000
24	5/647E	UNION SLOUGH	Northwest	Replace Exp Jnt	$120,000
25	5/647W	UNION SLOUGH	Northwest	Replace Exp Jnt	$120,000
26	5/648W	STEAMBOAT SLOUGH	Northwest	Replace Exp Jnt	$144,000
27	5/650E	EBEY SL BN RY SR 529	Northwest	Replace Exp Jnt	$900,000
28	5/650W	EBEY SL BN RY SR 529	Northwest	Replace Exp Jnt	$470,000
76	6/118	CHEHALIS R ADNA	Southwest	Replace Exp Jnt	$40,000
77	9/360	JOHNSON CR	Northwest	Add Sheet Pile Wall	$100,000

P2 Bridge Preservation - Bridge Repair

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Region	Repair Description	Bridge Item$'s
58	12/12N	WISHKAH R CS1413	Olympic	Rehab deteriorated Conc	$100,000
78	12/306	INDIAN CR	Southwest	Replace Conc Bridge Rail	$45,000
68	12/512S	SNAKE RIVER AT BURBA	South Central	Repair cracks in Steel Stringers	$400,000
80	12/713	NP RY OC	South Central	Replace Conc Bridge Rail	$110,000
81	12/915	SNAKE R CLARKSTON	South Central	Bridge Rail	$300,000
1	16/110E	TACOMA NARROWS	Olympic	Replace Finger Exp Jnt at Tower #4	$300,000
2	16/110E	TACOMA NARROWS	Olympic	Replace Maintenance Traveler	$3,000,000
30	18/9	NP RY OC	Northwest	Replace Exp Jnts @ 6 locations	$250,000
31	18/9	NP RY OC	Northwest	ı and Paint Steel Hanger and Pin asse	$309,750
59	18/17S	GREEN R (NEELEY BRID	Northwest	Repair cracking in steel stringers	$250,000
52	20/204	DECEPTION PASS	Northwest	Replace deteriorated steel truss braces	$250,000
61	20/207	CANOE PASS	Northwest	Replace deteriorated steel truss braces	$200,000
88	20/651	BONAPARTE CR	North Central	Replace Bridge Rail	$250,000
82	21/321	W FK SAN POIL	Eastern	Replace Conc Bridge Rail	$50,000
83	21/323	SAN POIL R	Eastern	Replace Conc Bridge Rail	$50,000
84	26/2SP	N FK PALOUSE-WEST W	Eastern	Replace Conc Bridge Rail	$50,000
32	90/10W-S	I-5 OC, W-S RAMP	Northwest	Replace Exp Joints	$164,000
21	90/25N	HOMER M. HADLEY	Northwest	Replace 10 Anchor Cables	$2,430,000
44	90/25N	HOMER M. HADLEY	Northwest	Replace 10 Anchor Cables	$2,430,000
22	90/25S	LACEY V. MURROW BR	Northwest	Replace 10 Anchor Cables	$2,430,000
53	90/40N	EAST CHANNEL-LK WAS	Northwest	Install new seals in Modular Joints	$75,000
60	90/180	COLUMBIA R VANTAG	South Central	Repl poured rubber in deck jnts	$168,000
85	90/332	I-90 OC, TOKIO RD	Eastern	Replace Expansion Joint	$80,000
33	90/540N	HANGMAN CR	Eastern	Repair deteriorated conc in CBOX	$150,000
34	90/540S	HANGMAN CR	Eastern	Repair deteriorated conc in CBOX	$100,000
62	90/545E-E	FOURTH-E RAMP	Eastern	Repair deteriorated conc in CBOX	$200,000
69	99/507E	SR 599 OC	Northwest	Replace Exp Jnt	$74,000
70	99/507S-S	PACIFIC HWY OC	Northwest	Replace Exp Jnt	$95,000
71	99/507W	S 116TH PL OC	Northwest	Replace Exp Jnt	$54,000
72	99/508	PACIFIC HWY OC	Northwest	Replace Exp Jnt	$113,500
73	101/115N-W	N-W RAMP	Olympic	Replace Exp Jnt	$40,000
45	101/269	FULTON CR	Olympic	Repair Concrete Columns	$320,000
46	101/432E	KENNEDY CR	Olympic	Repair Concrete Columns	$720,000

P2 Bridge Preservation - Bridge Repair

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Region	Repair Description	Bridge Item$'s
47	101/432W	KENNEDY CR	Olympic	Repair Concrete Columns	$720,000
20	104/5.1	HOOD CANAL-W.A. BUG	Olympic	Replace 18 anchor cables	$3,000,000
63	107/4	CHEHALIS R	Olympic	Replace Timber Deck	$1,600,000
42	153/16	METHOW R	North Central	Concrete Bridge Rail	$190,000
43	153/17	METHOW R	North Central	Concrete Bridge Rail	$125,000
48	167/32E	VALLEY AVE & UPRR O'	Olympic	Replace Expansion Joint	$100,000
1	167/38	24TH ST E OVER SR 167	Olympic	Replace damaged PCG	$500,000
54	167/40E	8TH ST E O'XING	Olympic	Repair Bridge Rail	$25,000
55	195/24	S FK PALOUSE R CT HO	Eastern	Repair deteriorated Conc	$100,000
86	195/27	N FK PALOUSE R	Eastern	Concrete Bridge Railing	$96,000
49	290/4.7E-E	3RD AVE & E-E RAMP O	Eastern	Repair deteriorated Conc	$200,000
4	395/40	PIONEER MEM. BR	South Central	Replace Exp Joint	$470,000
50	395/40	PIONEER MEM. BR	South Central	Replace Exp Joint	$156,675
35	405/70E	SR 522 OC SAMMAMISH	Northwest	Replace Exp Joints	$100,000
36	405/70N-E	N-E RAMP SAMMAMISH	Northwest	Replace Exp Joints	$34,500
37	405/70N-W	N-W RAMP SAMMAMISH	Northwest	Replace Exp Joints	$60,000
38	405/70S-E	S-E RAMP BR	Northwest	Replace Exp Joints	$25,000
39	405/70W	SR 522 OC SAMMAMISH	Northwest	Replace Exp Joints	$100,000
64	409/10	JULIA BUTLER HANSEN	Southwest	Replace Timber Deck	$1,500,000
56	410/31	WHITE R (STUCK R)	Olympic	Replace Exp Joints	$108,000
57	500/6	I-205 OC	Southwest	Replace Exp Joints	$111,000
65	529/15E	UNION SL	Northwest	Repair deteriorated concrete columns	$3,000,000
66	529/15E	UNION SL	Northwest	Repair deteriorated concrete columns	$3,000,000
67	530/124	N FK STILLAGUAMISH R	Northwest	Repair cracks in steel elements	$200,000

Total Number of Bridges = 90 Totals $ = $36,294,530

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
2 / 39	0001706C	ANDERSON CR	34.25	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1933	CTB	93 ft	25.0 ft	59.57FO

Average Daily Traffic: Truck%	Freight Route	Num of Lanes:
6,364		2

Date Inspected:
Superstr Code:
Substr Code:
Structr Adequacy:
Safe Load:
Scour:

BMS Element Num: **331**
BMS Element Descr: **Concrete Bridge Rail**
BMS Element Quantity: 93

Project Number:
Repair Year: 2011
CPMS Ad Date:
2011-13 Priority#: 1
2009-11 Priority#:
Bridge $'s: $300,000
Repair Total$'s: $600,000

Repair Description:

Replace damaged concrete balluster rail

COMMENTS

The concrete bridge rail was damaged in Dec 2009 by a Truck impact. NW Region Bridge Maintenance Crews removed the damaged rail and added a temporary thrie beam on H-Beam posts.

The costs and details for the concrete bridge rail replacement should be similar to those used on Us 2 Deep Creek bridge (contract 7568) in 2008.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
2 / 601	0003168A	STEVENS CR UPPER X-ING	267.23	Eastern

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1946	CS	23 ft	36.0 ft	91.06

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
6,105	10%		2

Date Inspected:	8/9/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	6	Scour:	8

BMS Element Num: **331**

BMS Element Descr: **Concrete Bridge Rail**

BMS Element Quantity: 46

Project Number:		2011-13 Priority#:	79
Repair Year:		2009-11 Priority#:	91
CPMS Ad Date:		Bridge $'s:	$25,000
		Repair Total$'s:	$50,000

Repair Description:

Replace deteriorated concrete balluster rail

COMMENTS

The concrete bridge rails are deteriorated with exposed reinforcing steel. The bridge rails need to be replaced with a new Thrie Beam and steel H-Posts.

The costs and details for the concrete bridge rail replacement should be similar to those used on SR 153 bridges (contract 7229) in 2007.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
4 / 230	0003717A	COWLITZ R-P CRAWFORD BR	61.08	Southwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1951	STrus CTB	1,710 ft	56.0 ft	40.98

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
28,026	4%		4

Date Inspected:	9/11/2006	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Scour:	5

BMS Element Num: **402**

BMS Element Descr: **Poured Joint Filler**

BMS Element Quantity: 728

Project Number:		2011-13 Priority#:	74
Repair Year:		2009-11 Priority#:	85
CPMS Ad Date:		Bridge $'s:	$54,600
		Repair Total$'s:	$109,200

Repair Description:

Replace joint material in panel joints in Steel Truss span.

COMMENTS

Bridge item$ based on $75 / ft , Total Project$ based on $150 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 40W	0002559A	LEWIS R	19.83	Southwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1940	STrus CTB	1,310 ft	48.0 ft	46.09FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
33,747	21%		3

Date Inspected:	9/21/2009	Structr Adequacy:	3
Superstr Code:	5	Safe Load:	5
Substr Code:	7	Scour:	5

BMS Element Num:

BMS Element Descr: **Steel Truss**

BMS Element Quantity: 0

Project Number:		2011-13 Priority#:	87
Repair Year:	2020	2009-11 Priority#:	
CPMS Ad Date:		Bridge $'s:	$250,000
		Repair Total$'s:	$500,000

Repair Description:

Repair sways damaged from overheight truck

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 102E	0007064A	SR 503 OC	21.08	Southwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1963	PCB	168 ft	45.0 ft	75.54 FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
23,154	21%	T1	3

Date Inspected:	10/27/2005	Structr Adequacy:	7
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt Down**

BMS Element Quantity: 186 Feet

Project Number:		2011-13 Priority#:	40
Repair Year:	2016	2009-11 Priority#:	44
CPMS Ad Date:		Bridge $'s:	$93,000
		Repair Total$'s:	$279,000

No Photo Available

Repair Description:

Replace the rubber bolt down expansion joints.

COMMENTS

The rubber bolt down expansion joints were added to this bridge in 1983. These expansion joints are deteriorated and need to be replaced.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 102W	0007064B	SR 503 OC	21.08	Southwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1963	PCB	168 ft	45.0 ft	75.54 FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
23,154	21%	T1	3

Date Inspected:	10/27/2005	Structr Adequacy:	7
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt Down**

BMS Element Quantity: 186 Feet

Project Number:		2011-13 Priority#:	41
Repair Year:	2016	2009-11 Priority#:	45
CPMS Ad Date:		Bridge $'s:	$93,000
		Repair Total$'s:	$279,000

Repair Description:

Replace the rubber bolt down expansion joints.

COMMENTS

The rubber bolt down expansion joints were added to this bridge in 1983. These expansion joints are deteriorated and need to be replaced.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 104W	0008952A	DIKE ACCESS RD & RR OC	22.72	Southwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1972	SG	675 ft	52.0 ft	91.27

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
27,077	24%	T1	3

Date Inspected:	3/20/2005	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **414**

BMS Element Descr: **Steel Plate Exp Jnt with Bolts**

BMS Element Quantity: 104

Project Number:		2011-13 Priority#:	3
Repair Year:	2012	2009-11 Priority#:	6
CPMS Ad Date:		Bridge $'s:	$208,000
		Repair Total$'s:	$520,000

Repair Description:

Replace steel plate expansion joints at both ends of the bridge.

COMMENTS

The sliding steel plate joints are held in place with springs and bolts. The south abutment joint has its anchorage straps sheared off in the right lane and has been temporally repaired. The north abutment joint headers have been patched with UREfast.

Bridge Item cost based on $2,000 / ft. Total project cost based on $5,000 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 232W	0011757B	SKOOKUMCHUCK R	82.28	Southwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1951	STrus CTB	252 ft	31.0 ft	62.20

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
34,200	20%		2

Date Inspected:	6/28/2008	Structr Adequacy:	5
Superstr Code:	5	Safe Load:	5
Substr Code:	6	Scour:	3

BMS Element Num:

BMS Element Descr:

BMS Element Quantity: 0

Project Number:		2011-13 Priority#:	23
Repair Year:	2014	2009-11 Priority#:	
CPMS Ad Date:		Bridge $'s:	$540,000
		Repair Total$'s:	$1,000,000

Repair Description:

Repair the damaged steel truss

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 342W-S	0008100H	MCALLISTER CR	114.09	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1968	CS	168 ft	23.0 ft	84.57

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
830	2%	T1	1

Date Inspected:	7/27/2006	Structr Adequacy:	5
Superstr Code:	7	Safe Load:	5
Substr Code:	5	Scour:	8

BMS Element Num: **227**

BMS Element Descr: **Concrete Submerged Pile/Column**

BMS Element Quantity: 8

Project Number:		2011-13 Priority#:	29
Repair Year:	2016	2009-11 Priority#:	32
CPMS Ad Date:		Bridge $'s:	$200,000
		Repair Total$'s:	$350,000

Repair Description:

Repair salt water deteriorated columns @ piers 2 & 4.

COMMENTS

The columns are showing signs of corrosion in the reinforcing steel. Repair with fiberglass jackets.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 535E	0007816A	NB VIADUCT STA 2032	162.19	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1966 / 1992	PCB	901 ft	76.0 ft	87.81

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
98,250	7%	T1	5

Date Inspected:	11/6/2006	Structr Adequacy:	7
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 304 Feet

Project Number:		2011-13 Priority#:	7
Repair Year:	2012	2009-11 Priority#:	14
CPMS Ad Date:		Bridge $'s:	$456,000
		Repair Total$'s:	$760,000

Repair Description:

Replace the Steel Sliding Plate expansion joints.

COMMENTS

Sections of the existing steel sliding plate expansion joints have failed and have been replaced with a poured rubber joint. These expansion joints need to be replaced.

There are four (4) expansion joint locations (Piers 1, 4, 7, 10)

Bridge Item cost based on $1,500 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 536N-W	0007741G	N-W RAMP I-5 OC	162.98	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1967	CBOX	1,722 ft	21.0 ft	78.89

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
3,086	5%	T1	1

Date Inspected:	10/26/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 150 Feet

Project Number:		2011-13 Priority#:	8
Repair Year:	2012	2009-11 Priority#:	15
CPMS Ad Date:		Bridge $'s:	$150,000
		Repair Total$'s:	$375,000

Repair Description:

Replace the Steel Sliding Plate expansion joints.

COMMENTS

Sections of the existing steel sliding plate expansion joints have failed and have been replaced with a poured rubber joint. These expansion joints need to be replaced.

The steel sliding plate has been removed from the expansion joints in spans 2, 13, and 17 creating an open joint.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 537E-S	0007741N	E-S RAMP BR	162.99	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1967	CBox	1,206 ft	21.0 ft	96.86

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
7,505	5%	T1	1

Date Inspected:	8/23/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 120

Project Number:		2011-13 Priority#:	9
Repair Year:	2012	2009-11 Priority#:	16
CPMS Ad Date:		Bridge $'s:	$120,000
		Repair Total$'s:	$300,000

No Photo Available

Repair Description:

Replace steel plate expansion joints

COMMENTS

Sections of the existing steel sliding plate expansion joints have failed and need to be replaced.
Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 537N	0007741R	S-E RAMP WB LANES	163.00	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1967	CBOX	2,885 ft	28.0 ft	27.54SD

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
79,346	7%	T1	2

Date Inspected:	5/9/2006	Structr Adequacy:	4
Superstr Code:	5	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 369 feet

Project Number:	100562S	2011-13 Priority#:	10
Repair Year:	2012	2009-11 Priority#:	17
CPMS Ad Date:		Bridge $'s:	$553,500
		Repair Total$'s:	$922,500

Repair Description:

Replace the existing steel sliding plate expansion joints.

COMMENTS

The original steel sliding plate expansion joints are breaking up and in need of replacement. There are ten (10) expansion joint locations (Pier 1, span 5, span 8, span 11, span 15, span 18, span 22, span 26, span 30, span 34)

Bridge Item cost based on $1,500 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 537N-W	0007741H	N-6TH RAMP BRIDGE	162.98	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1967	CBox	720 ft	21.0 ft	96.65

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
8,243	30%	T1	1

Date Inspected:	5/9/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 63

Project Number:		2011-13 Priority#:	11
Repair Year:	2012	2009-11 Priority#:	18
CPMS Ad Date:		Bridge $'s:	$63,000
		Repair Total$'s:	$157,500

Repair Description:

Replace the existing steel sliding plate expansion joints.

COMMENTS

The original steel sliding plate expansion joints are breaking up and in need of replacement.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 537S	0007741T	EB LANES I-5 OC	163.00	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1966	CBOX	1,793 ft	28.0 ft	32.00SD

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
30,000	30%	T1	2

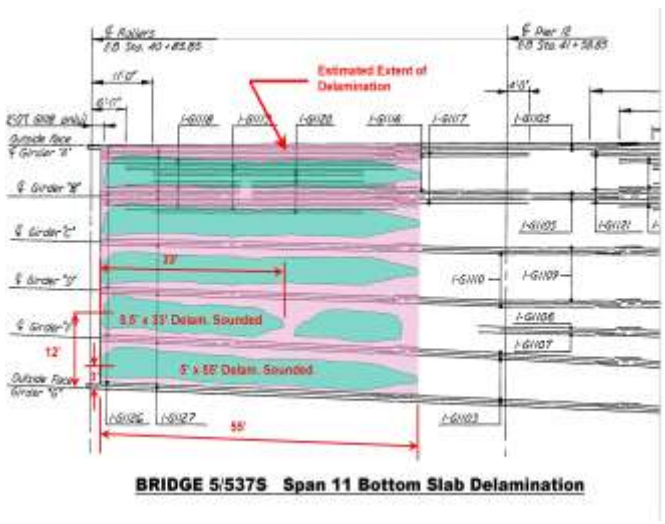
Date Inspected:	11/6/2006	Structr Adequacy:	4
Superstr Code:	4	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **105**

BMS Element Descr: **Concrete Box Girder**

BMS Element Quantity: 600 feet

Project Number:	100562S	2011-13 Priority#:	5
Repair Year:	2012	2009-11 Priority#:	12
CPMS Ad Date:		Bridge $'s:	
		Repair Total$'s:	$500,000



Repair Description:

Repair delaminated concrete areas on the bottom side of the bottom slab.

COMMENTS

The expansion joints allow water and contaminates to flow onto the bottom slab of the Concrete Box superstructure which has caused delaminations in the concrete from the reinforcing steel.
The 10/5/2002 Bridge Inspection recorded the BMS states for Element 105 Concrete Box Girder to be: Condition State 2 = 700LF , Condition State 3 = 500LF , Condition State 4 = 100LF.

Total cost estimated @ $500,000 until a thorough review can be done.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 537S	0007741T	EB LANES I-5 OC	163.00	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1966	CBOX	1,793 ft	28.0 ft	32.00SD

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
30,000	30%	T1	2

Date Inspected:	11/6/2006	Structr Adequacy:	4
Superstr Code:	4	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 300 Feet

Project Number:	100562S	2011-13 Priority#:	6
Repair Year:	2012	2009-11 Priority#:	13
CPMS Ad Date:		Bridge $'s:	$450,000
		Repair Total$'s:	$750,000

Repair Description:

Replace the steel sliding plate expansion joints.

COMMENTS

The original steel sliding plate expansion joints are breaking up and allowing water and contaminates to flow onto the bottom slab of the Concrete Box superstructure. This has caused delaminations in the concrete from the reinforcing steel.

There are seven (7) expansion joint locations (East Abutment, Span 4, Span 7, Span 11, Span 14, Span 17, Span 21).

Bridge Item cost based on $1,500 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 538E	0007741C	NB VIADUCT STA 2075	162.98	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1966 / 1992	CS	872 ft	57.7 ft	77.49

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
79,346	7%	T1	4

Date Inspected:	11/7/2006	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 140 Feet

Project Number:		2011-13 Priority#:	12
Repair Year:	2012	2009-11 Priority#:	19
CPMS Ad Date:		Bridge $'s:	$140,000
		Repair Total$'s:	$350,000

No Photo Available

No Photo Available

Repair Description:

Replace the steel sliding plate expansion joints at 4 locations.

COMMENTS

Sections of the existing steel sliding plate expansion joints are loose. These expansion joints need to be replaced.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 543E	0007504A	KING-JACKSON ST OC	164.41	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1965 / 1992	CBox	706 ft	58.8 ft	67.31

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
79,500	5%	T1	4

Date Inspected:	8/24/2006	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	4
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 58

Project Number:		2011-13 Priority#:	13
Repair Year:	2012	2009-11 Priority#:	20
CPMS Ad Date:		Bridge $'s:	$58,000
		Repair Total$'s:	$145,000

No Photo Available

Repair Description:

Replace the steel sliding plate expansion joints at 1 locations.

COMMENTS

Sections of the existing steel sliding plate expansion joints are loose. These expansion joints need to be replaced.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 543NCD	0007504C	NBCD KING JACKSON ST OC	164.41	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1965	CBox	709 ft	48.0 ft	56.17FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
61,357	10%	T1	4

Date Inspected:	8/24/2006	Structr Adequacy:	5
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 113

Project Number:		2011-13 Priority#:	14
Repair Year:	2012	2009-11 Priority#:	21
CPMS Ad Date:		Bridge $'s:	$113,000
		Repair Total$'s:	$282,500

Repair Description:

Replace the steel sliding plate expansion joints.

COMMENTS

Sections of the existing steel sliding plate expansion joints are loose. These expansion joints need to be replaced.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 543SCD	0007504D	SBCD KING JACKSON ST OC	164.41	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1965	CBox	709 ft	60.0 ft	64.81

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
73,582	55%	T1	4

Date Inspected:	8/24/2006	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 150

Project Number:		2011-13 Priority#:	15
Repair Year:	2012	2009-11 Priority#:	22
CPMS Ad Date:		Bridge $'s:	$150,000
		Repair Total$'s:	$375,000

Repair Description:

Replace the steel sliding plate expansion joints.

COMMENTS

Sections of the existing steel sliding plate expansion joints are loose. These expansion joints need to be replaced.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 543W	0007504B	KING-JACKSON ST OC	164.41	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1965 / 1992	CBox	712 ft	55.8 ft	92.55

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
79,500	5%	T1	3

Date Inspected:	8/24/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 56

Project Number:		2011-13 Priority#:	16
Repair Year:	2012	2009-11 Priority#:	23
CPMS Ad Date:		Bridge $'s:	$56,000
		Repair Total$'s:	$140,000

No Photo Available

Repair Description:

Replace the steel sliding plate expansion joints.

COMMENTS

Sections of the existing steel sliding plate expansion joints are loose. These expansion joints need to be replaced.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 545NCD	0007110F	NBCD VIADUCT STA 2195	165.69	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1964	CBox	702 ft	32.0 ft	79.42

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
29,230	5%	T1	2

Date Inspected:	10/23/2005	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 96

Project Number:		2011-13 Priority#:	17
Repair Year:	2012	2009-11 Priority#:	24
CPMS Ad Date:		Bridge $'s:	$96,000
		Repair Total$'s:	$240,000

Repair Description:

Replace the steel sliding plate expansion joints.

COMMENTS

Sections of the existing steel sliding plate expansion joints are loose. These expansion joints need to be replaced.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 545SCD	0007110G	SBCD VIADUCT STA 2195	165.71	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1964 / 1991	CBox	806 ft	44.9 ft	67.67FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
73,582	5%	T1	3

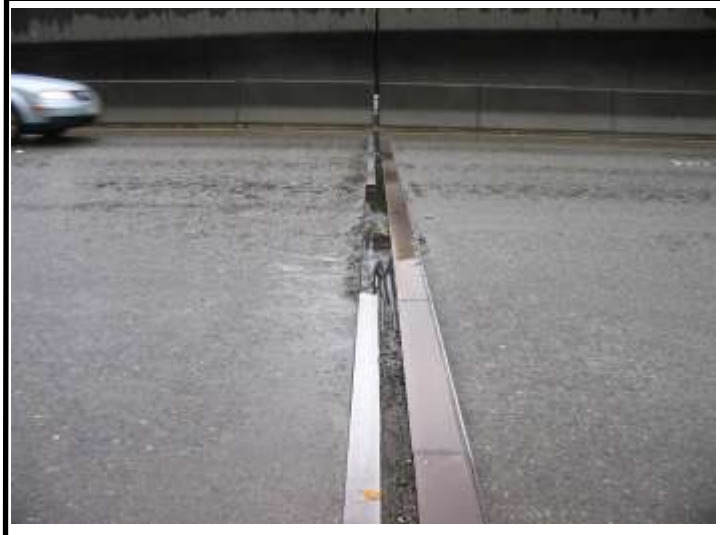
Date Inspected:	10/11/2005	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **406**

BMS Element Descr: **Comp Seal w/ Steel Header**

BMS Element Quantity: 180

Project Number:		2011-13 Priority#:	18
Repair Year:	2012	2009-11 Priority#:	25
CPMS Ad Date:		Bridge $'s:	$180,000
		Repair Total$'s:	$450,000



Repair Description:

Replace expansion joints at 4 locations.

COMMENTS

Sections of the existing steel sliding plate expansion joints have been repaired by Region Maintenance crews. These expansion joints need to be replaced.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 553	0006635B	I-5 OC, DENNY WAY	166.06	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1962	CBox	321 ft	42.0 ft	69.37FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
24,000	5%		4

Date Inspected:	10/12/2005	Structr Adequacy:	7
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **415**

BMS Element Descr: **Rubber bolt down exp jnt**

BMS Element Quantity: 42

Project Number:		2011-13 Priority#:	75
Repair Year:		2009-11 Priority#:	86
CPMS Ad Date:		Bridge $'s:	$42,000
		Repair Total$'s:	$84,000

Repair Description:

Replace the expansion joint on the east end of the bridge

COMMENTS

Sections of the existing expansion joint are broken. This expansion joint needs to be replaced.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 562E	0006800B	NB LANES VIADUCT	166.98	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1963	CTB	381 ft	66.0 ft	83.22

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
108,000	5%	T1	4

Date Inspected:	12/7/2005	Structr Adequacy:	6
Superstr Code:	7	Safe Load:	5
Substr Code:	6	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Exp Jnt - Steel Sliding Plate**

BMS Element Quantity: 90

Project Number:		2011-13 Priority#:	19
Repair Year:	2012	2009-11 Priority#:	26
CPMS Ad Date:		Bridge $'s:	$90,000
		Repair Total$'s:	$225,000

No Photo Available

Repair Description:

Replace the steel sliding plate expansion joints.

COMMENTS

Sections of the existing steel sliding plate expansion joints have been repaired by Region Maintenance crews. These expansion joints need to be replaced.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 570	0006080A	LAKE WASH SHIP CANAL	169.63	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1962	STrus CBox CS	4,429 ft	174.0 ft	53.99FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
200,000	6%	T1	12

Date Inspected:	9/10/2005	Structr Adequacy:	3
Superstr Code:	6	Safe Load:	4
Substr Code:	7	Scour:	8

BMS Element Num: **402**
BMS Element Descr: **Poured Joints**
BMS Element Quantity: 3,600

Project Number:		2011-13 Priority#:	51
Repair Year:		2009-11 Priority#:	60
CPMS Ad Date:		Bridge $'s:	$360,000
		Repair Total$'s:	$500,000

Repair Description:

Replace poured joint sealant in deck joints of the lower deck express lanes.

COMMENTS

There are deck joints at 60 locations in the Steel Truss span. The poured joint sealant needs to be replaced to prevent water leakage and corrosion of the supporting steel elements. The roadway width is 60 feet.

The bridge item cost is estimated to be $100 per foot of joint

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 647E	0008226B	UNION SLOUGH	197.09	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1968	PCB CTB	396 ft	48.0 ft	86.56

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
55,401	8%	T1	3

Date Inspected:	10/28/2005	Structr Adequacy:	6
Superstr Code:	7	Safe Load:	5
Substr Code:	6	Scour:	8

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt down**

BMS Element Quantity: 240 Feet

Project Number:		2011-13 Priority#:	24
Repair Year:	2012	2009-11 Priority#:	27
CPMS Ad Date:		Bridge $'s:	$120,000
		Repair Total$'s:	$360,000

Repair Description:

Replace the Rubber Bolt Down expansion joints.

COMMENTS

The rubber bolt down expansion joints were installed in 1985 along with the modified concrete overlay. These joints have been repaired many times by Region Maintenance.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 647W	0008226C	UNION SLOUGH	197.09	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1968	PCB CTB	396 ft	48.0 ft	84.56

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
55,401	8%	T1	3

Date Inspected:	10/28/2005	Structr Adequacy:	6
Superstr Code:	7	Safe Load:	5
Substr Code:	6	Scour:	8

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt down**

BMS Element Quantity: 240 Feet

Project Number:		2011-13 Priority#:	25
Repair Year:	2012	2009-11 Priority#:	28
CPMS Ad Date:		Bridge $'s:	$120,000
		Repair Total$'s:	$360,000

Repair Description:

Replace the Rubber Bolt Down expansion joints.

COMMENTS

The rubber bolt down expansion joints were installed in 1985 along with the modified concrete overlay. These joints have been repaired many times by Region Maintenance.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 648W	0008226E	STEAMBOAT SLOUGH	197.90	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1968	PCG	1,026 ft	48.0 ft	81.14

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
63,000	8%	T1	3

Date Inspected:	4/22/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	7

BMS Element Num: **412**

BMS Element Descr: **Strip Seal Expansion Joint**

BMS Element Quantity: 96

Project Number:		2011-13 Priority#:	26
Repair Year:	2012	2009-11 Priority#:	29
CPMS Ad Date:		Bridge $'s:	$144,000
		Repair Total$'s:	$240,000

Repair Description:

Replace strip seal expansion joint at two locations.

COMMENTS

Sections of the existing steel sliding plate expansion joints have failed and need to be replaced.

Bridge item cost based on $1,500 per foot. Total project cost based on $2,500 per foot.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 650E	0008400A	EBEY SL BN RY SR 529 OC	198.50	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1969	PCG	2,062 ft	60.0 ft	74.72FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
52,500	8%	T1	4

Date Inspected:	12/3/2006	Structr Adequacy:	5
Superstr Code:	7	Safe Load:	5
Substr Code:	6	Scour:	3

BMS Element Num: **416**
BMS Element Descr: **Modular Expansion Joint**
BMS Element Quantity: 360

Project Number:		2011-13 Priority#:	27
Repair Year:	2014	2009-11 Priority#:	30
CPMS Ad Date:		Bridge $'s:	$900,000
		Repair Total$'s:	$1,800,000

Repair Description:

Replace Modular Expansion Joints and strip seal joints.

COMMENTS

Sections of the existing steel sliding plate expansion joints have failed and need to be replaced.

Bridge Item cost based on $1,500 / ft. Total project cost based on $3,000 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
5 / 650W	0004196A	EBEY SL BN RY SR 529 OC	198.51	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1954 / 1968	SG CTB	1,920 ft	54.0 ft	70.10

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
52,500	8%	T1	4

Date Inspected:	12/3/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	5

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt down**

BMS Element Quantity: 924

Project Number:		2011-13 Priority#:	28
Repair Year:	2014	2009-11 Priority#:	31
CPMS Ad Date:		Bridge $'s:	$470,000
		Repair Total$'s:	$1,386,000

Repair Description:

Replace the Rubber Bolt Down expansion joints.

COMMENTS

The rubber bolt down expansion joints were installed in 1985 along with the modified concrete overlay. These joints have been repaired many times by Region Maintenance.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
6 / 118	0008757A	CHEHALIS R ADNA	46.59	Southwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1971	SG	406 ft	40.0 ft	95.31

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
5,663	10%		2

Date Inspected:	5/23/2007	Structr Adequacy:	7
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	3

BMS Element Num: **414**

BMS Element Descr: **Steel Plate Exp Jnt**

BMS Element Quantity: 80

Project Number:		2011-13 Priority#:	76
Repair Year:		2009-11 Priority#:	87
CPMS Ad Date:		Bridge $'s:	$40,000
		Repair Total$'s:	$240,000

Repair Description:

Rehabilitate the expansion joints.

COMMENTS

Remove and replace the bolts that attach the steel sliding plate expansion joint.

Bridge Item cost based on $500 / ft. Total project cost based on $3,000 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
9 / 360	0006578A	JOHNSON CR	97.81	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1961	CST	104 ft	28.0 ft	75.51FO

Average Daily Traffic: Truck%	Freight Route	Num of Lanes:
12,662		2

Date Inspected:	4/18/2007	Structr Adequacy:	6
Superstr Code:	7	Safe Load:	5
Substr Code:	6	Scour:	4

BMS Element Num: **215**

BMS Element Descr: **Concrete Abutment**

BMS Element Quantity: 56

Project Number:		2011-13 Priority#:	77
Repair Year:		2009-11 Priority#:	88
CPMS Ad Date:		Bridge $'s:	$100,000
		Repair Total$'s:	$350,000

Repair Description:

Add a sheet pile wall around the abutments to contain the approach roadway embankment.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
12 / 12N	0002311A	WISHKAH R CS1413	0.08	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1925 / 2003	BAS ST CTB CS	363 ft	27.0 ft	42.98

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
7,500	12%		2

Date Inspected:	6/6/2005	Structr Adequacy:	4
Superstr Code:	5	Safe Load:	5
Substr Code:	5	Scour:	3

BMS Element Num: **110**

BMS Element Descr: **Concrete Girder**

BMS Element Quantity: 0

Project Number:		2011-13 Priority#:	58
Repair Year:		2009-11 Priority#:	68
CPMS Ad Date:		Bridge $'s:	
		Repair Total$'s:	$100,000

Repair Description:

Rehabilitate deteriorated concrete elements.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
12 / 306	0002513A	INDIAN CR	159.01	Southwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1939	CTB	139 ft	24.0 ft	79.09

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
1,788	21%		2

Date Inspected:	9/5/2006	Structr Adequacy:	6
Superstr Code:	7	Safe Load:	5
Substr Code:	6	Scour:	3

BMS Element Num: **331**

BMS Element Descr: **Concrete Bridge Rail**

BMS Element Quantity: 278

Project Number:		2011-13 Priority#:	78
Repair Year:		2009-11 Priority#:	90
CPMS Ad Date:		Bridge $'s:	$45,000
		Repair Total$'s:	$100,000

Repair Description:

Replace the deteriorated concrete bridge rails.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
12 / 512S	0012800A	SNAKE RIVER AT BURBANK	294.51	South Central

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1986	ST PCB	1,780 ft	38.0 ft	82.45

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
7,063			2

Date Inspected:	5/2/2006	Structr Adequacy:	5
Superstr Code:	5	Safe Load:	5
Substr Code:	5	Scour:	3

BMS Element Num: **356**

BMS Element Descr: **Steel Cracking**

BMS Element Quantity: 11

Project Number:		2011-13 Priority#:	68
Repair Year:		2009-11 Priority#:	78
CPMS Ad Date:		Bridge $'s:	$400,000
		Repair Total$'s:	$600,000

Repair Description:

Repair cracking in stringers.

COMMENTS

As of 10/2005 this problem is in a "No Action" status. A mitigation plan should be established.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
12 / 713	0001687B	NP RY OC	367.73	South Central

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1933	CTB	269 ft	26.0 ft	68.43FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
3,118	15%		2

Date Inspected:	3/6/2007	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	6	Scour:	N

BMS Element Num: **331**

BMS Element Descr: **Concrete Bridge Rail**

BMS Element Quantity: 538 Feet

Project Number:		2011-13 Priority#:	80
Repair Year:		2009-11 Priority#:	92
CPMS Ad Date:		Bridge $'s:	$110,000
		Repair Total$'s:	$220,000

Repair Description:

Replace the deteriorated concrete bridge rails.

COMMENTS

The existing concrete rail is deteriorated. Maintenance has covered the top rail with sheet metal.

The construction details and costs should be similar to those on bridge 26/285 (C#6567) completed in 2003.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
12 / 915	0002348A	SNAKE R CLARKSTON	434.10	South Central

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1939	SL ST CTB	1,432 ft	40.0 ft	44.20SD

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
20,518	2%		4

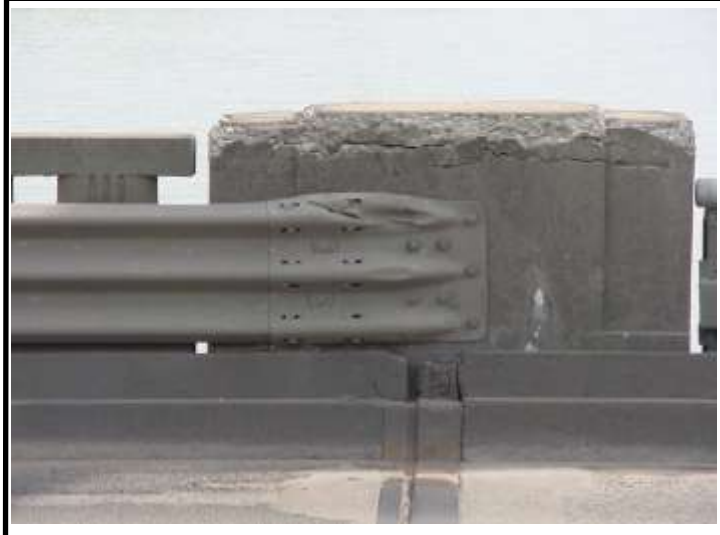
Date Inspected:	7/25/2006	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Scour:	3

BMS Element Num: **331**

BMS Element Descr: **Concrete Bridge Rail**

BMS Element Quantity: 922 Feet

Project Number:	501212P	2011-13 Priority#:	81
Repair Year:		2009-11 Priority#:	93
CPMS Ad Date:		Bridge $'s:	$300,000
		Repair Total$'s:	$600,000



Repair Description:

Replace the deteriorated concrete bridge rail on the approach spans and repair the concrete end posts.

COMMENTS

The concrete bridge rail is deteriorated with many areas of exposed reinforcing steel. The concrete end posts are exfoliated and severely cracked.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
16 / 110E	0003418A	TACOMA NARROWS	7.28	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1949	SSusS SG CTB	5,978 ft	46.3 ft	39.88FO

Average Daily Traffic: Truck%	Freight Route	Num of Lanes:
48,000	T1	4

Date Inspected:
Superstr Code:
Substr Code:
Structr Adequacy:
Safe Load:
Scour:

BMS Element Num:
BMS Element Descr:
BMS Element Quantity:

Project Number:
Repair Year: 2012
CPMS Ad Date:
2011-13 Priority#: 1
2009-11 Priority#:
Bridge $'s:
Repair Total$'s: $500,000

Repair Description:

Replace Expansion Joint and supports at Tower 4

COMMENTS

The support system for the steel supporting the Finger Expansion Joint at Tower 4 is deteriorated and in need of replacement.

Total cost estimated @ $500,000 until a thorough review can be done.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
16 / 110E	0003418A	TACOMA NARROWS	7.28	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1949	SSusS SG CTB	5,978 ft	46.3 ft	39.88FO

Average Daily Traffic: Truck%	Freight Route	Num of Lanes:
48,000	T1	4

Date Inspected:
Superstr Code:
Substr Code:
Structr Adequacy:
Safe Load:
Scour:

BMS Element Num:
BMS Element Descr:
BMS Element Quantity:

Project Number:
Repair Year: 2012
CPMS Ad Date:
2011-13 Priority#: 2
2009-11 Priority#:
Bridge $'s:
Repair Total$'s: $3,500,000

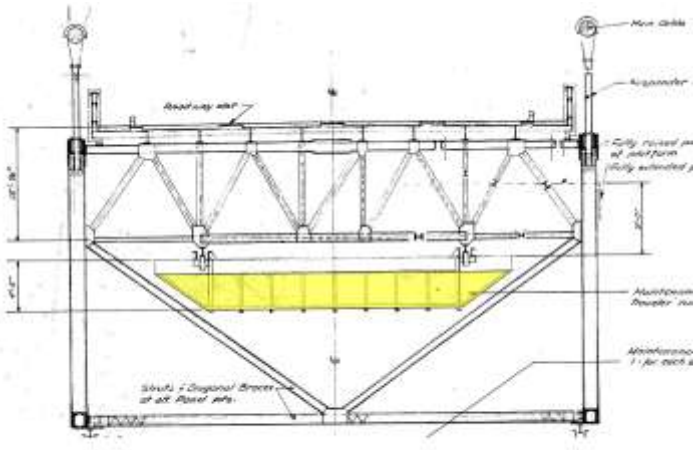


FIGURE 1- Maintenance Traveler

Repair Description:

Replace Maintenance Traveler

COMMENTS

The Top traveler and rail is 70 years old and in need of replacement. There are sections of the rail track at the towers that is deteriorating. Bridge Maintenance crews use this traveler system to perform maintenance on the bridge.

Total cost estimated @ $3,500,000 until a thorough review can be done.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
18 / 9	0005082A	NP RY OC	3.82	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1956 / 1975	CBox	1,151 ft	69.2 ft	86.26

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
44,000	6%	T1	5

Date Inspected:	12/20/2005	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **415**

BMS Element Descr: **Rubber Bolt Down exp joints**

BMS Element Quantity: 413

Project Number:		2011-13 Priority#:	30
Repair Year:	2016	2009-11 Priority#:	33
CPMS Ad Date:		Bridge $'s:	$309,750
		Repair Total$'s:	$619,500

Repair Description:

Replace Expansion Joints at 6 locations.

COMMENTS

The rubber bolt down expansion joints are deteriorated. Maintenance has removed and replaced sections of the expansion joint.

Bridge Item cost based on $750 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
18 / 9	0005082A	NP RY OC	3.82	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1956 / 1975	CBox	1,151 ft	69.2 ft	86.26

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
44,000	6%	T1	5

Date Inspected:	12/20/2005	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **161**

BMS Element Descr: **Steel Hanger Assembly**

BMS Element Quantity: 58

Project Number:		2011-13 Priority#:	31
Repair Year:	2016	2009-11 Priority#:	34
CPMS Ad Date:		Bridge $'s:	$250,000
		Repair Total$'s:	$450,000

Repair Description:

Clean and Paint Steel Hanger and Pin assembly.

COMMENTS

The existing pins and hangers are rusty. They need to be cleaned and painted with an epoxy rust penatrating sealer.

Use a lump sum bridge Item cost of $4,000 for each or say $250,000. Use $200,000 for Region items.
Use $450,000 for total.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
18 / 17S	0006066B	GREEN R (NEELEY BRIDGE)	6.62	Northwest

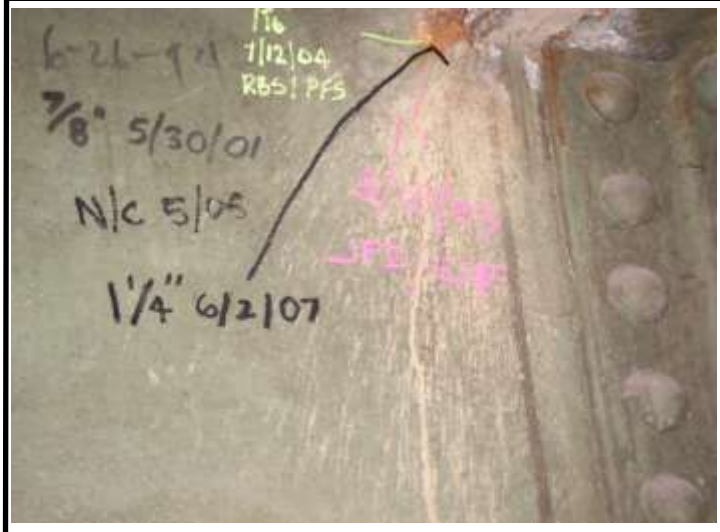
Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1959	STrus CBox	371 ft	29.5 ft	37.45SD

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
22,000	10%	T1	2

Date Inspected:	8/8/2006	Structr Adequacy:	5
Superstr Code:	5	Safe Load:	5
Substr Code:	5	Scour:	4

BMS Element Num: **356**
BMS Element Descr: **Steel Stringer**
BMS Element Quantity: 16

Project Number:	2011-13 Priority#:	59
Repair Year:	2009-11 Priority#:	69
CPMS Ad Date:	Bridge $'s:	
	Repair Total$'s:	$500,000



No Photo Available

Repair Description:

Address cracking in 15 steel stringers.

COMMENTS

Repair cope cracks at the following locations:
Stringer 1A at Floorbeam 1 , Stringer 1E at Floorbeam 1 , Stringer 2E at Floorbeam 1 , Stringer 3A at Floorbeam 2 , Stringer 3E at Floorbeam 2 , Stringer 4A at Floorbeam 3 , Stringer 4A at Floorbeam 4 , Stringer 5A at Floorbeam 5 , Stringer 6A at Floorbeam 6 , Stringer 6E at Floorbeam 6 , Stringer 7A at Floorbeam 6 , Stringer 7E at Floorbeam 6 , Stringer 7A at Floorbeam 7 , Stringer 8A at Floorbeam 7 , Stringer 8E at Floorbeam 7 .

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
20 / 204	0001929A	DECEPTION PASS	41.81	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1935	STrus CTB	976 ft	22.0 ft	47.72FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
14,000	6%		2

Date Inspected:	3/29/2007	Structr Adequacy:	5
Superstr Code:	5	Safe Load:	5
Substr Code:	7	Scour:	9

BMS Element Num: **131**

BMS Element Descr: **Steel Deck Truss**

BMS Element Quantity: 0

Project Number:	2011-13 Priority#:	52
Repair Year:	2009-11 Priority#:	61
CPMS Ad Date:	Bridge $'s:	
	Repair Total$'s:	$500,000

Repair Description:

Replace corroded secondary braces.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
20 / 207	0001929B	CANOE PASS	42.04	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1935	SA CTB	511 ft	22.0 ft	48.21FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
14,000	6%		2

Date Inspected:	4/11/2007	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	9

BMS Element Num: **131**
BMS Element Descr: **Steel Deck Truss**
BMS Element Quantity: 0

Project Number:	2011-13 Priority#:	61
Repair Year:	2009-11 Priority#:	71
CPMS Ad Date:	Bridge $'s:	$200,000
	Repair Total$'s:	$400,000

Repair Description:

Replace corroded secondary braces.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
20 / 651	0001738A	BONAPARTE CR	262.83	North Central

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1933	CA CS	118 ft	24.0 ft	46.48

Average Daily Traffic: Truck%	Freight Route	Num of Lanes:
		2

Date Inspected: 3/17/2007
Superstr Code: 6
Substr Code: 5
Structr Adequacy:
Safe Load:
Scour:

BMS Element Num: **331**
BMS Element Descr: **Concrete Bridge Rail**
BMS Element Quantity: 236

Project Number:
Repair Year:
CPMS Ad Date:
2011-13 Priority#: 88
2009-11 Priority#: 999
Bridge $'s:
Repair Total$'s: $700,000

Repair Description:

Replace Bridge Rail and repair concrete braces that support the bridge rail.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
21 / 321	0001622A	W FK SAN POIL	145.62	Eastern

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1932	CTB	42 ft	24.0 ft	73.32

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
207	8%		2

Date Inspected:	9/12/2006	Structr Adequacy:	6
Superstr Code:	7	Safe Load:	5
Substr Code:	6	Scour:	3

BMS Element Num: **331**

BMS Element Descr: **Concrete Bridge Rail**

BMS Element Quantity: 84

Project Number:	2011-13 Priority#:	82
Repair Year:	2009-11 Priority#:	94
CPMS Ad Date:	Bridge $'s:	$50,000
	Repair Total$'s:	$100,000

No Photo Available

Repair Description:

Replace the deteriorated concrete bridge rails.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
21 / 323	000000HN	SAN POIL R	148.45	Eastern

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1927	CTB	61 ft	20.4 ft	4.98SD

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
643	7%		2

Date Inspected:	9/13/2006	Structr Adequacy:	3
Superstr Code:	7	Safe Load:	5
Substr Code:	3	Scour:	3

BMS Element Num: **331**

BMS Element Descr: **Concrete Bridge Rail**

BMS Element Quantity: 122

Project Number:		2011-13 Priority#:	83
Repair Year:		2009-11 Priority#:	95
CPMS Ad Date:		Bridge $'s:	$50,000
		Repair Total$'s:	$100,000

No Photo Available

Repair Description:

Replace the deteriorated concrete bridge rails.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
26 / 2SP	0002385B	N FK PALOUSE-WEST WYE	38.50	Eastern

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1938	CTB	114 ft	26.0 ft	61.45FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
9,105	9%		2

Date Inspected:	10/24/2006	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	6	Scour:	8

BMS Element Num: **331**

BMS Element Descr: **Concrete Bridge Rail**

BMS Element Quantity: 228 Feet

Project Number:	2011-13 Priority#:	84
Repair Year:	2009-11 Priority#:	96
CPMS Ad Date:	Bridge $'s:	$50,000
	Repair Total$'s:	$100,000

Repair Description:

Replace the deteriorated concrete bridge rails.

COMMENTS

The concrete bridge rail is deteriorated.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 10W-S	0007565B	I-5 OC, W-S RAMP	2.40	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1965 / 1988	CBox	1,245 ft	20.5 ft	79.11FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
13,247	5%	T1	1

Date Inspected:	7/11/2005	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **408**

BMS Element Descr: **Steel Sliding Plate**

BMS Element Quantity: 164

Project Number:		2011-13 Priority#:	32
Repair Year:	2016	2009-11 Priority#:	35
CPMS Ad Date:		Bridge $'s:	$164,000
		Repair Total$'s:	$410,000

Repair Description:

Replace Expansion Joints

COMMENTS

Sections of the existing steel sliding plate expansion joints have failed and need to be replaced.

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 25N	0012271A	HOMER M. HADLEY	4.24	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1989	CFP POBX SBOX	9,559 ft	92.0 ft	71.79FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
57,401		T1	7

Date Inspected:	5/31/2005	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	8

BMS Element Num: **148**

BMS Element Descr: **Floating Bridge - Anchor Cable**

BMS Element Quantity: 10

Project Number:		2011-13 Priority#:	21
Repair Year:	2014	2009-11 Priority#:	9
CPMS Ad Date:		Bridge $'s:	$1,500,000
		Repair Total$'s:	$2,000,000

Repair Description:

Replace 10 anchor cables.

COMMENTS

The Bridge Office recommends the following 10 anchor cable be replaced in the 2013-15 biennium:
L1n , L2n , L3n , L4n , L5n , L6n , Fn , Jn , Os , Ys

Bridge Item cost uses $150,000 for install and cost of each cable ...$150k x 10 = $1.5m
Use $500,000 to develop PS&E and construction engineering and contingencies.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 25N	0012271A	HOMER M. HADLEY	4.24	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1989	CFP PTCBox SBox	9,559 ft	92.0 ft	71.79FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
61,500	0%	T1	7

Date Inspected:	5/31/2005	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	8

BMS Element Num: **148**

BMS Element Descr: **Floating Bridge - Anchor Cable**

BMS Element Quantity: 10

Project Number:		2011-13 Priority#:	44
Repair Year:	2016	2009-11 Priority#:	52
CPMS Ad Date:		Bridge $'s:	$2,430,000
		Repair Total$'s:	$2,700,000

Repair Description:

Replace 10 anchor cables

COMMENTS

There are 9 (out of a total of 53) anchor cables that were installed in 1983. These need to be replaced in the 2013-15 biennium.

Bridge Item cost uses $250,000 for install of each cable and $20,000 cable cost...$270k x 9 = $2.43m
Use $300,000 to develop PS&E and construction engineering and contingencies.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 25S	000000KN	LACEY V. MURROW BR	4.24	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1940 / 1992	CFP SA ST CBOX S	8,981 ft	52.0 ft	90.80

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
57,401	4%	T1	3

Date Inspected:	6/5/2007	Structr Adequacy:	6
Superstr Code:	7	Safe Load:	5
Substr Code:	6	Scour:	8

BMS Element Num: **148**

BMS Element Descr: **Floating Bridge - Anchor Cable**

BMS Element Quantity: 10

Project Number:		2011-13 Priority#:	22
Repair Year:	2014	2009-11 Priority#:	10
CPMS Ad Date:		Bridge $'s:	$1,500,000
		Repair Total$'s:	$2,000,000

Repair Description:

Replace 10 anchor cables.

COMMENTS

Recommendation from consultant hired by the Bridge Preservation Office recommends the following anchor cable be replaced:
Es , Js , Ks , L1n , L2n , L3n , Ls , Ns , Ps

Bridge Item cost uses $250,000 for install of each cable and $20,000 cable cost...$270k x 9 = $2.4m
Use $300,000 to develop PS&E and construction engineering and contingencies.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 40N	0011490A	EAST CHANNEL-LK WASH	8.48	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1981	WSBox	2,224 ft	80.0 ft	69.37FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
67,000	0%		5

Date Inspected:	10/30/2006	Structr Adequacy:	4
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	8

BMS Element Num: **416**

BMS Element Descr: **Modular Expansion Joint**

BMS Element Quantity: 160

Project Number:	2011-13 Priority#:	53
Repair Year:	2009-11 Priority#:	62
CPMS Ad Date:	Bridge $'s:	$75,000
	Repair Total$'s:	$150,000

Repair Description:

Replace Glands in Modular expansion joints in westbound lanes.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 180	0006533A	COLUMBIA R VANTAGE	137.19	South Central

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1962	STrus SG	2,504 ft	56.0 ft	44.71

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
11,916	26%	T1	4

Date Inspected:	7/11/2007	Structr Adequacy:	5
Superstr Code:	5	Safe Load:	5
Substr Code:	6	Scour:	3

BMS Element Num: **402**

BMS Element Descr: **Poured Joint Filler**

BMS Element Quantity: 2,240

Project Number:		2011-13 Priority#:	60
Repair Year:		2009-11 Priority#:	70
CPMS Ad Date:		Bridge $'s:	$168,000
		Repair Total$'s:	$336,000

No Photo Available

Repair Description:

Replace poured joint filler in all transverse joints.

COMMENTS

Bridge Item repair cost based on $75 / ft. Total Project cost based on $150 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 332	0005783D	I-90 OC, TOKIO RD	231.23	Eastern

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1958	PCG	225 ft	26.0 ft	96.15

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
250	25%		2

Date Inspected:	9/26/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	6	Scour:	N

BMS Element Num: **409**

BMS Element Descr: **Steel Sliding Exp Joint**

BMS Element Quantity: 160

Project Number:		2011-13 Priority#:	85
Repair Year:		2009-11 Priority#:	97
CPMS Ad Date:		Bridge $'s:	$80,000
		Repair Total$'s:	$160,000

Repair Description:

Replace Expansion Joints

COMMENTS

Bridge Item cost based on $500 / ft. Total project cost based on $1,000 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 540N	0006579B	HANGMAN CR	279.49	Eastern

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1963	CBOX	1,222 ft	44.0 ft	67.56

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
24,152	13%	T1	3

Date Inspected:	9/21/2005	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Scour:	7

BMS Element Num: **105**

BMS Element Descr: **Concrete Box Girder**

BMS Element Quantity: 2

Project Number:		2011-13 Priority#:	33
Repair Year:	2016	2009-11 Priority#:	36
CPMS Ad Date:		Bridge $'s:	$150,000
		Repair Total$'s:	$300,000

Repair Description:

Remove loose concrete, clean rusty steel and apply a patching material and sealer.

COMMENTS

The strip seal expansion joints over the interior hinges were replaced in 1999. Shortly after the expansion joints were replaced the gap in the hinged area closed.

Use assumed costs of $150,000 and $300,000 until better estimates are developed.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 540S	0006579B	HANGMAN CR	279.49	Eastern

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1963	CBOX	1,222 ft	44.0 ft	67.56

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
24,152	13%	T1	3

Date Inspected:	9/21/2005	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Scour:	7

BMS Element Num: **105**

BMS Element Descr: **Concrete Box Girder**

BMS Element Quantity: 2

Project Number:		2011-13 Priority#:	34
Repair Year:	2016	2009-11 Priority#:	37
CPMS Ad Date:		Bridge $'s:	$150,000
		Repair Total$'s:	$300,000

Repair Description:

Remove loose concrete, clean rusty steel and apply a patching material and sealer.

COMMENTS

The strip seal expansion joints over the interior hinges were replaced in 1999. Shortly after the expansion joints were replaced the gap in the hinged area closed.

Use assumed costs of $150,000 and $300,000 until better estimates are developed.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
90 / 545E-E	0008322D	FOURTH-E RAMP	280.54	Eastern

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1967	CBox	79 ft	25.0 ft	96.57

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
4,590	5%	T1	1

Date Inspected:	8/24/2005	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	6	Scour:	N

BMS Element Num: **215**

BMS Element Descr: **Concrete Abutment**

BMS Element Quantity: 25

Project Number:		2011-13 Priority#:	62
Repair Year:		2009-11 Priority#:	72
CPMS Ad Date:		Bridge $'s:	$200,000
		Repair Total$'s:	$300,000

Repair Description:

Remove delaminated concrete, clean rusty rebar and apply new patching material.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
99 / 507E	0007967A	SR 599 OC	22.94	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1966	PCB	263 ft	23.0 ft	76.96FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
4,973	6%		1

Date Inspected:	5/10/2006	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	6	Scour:	N

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt Down**

BMS Element Quantity: 160 feet

Project Number:		2011-13 Priority#:	69
Repair Year:		2009-11 Priority#:	80
CPMS Ad Date:		Bridge $'s:	$74,000
		Repair Total$'s:	$222,000

Repair Description:

Replace 160 LF of rubber bolt down expansion joint.

COMMENTS

The rubber bolt down expansion joints are deteriorated. Maintenance has removed and replaced sections of the expansion joint.

The new Expansion Joint will be RCS with Polyester Concrete headers.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
99 / 507S-S	0007967D	PACIFIC HWY OC	22.94	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1966	PCB	236 ft	38.0 ft	81.78FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
16,961	6%		2

Date Inspected:	5/10/2006	Structr Adequacy:	6
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt Down**

BMS Element Quantity: 190 feet

Project Number:		2011-13 Priority#:	70
Repair Year:		2009-11 Priority#:	81
CPMS Ad Date:		Bridge $'s:	$95,000
		Repair Total$'s:	$285,000

Repair Description:

Replace 190 LF of rubber bolt down expansion joint.

COMMENTS

The rubber bolt down expansion joints are deteriorated. Maintenance has removed and replaced sections of the expansion joint.

The new Expansion Joint will be RCS with Polyester Concrete headers.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
99 / 507W	0007967C	S 116TH PL OC	22.94	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1966	PCB	196 ft	23.0 ft	81.20FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
2,447	6%		1

Date Inspected:	5/10/2006	Structr Adequacy:	6
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt Down**

BMS Element Quantity: 108 feet

Project Number:	2011-13 Priority#:	71
Repair Year:	2009-11 Priority#:	82
CPMS Ad Date:	Bridge $'s:	$54,000
	Repair Total$'s:	$162,000

No Photo Available

Repair Description:

Replace 108 LF of rubber bolt down expansion joint.

COMMENTS

The rubber bolt down expansion joints are deteriorated. Maintenance has removed and replaced sections of the expansion joint.

The new Expansion Joint will be RCS with Polyester Concrete headers.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
99 / 508	0007967B	PACIFIC HWY OC	22.94	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1966	PCB	248 ft	52.0 ft	79.25FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
19,960	6%		3

Date Inspected:	5/10/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	6	Scour:	N

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt Down**

BMS Element Quantity: 227

Project Number:		2011-13 Priority#:	72
Repair Year:		2009-11 Priority#:	83
CPMS Ad Date:		Bridge $'s:	$113,500
		Repair Total$'s:	$340,500

Repair Description:

Replace 227 LF of rubber bolt down expansion joint.

COMMENTS

The rubber bolt down expansion joints are deteriorated. Maintenance has removed and replaced sections of the expansion joint.The new Expansion Joint will be RCS with Polyester Concrete headers.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
101 / 115N-W	0012643A	N-W RAMP	83.12	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1985	SG	1,456 ft	20.0 ft	96.26

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
4,623	0%		1

Date Inspected:	6/7/2005	Structr Adequacy:	6
Superstr Code:	7	Safe Load:	5
Substr Code:	6	Scour:	N

BMS Element Num: **415**

BMS Element Descr: **Bolt Down Panel - Molded Rubbe**

BMS Element Quantity: 80 LF

Project Number:	2011-13 Priority#:	73
Repair Year:	2009-11 Priority#:	84
CPMS Ad Date:	Bridge $'s:	$40,000
	Repair Total$'s:	$120,000

No Photo Available

Repair Description:

Replace bolt down panels expansion joint system.

COMMENTS

The rubber bolt down expansion joints are deteriorated. The new Expansion Joint will be RCS with Polyester Concrete headers.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
101 / 269	0000987A	FULTON CR	313.55	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1926	CTB	127 ft	24.0 ft	46.21 FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
2,063	17%		2

Date Inspected:	7/12/2006	Structr Adequacy:	5
Superstr Code:	7	Safe Load:	5
Substr Code:	5	Scour:	3

BMS Element Num: **227**

BMS Element Descr: **Concrete Submerged Column**

BMS Element Quantity: 8

Project Number:		2011-13 Priority#:	45
Repair Year:	2016	2009-11 Priority#:	54
CPMS Ad Date:		Bridge $'s:	$320,000
		Repair Total$'s:	$600,000

Repair Description:

Repair and encase section of concrete columns exposed to saltwater.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
101 / 432E	0006383B	KENNEDY CR	356.17	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1960	CVS	129 ft	28.0 ft	66.79FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
8,357	7%		2

Date Inspected:	7/25/2006	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Scour:	3

BMS Element Num: **227**

BMS Element Descr: **Concrete Submerged Column**

BMS Element Quantity: 18

Project Number:		2011-13 Priority#:	46
Repair Year:	2016	2009-11 Priority#:	55
CPMS Ad Date:		Bridge $'s:	$720,000
		Repair Total$'s:	$1,080,000

No Photo Available

Repair Description:

Clean and encase concrete columns

COMMENTS

Need to get current pictures of the columns.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
101 / 432W	0006383A	KENNEDY CR	356.17	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1960	CVS	129 ft	28.0 ft	57.77FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
8,357	7%		2

Date Inspected:	7/24/2006	Structr Adequacy:	5
Superstr Code:	7	Safe Load:	5
Substr Code:	5	Scour:	3

BMS Element Num: **227**

BMS Element Descr: **Concrete Submerged Column**

BMS Element Quantity: 18

Project Number:		2011-13 Priority#:	47
Repair Year:	2016	2009-11 Priority#:	56
CPMS Ad Date:		Bridge $'s:	$720,000
		Repair Total$'s:	$1,080,000

No Photo Available

No Photo Available

Repair Description:

Clean and encase concrete columns

COMMENTS

Need to get current pictures of the columns.

Bridge Preservation Program (P2)

Bridge Repair Info Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
104 / 5.1	0011964A	HOOD CANAL-WEST HALF	13.93	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1982	CFP PCG STrus	4,245 ft	28.0 ft	47.98

Average Daily Traffic:	Truck%	Detour (miles)	Num of Lanes:
13,327			2

Date Inspected:
Superstr Code:
Substr Code:
Structr Adequacy:
Safe Load:
Scour:

BMS Element Num: **148**
BMS Element Descr: **Floating Bridge - Anchor Cable**
BMS Element Quantity: 18 Each

Project Number:
Repair Year: 2014
CPMS Ad Date:
2009-11 Priority#: 53
2011-13 Priority#: 20
Bridge $'s: $5,040,000
Repair Total$'s: $5,891,760

Repair Description:

Replace 18 anchor cables and purchase 1 spare cable.

COMMENTS

The bridge has 24 anchor cables that are 3 inches in diameter, of which 18 are 29 years old. These 18 should be programmed for replacement when they reach 30 years old. This project also needs to include the purchase of 1 spare cable in case of a need to replace a cable by an emergency. Cables - An, As, Bs, Dn, Fs, Gn, Gs, Hn, Hs, Jn, Js, L1n, L1s, L2s, Mn, Ms.

Bridge Item estimate ($250,000 installation + $30,000 materials) per cable x 18 cables. = $5,040,000. Total cost = $5,891,760

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
107 / 4	0005827A	CHEHALIS R	6.83	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1958	ST CBOX TTT	1,302 ft	26.0 ft	40.45SD

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
4,392	16%		2

Date Inspected:	3/19/2007	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Scour:	3

BMS Element Num: **31**
BMS Element Descr: **Timber Deck**
BMS Element Quantity: 20,226 SF

Project Number:		2011-13 Priority#:	63
Repair Year:		2009-11 Priority#:	73
CPMS Ad Date:		Bridge $'s:	$1,600,000
		Repair Total$'s:	$3,200,000

Repair Description:

Remove and replace the timber deck and bridge rails on the timber approach span.

COMMENTS

The timber deck has many areas that are deteriorated as evident by the failure in the ACP overlay. The Olympic Region Maintenance office indicates that they have repaired the timber deck in many areas. Four patched areas have replaced 4 deck planks with one 12" x 4" timber. Most spans between the timber piers have cracks in the ACP.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
153 / 16	0003507A	METHOW R	16.85	North Central

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1939 / 1949	CTB	454 ft	24.0 ft	38.67

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
865	12%		2

Date Inspected:	9/27/2006	Structr Adequacy:	4
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Scour:	3

BMS Element Num: **331**

BMS Element Descr: **Concrete Bridge Rail**

BMS Element Quantity: 908 LF

Project Number:		2011-13 Priority#:	42
Repair Year:	2016	2009-11 Priority#:	50
CPMS Ad Date:		Bridge $'s:	$190,000
		Repair Total$'s:	$275,000

No Photo Available

Repair Description:

Remove the concrete baluster bridge rails and replace with a new Thrie Beam rail. Add a new metal pedestrian rail to the sidewalk.

COMMENTS

The concrete balluster bridge rails are deteriorated with exposed reinforcing steel.

The costs and details for the concrete bridge rail replacement should be similar to those used on bridge 153/20 (16315) in 2002.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
153 / 17	0002450E	METHOW R	18.91	North Central

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1939	CTB	302 ft	24.0 ft	49.87

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
865	12%		2

Date Inspected:	9/27/2006	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Scour:	5

BMS Element Num: **331**

BMS Element Descr: **Concrete Bridge Rail**

BMS Element Quantity: 604 LF

Project Number:		2011-13 Priority#:	43
Repair Year:	2016	2009-11 Priority#:	51
CPMS Ad Date:		Bridge $'s:	$125,000
		Repair Total$'s:	$185,000

No Photo Available

Repair Description:

Remove the concrete baluster bridge rails and replace with a new Thrie Beam rail. Add a new metal pedestrian rail to the sidewalk.

COMMENTS

The concrete balluster bridge rails are deteriorated with exposed reinforcing steel.

The costs and details for the concrete bridge rail replacement should be similar to those used on bridge 153/20 (16315) in 2002.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
167 / 32E	0009075D	VALLEY AVE & UPRR O'XIN	7.22	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1973	PCG	925 ft	50.5 ft	94.49

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
26,125	8%		2

Date Inspected:	12/12/2006	Structr Adequacy:	7
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **409**

BMS Element Descr: **Steel Sliding Plate Exp Joint**

BMS Element Quantity: 100

Project Number:	2011-13 Priority#:	48
Repair Year:	2009-11 Priority#:	57
CPMS Ad Date:	Bridge $'s:	$100,000
	Repair Total$'s:	$250,000

No Photo Available

Repair Description:

Replace Expansion joints @ piers 4 and 6.

COMMENTS

Bridge Item cost based on $1,000 / ft. Total project cost based on $2,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
167 / 38	0016597A	24TH ST E OVER SR 167	9.61	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
2004	PCG	382 ft	69.8 ft	48.22

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
8,832			5

Date Inspected:	11/12/2008	Structr Adequacy:	3
Superstr Code:	3	Safe Load:	5
Substr Code:	7	Scour:	5

BMS Element Num: **115**

BMS Element Descr: **Prestress Concrete Girder**

BMS Element Quantity: 134

Project Number:		2011-13 Priority#:	1
Repair Year:	2011	2009-11 Priority#:	
CPMS Ad Date:		Bridge $'s:	$500,000
		Repair Total$'s:	$800,000

Repair Description:

Replace the south outside prestress girder over the north bound lanes.

COMMENTS

The south outside prestress girder over the north bound lanes was damaged by a truck impact on Dec 16 2009. The Bridge Preservation Office has determined that this girder cannot be repaired and needs to be replaced.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
167 / 40E	0010558A	8TH ST E O'XING	10.62	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1977	PCG	185 ft	38.0 ft	91.36

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
26,125	8%		2

Date Inspected:	12/5/2005	Structr Adequacy:	7
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **331**

BMS Element Descr: **Concrete Bridge Rail**

BMS Element Quantity: 56

Project Number:		2011-13 Priority#:	54
Repair Year:		2009-11 Priority#:	64
CPMS Ad Date:		Bridge $'s:	$25,000
		Repair Total$'s:	$50,000

Repair Description:

Replace 56 feet of bridge rail.

COMMENTS

Southeast six sections of bridge rail has severe exfolliation of top 1 foot, and requires repair/replacement. Also, Northwest end section has severe exfolliation of top 1 foot, and requires repair/replacement. -- (Revised the priority to 2 from 4 per GCS. RLS 12/19/05).

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
195 / 24	000000BI	S FK PALOUSE R CT HOUSE	38.09	Eastern

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1923	CTB	228 ft	56.0 ft	31.00FO

Average Daily Traffic: Truck%	Freight Route	Num of Lanes:
11,386		4

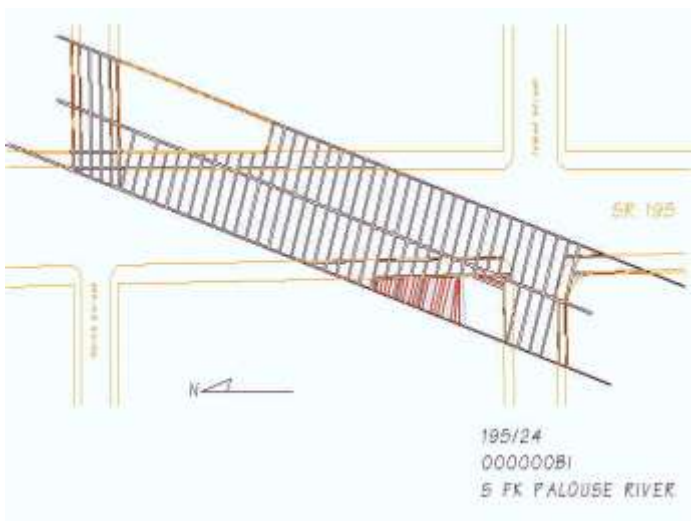
Date Inspected:	10/25/2006	Structr Adequacy:	3
Superstr Code:	5	Safe Load:	5
Substr Code:	6	Scour:	8

BMS Element Num: **110**

BMS Element Descr: **Concrete Girder**

BMS Element Quantity: 2,000

Project Number:		2011-13 Priority#:	55
Repair Year:		2009-11 Priority#:	65
CPMS Ad Date:		Bridge $'s:	
		Repair Total$'s:	$200,000



Repair Description:

Patch all spalls on the girders, edge beams, and the deck soffit that have exposed rebar. Remove all the loose concrete, clean all the rust off the exposed rebars and concrete grout patch the spall areas.

COMMENTS

Active corrosion spalling in the bottom flange of the girders.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
195 / 27	0001542A	N FK PALOUSE R	38.50	Eastern

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1931	CTB	240 ft	26.0 ft	69.15FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
9,105	9%		2

Date Inspected:	10/26/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	6	Scour:	8

BMS Element Num: **331**

BMS Element Descr: **Concrete Bridge Railing**

BMS Element Quantity: 480 LF

Project Number:	2011-13 Priority#:	86
Repair Year:	2009-11 Priority#:	98
CPMS Ad Date:	Bridge $'s:	$96,000
	Repair Total$'s:	$200,000

Repair Description:

Remove the concrete baluster bridge rails and replace with a new Thrie Beam rail.

COMMENTS

The existing concrete rail is cracked and deteriorated.

Bridge Item $ estimate based on $200 per ft , Total Project $ estimate based on $400 per ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
290 / 4.7E-W	0008774C	3RD AVE & E-E RAMP OC	1.18	Eastern

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1971	CBox	518 ft	38.0 ft	87.02

Average Daily Traffic: Truck%	Freight Route	Num of Lanes:
9,000		2

Date Inspected:	9/25/2006	Structr Adequacy:	5
Superstr Code:	5	Safe Load:	5
Substr Code:	6	Scour:	N

BMS Element Num: **105**
BMS Element Descr: **Concrete Box**
BMS Element Quantity: 10

Project Number:		2011-13 Priority#:	49
Repair Year:		2009-11 Priority#:	58
CPMS Ad Date:		Bridge $'s:	
		Repair Total$'s:	$400,000

Repair Description:

Remove delaminated concrete, clean rusty steel and apply new patching material.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
395 / 40	0004195A	PIONEER MEM. BR	18.59	South Central

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1954 / 1986	STrus SG PCS	2,521 ft	63.3 ft	59.21FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
42,446	7%	T1	4

Date Inspected:	10/26/2006	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	6	Scour:	3

BMS Element Num: **416**
BMS Element Descr: **Modular Expansion Joint**
BMS Element Quantity: 188

Project Number:		2011-13 Priority#:	4
Repair Year:	2012	2009-11 Priority#:	7
CPMS Ad Date:		Bridge $'s:	$470,000
		Repair Total$'s:	$940,000

Repair Description:

Replace modular expansion joints @ 3 locations installed in 1986.

COMMENTS

The SC Region has noted recurring failure with the modular expansion joints on the Blue Bridge. The bolts holding the longitudinal bars to the support bars either shear off or become loose and back out due to wear, age, and obsolete design. Current design on similar joint requires almost twice as many support bars significantly reducing strain on the longitudinal bars. Repairs require the closure of all lanes, either north or south depending on the joint being repaired. The repairs require a UBIT to access the bottom of the joint. Current repair costs are between $12-20,000 per repair. Since 1992 when the problem was first discovered 8 repairs have been required at the 4 joints.
Bridge Item cost based on $2,500 / ft. Total project cost based on $5,000 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
395 / 40	0004195A	PIONEER MEM. BR	18.59	South Central

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1954 / 1986	STrus SG PCS	2,521 ft	63.3 ft	59.21FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
42,446	7%		4

Date Inspected:	10/26/2006	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	6	Scour:	3

BMS Element Num: **402**

BMS Element Descr: **Poured Joint Filler**

BMS Element Quantity: 2,089

Project Number:		2011-13 Priority#:	50
Repair Year:		2009-11 Priority#:	59
CPMS Ad Date:		Bridge $'s:	$156,675
		Repair Total$'s:	$313,350

No Photo Available

Repair Description:

Replace poured joint filler in joints through the arch span.

COMMENTS

Bridge Item cost based on $75 / ft. Total project cost based on $150 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
405 / 70E	0008382A	SR 522 OC SAMMAMISH R	23.53	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1968	CBox	1,352 ft	40.0 ft	69.28FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
67,000	5%	T1	3

Date Inspected:	9/28/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	5

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt down**

BMS Element Quantity: 200

Project Number:		2011-13 Priority#:	35
Repair Year:	2016	2009-11 Priority#:	39
CPMS Ad Date:		Bridge $'s:	$100,000
		Repair Total$'s:	$300,000

Repair Description:

Replace all rubber bolt down expansion joints. There are rubber bolt down expansion joints at 5 separate locations on the bridge.

COMMENTS

These expansion joints were installed in 1985 with the existing concrete overlay. Many sections of the joints are missing or have been repaired by Region Maintenance crews.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
405 / 70N-E	0008382C	N-E RAMP SAMMAMISH R	23.53	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1968	CBox	709 ft	23.0 ft	85.23

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
15,791	5%	T1	1

Date Inspected:	4/18/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	5

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt down**

BMS Element Quantity: 69

Project Number:		2011-13 Priority#:	36
Repair Year:	2016	2009-11 Priority#:	40
CPMS Ad Date:		Bridge $'s:	$34,500
		Repair Total$'s:	$103,500

Repair Description:

Replace all rubber bolt down expansion joints. There are rubber bolt down expansion joints at 3 separate locations on the bridge.

COMMENTS

These expansion joints were installed in 1985 with the existing concrete overlay. Many sections of the joints are missing or have been repaired by Region Maintenance crews.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
405 / 70N-W	0008382D	N-W RAMP SAMMAMISH R	23.53	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1968	CBox	1,469 ft	24.0 ft	90.25FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
6,569	5%	T1	1

Date Inspected:	9/28/2006	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	5

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt down**

BMS Element Quantity: 120

Project Number:		2011-13 Priority#:	37
Repair Year:	2016	2009-11 Priority#:	41
CPMS Ad Date:		Bridge $'s:	$60,000
		Repair Total$'s:	$180,000

No Photo Available

Repair Description:

Replace all rubber bolt down expansion joints. There are rubber bolt down expansion joints at 5 separate locations on the bridge.

COMMENTS

These expansion joints were installed in 1985 with the existing concrete overlay. Many sections of the joints are missing or have been repaired by Region Maintenance crews.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
405 / 70S-E	0008382E	S-E RAMP BR	23.53	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1968	CBox	433 ft	25.0 ft	95.16FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
8,568	5%	T1	1

Date Inspected:	10/19/2005	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt down**

BMS Element Quantity: 50

Project Number:		2011-13 Priority#:	38
Repair Year:	2016	2009-11 Priority#:	42
CPMS Ad Date:		Bridge $'s:	$25,000
		Repair Total$'s:	$75,000

No Photo Available

Repair Description:

Replace all rubber bolt down expansion joints. There are rubber bolt down expansion joints at 2 separate locations on the bridge.

COMMENTS

These expansion joints were installed in 1985 with the existing concrete overlay. Many sections of the joints are missing or have been repaired by Region Maintenance crews.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
405 / 70W	0008382B	SR 522 OC SAMMAMISH R	23.53	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1968	CBox	1,410 ft	34.5 ft	56.99FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
67,000	5%	T1	3

Date Inspected:	9/27/2006	Structr Adequacy:	5
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	5

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt down**

BMS Element Quantity: 192

Project Number:		2011-13 Priority#:	39
Repair Year:	2016	2009-11 Priority#:	43
CPMS Ad Date:		Bridge $'s:	$100,000
		Repair Total$'s:	$288,000

Repair Description:

Replace all rubber bolt down expansion joints. There are rubber bolt down expansion joints at 5 separate locations on the bridge.

COMMENTS

These expansion joints were installed in 1985 with the existing concrete overlay. Many sections of the joints are missing or have been repaired by Region Maintenance crews.

Bridge Item cost based on $500 / ft. Total project cost based on $1,500 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
409 / 10	0002377A	JULIA BUTLER HANSEN BR	2.92	Southwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1938 / 1987	ST PCB SG CTB	2,615 ft	20.0 ft	40.45FO

Average Daily Traffic: Truck%	Freight Route	Num of Lanes:
2,200		2

Date Inspected:	12/15/2005	Structr Adequacy:	5
Superstr Code:	6	Safe Load:	5
Substr Code:	5	Scour:	5

BMS Element Num: **31**
BMS Element Descr: **Timber Deck**
BMS Element Quantity: 25,348

Project Number:		2011-13 Priority#:	64
Repair Year:		2009-11 Priority#:	74
CPMS Ad Date:		Bridge $'s:	$1,500,000
		Repair Total$'s:	$3,000,000

Repair Description:

Replace timber deck on steel truss span.

COMMENTS

The Southwest Region Maintenance bridge crews adding steel plates over deteriorated areas in the deck as part of an asphalt repaving project.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
410 / 31	0008746A	WHITE R (STUCK R)	8.99	Olympic

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1971	PCG CBox	442 ft	102.0 ft	86.46

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
44,586	7%		6

Date Inspected:	8/31/2005	Structr Adequacy:	6
Superstr Code:	6	Safe Load:	5
Substr Code:	7	Scour:	8

BMS Element Num: **415**

BMS Element Descr: **Exp Jnt - Rubber Bolt down**

BMS Element Quantity: 216

Project Number:	2011-13 Priority#:	56
Repair Year:	2009-11 Priority#:	66
CPMS Ad Date:	Bridge $'s:	$108,000
	Repair Total$'s:	$216,000

Repair Description:

Replace rubber bolt down expansion joints.

COMMENTS

Bridge Item cost based on $500 / ft. Total project cost based on $1,000 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
500 / 6	0009214B	I-205 OC	4.77	Southwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1973	PTCBox PCG	408 ft	114.0 ft	66.44FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
38,737	5%		7

Date Inspected:	10/24/2005	Structr Adequacy:	4
Superstr Code:	7	Safe Load:	5
Substr Code:	7	Scour:	N

BMS Element Num: **415**

BMS Element Descr: **Exp Joint - Rubber Bolt Down**

BMS Element Quantity: 222

Project Number:		2011-13 Priority#:	57
Repair Year:		2009-11 Priority#:	67
CPMS Ad Date:		Bridge $'s:	$111,000
		Repair Total$'s:	$222,000

Repair Description:

Replace expansion joints.

COMMENTS

Bridge Item cost based on $500 / ft. Total project cost based on $1,000 / ft.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
529 / 15E	0004562A	UNION SL	5.12	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1954	CTB	633 ft	28.0 ft	55.16FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
11,816	5%		2

Date Inspected:	7/19/2005	Structr Adequacy:	5
Superstr Code:	7	Safe Load:	5
Substr Code:	5	Scour:	5

BMS Element Num: **227**

BMS Element Descr: **Concrete Submerged Pile/Column**

BMS Element Quantity: 44

Project Number:		2011-13 Priority#:	65
Repair Year:		2009-11 Priority#:	75
CPMS Ad Date:		Bridge $'s:	$3,000,000
		Repair Total$'s:	$3,300,000

Repair Description:

Repair deteriorated columns.

COMMENTS

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
529 / 15W	0000965B	UNION SL	5.13	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1927	CTB	581 ft	24.0 ft	40.43SD

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
11,816	5%		2

Date Inspected:	7/21/2005	Structr Adequacy:	4
Superstr Code:	5	Safe Load:	5
Substr Code:	4	Scour:	5

BMS Element Num: **227**

BMS Element Descr: **Concrete Submerged Pile/Column**

BMS Element Quantity:

Project Number:		2011-13 Priority#:	66
Repair Year:		2009-11 Priority#:	76
CPMS Ad Date:		Bridge $'s:	$3,000,000
		Repair Total$'s:	$3,300,000

Repair Description:

Repair deteriorated columns.

COMMENTS

A review of the condition of these columns and a visual inspection indicate that a repair is not required at this time. Monitor condition.

Bridge Preservation Program (P2)

Bridge Repair Form

Bridge Number:	Structure ID	Bridge Name:	Milepost:	Region:
530 / 124	0007733A	N FK STILLAGUAMISH R	28.78	Northwest

Year Built / YR Widened:	Bridge Type:	Bridge Length:	Bridge Width (curb-curb):	Sufficiency Rating:
1966	SA PCB	377 ft	26.0 ft	55.27FO

Average Daily Traffic:	Truck%	Freight Route	Num of Lanes:
3,729	13%		2

Date Inspected:	5/20/2007	Structr Adequacy:	5
Superstr Code:	5	Safe Load:	5
Substr Code:	7	Scour:	7

BMS Element Num: **356**
BMS Element Descr: **Steel Stringer**
BMS Element Quantity: 12

Project Number:		2011-13 Priority#:	67
Repair Year:		2009-11 Priority#:	77
CPMS Ad Date:		Bridge $'s:	$200,000
		Repair Total$'s:	$400,000

Repair Description:

Repair cracking in stringers.

COMMENTS

Some cracks have been previously repaired by the Region Maintenance.

P2 Bridge Preservation - Concrete Deck Repair / Overlay Projects

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
2	395/545	COLUMBIA R KETTLE FALLS	241.49	Eastern	$700,000	$2,000,000
3	90/78N	SR 18 OC	25.66	Northwest	$133,768	$225,400
4	90/156S	DRY CR	104.71	South Central	$307,153	$782,092
5	90/126S	BIG CR	75.36	South Central	$169,830	$431,146
6	90/150S	TANEUM CR	97.27	South Central	$144,662	$414,750
7	90/316N	N PAHA PACKARD RD OC	215.24	Eastern	$133,685	$421,509
8	90/156N	DRY CR	104.71	South Central	$307,153	$782,092
9	90/120N	YAKIMA R	71.26	South Central	$487,840	$1,059,942
10	82/213S	CHANDLER CANAL BRIDGE	81.86	South Central	$139,798	$438,075
11	82/110S	EAST SELAH OC	29.02	South Central	$220,444	$548,041
12	261/120	TUCANNON R	10.27	South Central	$151,642	$469,802
13	12/329	COWICHE CR	199.21	South Central	$208,720	$565,887
14	6/123	CHEHALIS R RIVERSIDE	50.94	Southwest	$205,992	$347,096
15	5/534S-W	S-W RAMP LUCILE ST OC	161.28	Northwest	$378,017	$1,017,057
16	5/534A	N-W RAMP AIRPORT W. OC	161.27	Northwest	$606,335	$1,631,347
17	5/534N-W	N-W RAMP RR OC	161.27	Northwest	$13,442	$366,660
18	5/536N-W	NB I5 to WB W SEA FRWY	162.98	Northwest	$815,174	$2,057,887
19	90/540N	HANGMAN CR	279.49	Eastern	$1,176,683	$2,364,939
20	90/540S	HANGMAN CR	279.49	Eastern	$1,176,683	$2,364,939
21	203/106	SKYKOMISH R	23.20	Northwest	$576,380	$1,223,083
22	90/126N	BIG CR	75.36	South Central	$104,217	$312,783
23	90/140N	YAKIMA R	86.20	South Central	$307,153	$782,092
24	90/150N	TANEUM CR	97.27	South Central	$144,662	$414,750
25	90/152N	WEST SIDE CANAL	100.55	South Central	$74,931	$248,640
26	90/152S	WEST SIDE CANAL	100.55	South Central	$80,910	$264,904
27	90/162N	WILSON CR	109.13	South Central	$197,935	$553,218
28	290/2W-W	2ND AVE OC	0.07	Eastern	$314,298	$716,661
29	97/6	SWALE CR	8.08	Southwest	$110,978	$330,290
30	195/52	MILW RR OC (CMSTP&P)	63.30	Eastern	$187,314	$516,517
31	195/49	PINE CR #1	62.98	Eastern	$324,233	$818,149
32	128/10	SNAKE R - RED WOLF BR	0.22	South Central	$906,946	$2,102,466
33	9/315	N FK NOOKSACK R U S	78.87	Northwest	$422,917	$929,726
34	110/15	BOGACHIEL RIVER	8.64	Olympic	$191,197	$572,688
35	82/217	I-82 OC, WINE COUNTRY RD	36.45	South Central	$398,245	$1,119,916

P2 Bridge Preservation - Concrete Deck Repair / Overlay Projects

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
36	18/17S	GREEN R (NEELEY BRIDGE)	6.62	Northwest	$406,047	$954,562
37	90/118N	KACHESS R	69.49	South Central	$294,920	$676,882
38	90/154S	YAKIMA R	102.49	South Central	$618,666	$1,302,027
39	82/135N	BNI&UPRR OC	41.53	South Central	$1,042,137	$2,044,241
40	203/104	DRAINAGE OVERFLOW	22.05	Northwest	$87,090	$289,946
41	82/10S	SR 821 OC THRALL RD	3.22	South Central	$621,954	$1,408,614
42	203/3	SLOUGH	0.49	Northwest	$28,567	$48,136
43	5/537E-E	6TH-N RAMP BR	162.98	Northwest	$104,357	$339,932
44	90/316S	N PAHA PACKARD RD OC	215.24	Eastern	$133,685	$421,509
45	24/302	SAGEHILL WASTEWAY	74.15	North Central	$84,792	$283,162
46	97/103	SATUS CR 3RD CROSSING	37.54	South Central	$220,573	$646,550
47	25/130	COLUMBIA R @ NORTHPORT	113.92	Eastern	$727,870	$1,763,641
48	21/224	SINKING CR	85.16	Eastern	$83,285	$278,694
49	21/4	SAND HILLS COULEE # 3	2.72	Eastern	$79,254	$266,671
50	5/526W	DUWAMISH R BN & UP RR	156.35	Northwest	$605,568	$1,020,383
51	5/526E	DUWAMISH R BN & UP RR OC	156.34	Northwest	$614,843	$1,036,010
52	5/525.5E	INTERURBAN AVE OC	155.98	Northwest	$146,584	$246,994
53	5/417	CLOVER CR	125.64	Olympic	$679,875	$1,473,287
54	5/539W	SB VIADUCT STA 2075	162.98	Northwest	$8,470,588	$11,848,921
55	5/511W	SR 516 OC	149.17	Northwest	$210,116	$354,046
56	432/10S	COWLITZ R & NP RY OC	9.58	Southwest	$958,036	$2,199,658
57	90/43S	MERCER SL	9.24	Northwest	$3,990,926	$6,674,699
58	90/97.2N	DENNY CRK VIADUCT	50.44	South Central		$12,235,600
59	18/31N	HOLDER CR HOBART RD OC	20.34	Northwest	$329,899	$830,030
60	153/16	METHOW R	16.85	North Central	$119,781	$201,830
61	153/17	METHOW R	18.91	North Central	$82,607	$139,193
62	153/20	METHOW R	22.31	North Central	$90,202	$151,990
99	5/570	LAKE WASH SHIP CANAL	169.63	Northwest		$35,000,000
99	90/97.8N	FRANKLIN FALLS BR	51.12	South Central		$2,366,000
99	90/562E-E	E-E RAMP OVER I-90	282.11	Eastern		$1,670,100
99	182/16N	COL R LEE-VOLPENTEST BR	5.87	South Central		$6,084,000
99	182/16S	COL R LEE-VOLPENTEST BR	5.87	South Central		$6,084,000
99	290/1W-W	W-W RAMP OVER SR 290 WB	0.07	Eastern	$201,400	$402,800
99	303/12	PORT WASHINGTON CS1840	0.73	Olympic	$2,358,130	$4,029,608

P2 Bridge Preservation - Concrete Deck Repair / Overlay Projects

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
Total Number of Bridges = 68				Totals $ =	$35,211,085	$133,968,257

P2 Bridge Preservation - Concrete Deck Repair / Overlay Projects

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
53	5/417	CLOVER CR	125.64	Olympic	$679,875	$1,473,287
55	5/511W	SR 516 OC	149.17	Northwest	$210,116	$354,046
52	5/525.5E	INTERURBAN AVE OC	155.98	Northwest	$146,584	$246,994
51	5/526E	DUWAMISH R BN & UP RR OC	156.34	Northwest	$614,843	$1,036,010
50	5/526W	DUWAMISH R BN & UP RR	156.35	Northwest	$605,568	$1,020,383
16	5/534A	N-W RAMP AIRPORT W. OC	161.27	Northwest	$606,335	$1,631,347
17	5/534N-W	N-W RAMP RR OC	161.27	Northwest	$13,442	$366,660
15	5/534S-W	S-W RAMP LUCILE ST OC	161.28	Northwest	$378,017	$1,017,057
18	5/536N-W	NB I5 to WB W SEA FRWY	162.98	Northwest	$815,174	$2,057,887
43	5/537E-E	6TH-N RAMP BR	162.98	Northwest	$104,357	$339,932
54	5/539W	SB VIADUCT STA 2075	162.98	Northwest	$8,470,588	$11,848,921
99	5/570	LAKE WASH SHIP CANAL	169.63	Northwest		$35,000,000
14	6/123	CHEHALIS R RIVERSIDE	50.94	Southwest	$205,992	$347,096
33	9/315	N FK NOOKSACK R U S	78.87	Northwest	$422,917	$929,726
13	12/329	COWICHE CR	199.21	South Central	$208,720	$565,887
36	18/17S	GREEN R (NEELEY BRIDGE)	6.62	Northwest	$406,047	$954,562
59	18/31N	HOLDER CR HOBART RD OC	20.34	Northwest	$329,899	$830,030
49	21/4	SAND HILLS COULEE # 3	2.72	Eastern	$79,254	$266,671
48	21/224	SINKING CR	85.16	Eastern	$83,285	$278,694
45	24/302	SAGEHILL WASTEWAY	74.15	North Central	$84,792	$283,162
47	25/130	COLUMBIA R @ NORTHPORT	113.92	Eastern	$727,870	$1,763,641
41	82/10S	SR 821 OC THRALL RD	3.22	South Central	$621,954	$1,408,614
11	82/110S	EAST SELAH OC	29.02	South Central	$220,444	$548,041
39	82/135N	BNI&UPRR OC	41.53	South Central	$1,042,137	$2,044,241
10	82/213S	CHANDLER CANAL BRIDGE	81.86	South Central	$139,798	$438,075
35	82/217	I-82 OC, WINE COUNTRY RD	36.45	South Central	$398,245	$1,119,916
57	90/43S	MERCER SL	9.24	Northwest	$3,990,926	$6,674,699
3	90/78N	SR 18 OC	25.66	Northwest	$133,768	$225,400
58	90/97.2N	DENNY CRK VIADUCT	50.44	South Central		$12,235,600
99	90/97.8N	FRANKLIN FALLS BR	51.12	South Central		$2,366,000
37	90/118N	KACHESS R	69.49	South Central	$294,920	$676,882
9	90/120N	YAKIMA R	71.26	South Central	$487,840	$1,059,942
22	90/126N	BIG CR	75.36	South Central	$104,217	$312,783
5	90/126S	BIG CR	75.36	South Central	$169,830	$431,146

P2 Bridge Preservation - Concrete Deck Repair / Overlay Projects

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
23	90/140N	YAKIMA R	86.20	South Central	$307,153	$782,092
24	90/150N	TANEUM CR	97.27	South Central	$144,662	$414,750
6	90/150S	TANEUM CR	97.27	South Central	$144,662	$414,750
25	90/152N	WEST SIDE CANAL	100.55	South Central	$74,931	$248,640
26	90/152S	WEST SIDE CANAL	100.55	South Central	$80,910	$264,904
38	90/154S	YAKIMA R	102.49	South Central	$618,666	$1,302,027
8	90/156N	DRY CR	104.71	South Central	$307,153	$782,092
4	90/156S	DRY CR	104.71	South Central	$307,153	$782,092
27	90/162N	WILSON CR	109.13	South Central	$197,935	$553,218
7	90/316N	N PAHA PACKARD RD OC	215.24	Eastern	$133,685	$421,509
44	90/316S	N PAHA PACKARD RD OC	215.24	Eastern	$133,685	$421,509
19	90/540N	HANGMAN CR	279.49	Eastern	$1,176,683	$2,364,939
20	90/540S	HANGMAN CR	279.49	Eastern	$1,176,683	$2,364,939
99	90/562E-E	E-E RAMP OVER I-90	282.11	Eastern		$1,670,100
29	97/6	SWALE CR	8.08	Southwest	$110,978	$330,290
46	97/103	SATUS CR 3RD CROSSING	37.54	South Central	$220,573	$646,550
34	110/15	BOGACHIEL RIVER	8.64	Olympic	$191,197	$572,688
32	128/10	SNAKE R - RED WOLF BR	0.22	South Central	$906,946	$2,102,466
60	153/16	METHOW R	16.85	North Central	$119,781	$201,830
61	153/17	METHOW R	18.91	North Central	$82,607	$139,193
62	153/20	METHOW R	22.31	North Central	$90,202	$151,990
99	182/16N	COL R LEE-VOLPENTEST BR	5.87	South Central		$6,084,000
99	182/16S	COL R LEE-VOLPENTEST BR	5.87	South Central		$6,084,000
31	195/49	PINE CR #1	62.98	Eastern	$324,233	$818,149
30	195/52	MILW RR OC (CMSTP&P)	63.30	Eastern	$187,314	$516,517
42	203/3	SLOUGH	0.49	Northwest	$28,567	$48,136
40	203/104	DRAINAGE OVERFLOW	22.05	Northwest	$87,090	$289,946
21	203/106	SKYKOMISH R	23.20	Northwest	$576,380	$1,223,083
12	261/120	TUCANNON R	10.27	South Central	$151,642	$469,802
99	290/1W-W	W-W RAMP OVER SR 290 WB	0.07	Eastern	$201,400	$402,800
28	290/2W-W	2ND AVE OC	0.07	Eastern	$314,298	$716,661
99	303/12	PORT WASHINGTON CS1840	0.73	Olympic	$2,358,130	$4,029,608
2	395/545	COLUMBIA R KETTLE FALLS	241.49	Eastern	$700,000	$2,000,000
56	432/10S	COWLITZ R & NP RY OC	9.58	Southwest	$958,036	$2,199,658

P2 Bridge Preservation - Concrete Deck Repair / Overlay Projects

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
Total Number of Bridges = 68				Totals $ =	$35,211,085	$133,968,257

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
5 / 417	CLOVER CR	Olympic	125.64

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1957	05523 , 09574 , 12808	85.00

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 13.0 in.

BRIDGE WIDTH (curb-curb): 194.0 ft.

BRIDGE LENGTH: 69 ft.

AVERAGE DAILY TRAFFIC (ADT): 125,772

NUMBER OF LANES: 10

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1985

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: Rapid Set LMC Overlay

RESURFACING COMMENT

The existing LMC is debonding and breaking up near the ends of the bridge. The Olympic Region Maintenance Office reports that the concrete overlay has debonded in the vicinity of their deck repair areas.

We recommend removing and replacing the existing LMC Overlay with a new 1.0" Polyester or 1.5" Rapid Set Concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
5 / 511W	SR 516 OC	Northwest	149.17

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1962	06820 , 15968	83.30

BRIDGE TYPE: PCB

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 71.2 ft.

BRIDGE LENGTH: 259 ft.

AVERAGE DAILY TRAFFIC (ADT): 94,900

NUMBER OF LANES: 5

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

ACP Overlay

Year Applied - 2002

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 70.6

Conc Base - Type 1B w/Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Modifications may be required to accommodate a new overlay.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: HMA Mill Fill 0.08'

RESURFACING COMMENT

A 1.5" Modified Concrete overlay was specified as part of the widening project in 2002. The Modified Concrete overlay was deleted by change order and an ACP overlay was applied instead.

Resurfacing project must remove and replace 0.08' of HMA, using 3/8" aggregate mix.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
5 / 525.5E	INTERURBAN AVE OC	Northwest	155.98

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1966	07618,12291,13182,14543	86.61 FO

BRIDGE TYPE: PCG

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 76.0 ft.

BRIDGE LENGTH: 160 ft.

AVERAGE DAILY TRAFFIC (ADT): 84,210

NUMBER OF LANES: 5

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

ACP overlay

Year Applied - 1982

Overlay Thickness - 1.8 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: HMA Mill Fill 0.08'

RESURFACING COMMENT

If ride improvement is needed We recommend to remove and replace 0.08' of HMA, using 3/8" aggregate mix.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
5 / 526E	DUWAMISH R BN & UP RR OC	Northwest	156.34

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1964 / 1997	07171,10342,13182,14543	84.49 FO

BRIDGE TYPE: SB CBOX

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 9.0 in.

BRIDGE WIDTH (curb-curb): 69.0 ft.

BRIDGE LENGTH: 812 ft.

AVERAGE DAILY TRAFFIC (ADT): 94,276

NUMBER OF LANES: 5

VERTICAL CLEARANCE

VC Type:

Minimum VC = 18 FT 08 in

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

ACP overlay

Year Applied - 1976

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: HMA & Memb

RESURFACING COMMENT

If asphalt pavement needs replacement, we recommend Removing 1.5" HMA; placing waterproofing membrane; and placing 1.5" of new HMA.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
5 / 526W	DUWAMISH R BN & UP RR	Northwest	156.35

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1964 / 1996	07171,10342,13182,14543	71.95 FO

BRIDGE TYPE: SB CBOX

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 9.0 in.

BRIDGE WIDTH (curb-curb): 68.0 ft.

BRIDGE LENGTH: 812 ft.

AVERAGE DAILY TRAFFIC (ADT): 94,276

NUMBER OF LANES: 5

VERTICAL CLEARANCE

VC Type:

Minimum VC = 17 FT 03 in

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

ACP overlay

Year Applied - 1986

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: HMA & Memb

RESURFACING COMMENT

If asphalt pavement needs replacement, we recommend Removing 1.5" HMA; placing waterproofing membrane; and placing 1.5" of new HMA.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
5 / 534A	N-W RAMP AIRPORT W. OC	Northwest	161.27

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1967	07930 , 13737,16695	72.51 FO

BRIDGE TYPE: CBox

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 43.0 ft.

BRIDGE LENGTH: 636 ft.

AVERAGE DAILY TRAFFIC (ADT): 16,113

NUMBER OF LANES: 3

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 1.5 Lt 1.5 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required. No modifications required at this time.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

A 3/8 inch polymer overlay was applied in 1990 (Sika-epoxy) and was removed in 2004.

This bridge has nearly 0.5% of the deck with patching and delaminations. In other cases we would wait to schedule a protective overlay until the amount is over 2% but this bridge is connected to Bridge 5/534S-W and 5/534N-W so all three bridges must be included together in the ame project.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
5 / 534N-W	N-W RAMP RR OC	Northwest	161.27

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1967	07930 , 13737,16695	91.66

BRIDGE TYPE: CBox

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 21.0 ft.

BRIDGE LENGTH: 291 ft.

AVERAGE DAILY TRAFFIC (ADT): 4,416

NUMBER OF LANES: 1

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 1.3 Lt 1.3 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required. No modifications required at this time.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Concrete

RESURFACING COMMENT

A 3/8 inch polymer overlay was applied in 1990 (Sika-epoxy) and was removed in 2004.

This bridge has nearly 0.5% of the deck with patching and delaminations. In other cases we would wait to schedule a protective overlay until the amount is over 2% but this bridge is connected to Bridge 5/534S-W and 5/534N-W so all three bridges must be included together in the ame project.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
5 / 534S-W	S-W RAMP LUCILE ST OC	Northwest	161.28

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1967	07930 , 13737	76.33 SD

BRIDGE TYPE: CBox

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 31.0 ft.

BRIDGE LENGTH: 550 ft.

AVERAGE DAILY TRAFFIC (ADT): 12,901

NUMBER OF LANES: 2

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 1.5 Lt 1.5 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required. No modifications required at this time.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Deck Rehabilitation: Place 1.5" modified concrete overlay using hydromilling. Expansion Joint modification is required.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
5 / 537E-E	6TH-N RAMP BR	Northwest	162.98

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1967	07741	79.53 FO

BRIDGE TYPE: CBOX CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 16.0 ft.

BRIDGE LENGTH: 228 ft.

AVERAGE DAILY TRAFFIC (ADT): 5,638

NUMBER OF LANES: 1

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2
Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 1.5 Lt 1.5 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: RSLMC

RESURFACING COMMENT

The bridge deck has nearly 3% deterioration.

We recommend the bridge deck be hydromilled and a rapid set LMC be applied.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
5 / 539W	SB VIADUCT STA 2075	Northwest	162.98

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1967	07741	64.44

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 18.0 in.

BRIDGE WIDTH (curb-curb): 68.0 ft.

BRIDGE LENGTH: 6,622 ft.

AVERAGE DAILY TRAFFIC (ADT): 109,480

NUMBER OF LANES: 5

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

The steel plate expansion joints @ 41 locations need to be replaced (2,660 LF).

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Polyester

RESURFACING COMMENT

A new overlay is needed to address the wheel rutting. A 3/4" Polyester overlay is the most likely solution similar to what was done on bridge 5/539E in 2008.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
6 / 123	CHEHALIS R RIVERSIDE	Southwest	50.94

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1939	02538	65.43 FO

BRIDGE TYPE: STrus TTC

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 24.0 ft.

BRIDGE LENGTH: 1,045 ft.

AVERAGE DAILY TRAFFIC (ADT): 11,420

NUMBER OF LANES: 2

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Original Concrete

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 26

Steel Post - Bull Rail

RAIL MEETS CURRENT STANDARDS?: NO

SIDEWALK / CURB WIDTH: 0.6 Lt 3.5 Rt

EXPANSION JOINTS

Coordinate with your Region Bridge Maintenance to determine if any repairs are needed. Std Plan A40.20, Joint Detail 8 applies at the ends and truss joints on the bridge. (Std Item Number 6517)

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: HMA / membrane

RESURFACING COMMENT

The west approach spans have an asphalt overlay. The rest of the bridge does not have an overlay.

Resurfaceing project should place 0.15' of HMA with waterproofing membrane on the east approach spans and the steel truss span. Raising the steel expansion joints will be required (48 Ft @ $600/LF). The total HMA thickness must not exceed 0.15' inches.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
9 / 315	N FK NOOKSACK R U S	Northwest	78.87

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1954	04542 , 14264	45.66 SD

BRIDGE TYPE: STrus CTB

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 26.0 ft.

BRIDGE LENGTH: 410 ft.

AVERAGE DAILY TRAFFIC (ADT): 1,800

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 25

Steel Post - Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 2.5 Lt 2.5 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

3/8" Polymer Overlay

Year Applied - 1993

Overlay Thickness - 0.4 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

A 3/8" Polymer overlay (Degussa-MMA) was applied to the concrete deck in 1993.

Bridge Inspection data indicates over 6% of the overlay has deterioration and it is estimated that over 3% of the concrete deck has deterioration.

We recommend hydromilling 1" of the existing concrete deck and applying a 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
12 / 329	COWICHE CR	South Central	199.21

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1932	01603 , 08846 , 16318	81.71

BRIDGE TYPE: CTB

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 8.0 in.

BRIDGE WIDTH (curb-curb): 84.0 ft.

BRIDGE LENGTH: 53 ft.

AVERAGE DAILY TRAFFIC (ADT): 19,788

NUMBER OF LANES: 4

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 70.6

Conc Base - Type 1B w/Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.1 Lt 0.1 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Orig with ACP membrane

Year Applied - 1972

Overlay Thickness - 3.0 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

The original structure requires rehabilitation. We recommend a hydromill the original deck and place a modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
18 / 17S	GREEN R (NEELEY BRIDGE)	Northwest	6.62

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1959	06066 , 14354	37.45 SD

BRIDGE TYPE: STrus CBox

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 29.5 ft.

BRIDGE LENGTH: 371 ft.

AVERAGE DAILY TRAFFIC (ADT): 23,922

NUMBER OF LANES: 2

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Original Concrete

VERTICAL CLEARANCE

VC Type:

Minimum VC = 14 FT 06 in

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Coordinate with the Maintenance office to determine if any repairs are required.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: Mod conc

RESURFACING COMMENT

A 3/8" Polymer overlay was applied and then removed.

Bridge Inspection data indicates nearly 4% of concrete bridge deck has deterioration.

We recommend hydromilling 1" of the existing concrete deck and applying a 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
18 / 31N	HOLDER CR HOBART RD OC	Northwest	20.34

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1961	06541 , 13549	76.96

BRIDGE TYPE: CBOX

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 40.3 ft.

BRIDGE LENGTH: 304 ft.

AVERAGE DAILY TRAFFIC (ADT): 9,000

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 65

Single Slope Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Modifications may be required to accommodate the new overlay.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Polyester Overlay

Year Applied - 1989

Overlay Thickness - 0.8 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: Mod Concrete

RESURFACING COMMENT

The existing 3/4" Polyester is developing pot holes above the existing patch locations.

We recommend removing the existing overlay with a rotomill, hydromill for deck preparation, and replacing it with a modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
21 / 4	SAND HILLS COULEE # 3	Eastern	2.72

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1963	07173	82.22

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 12.3 in.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

BRIDGE WIDTH (curb-curb): 24.0 ft.

BRIDGE LENGTH: 85 ft.

AVERAGE DAILY TRAFFIC (ADT): 224

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 25

Steel Post - Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.7 Lt 0.7 Rt

EXPANSION JOINTS

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Concrete

RESURFACING COMMENT

The bridge deck has nearly 2% deterioration. The bridge deck needs to be repaired and then a 1.5" modified concrete overlay applied.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
21 / 224	SINKING CR	Eastern	85.16

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1950	03714	83.08

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 12.0 in.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

BRIDGE WIDTH (curb-curb): 26.0 ft.

BRIDGE LENGTH: 82 ft.

AVERAGE DAILY TRAFFIC (ADT): 268

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 41

Balluster Rail

RAIL MEETS CURRENT STANDARDS?: NO

SIDEWALK / CURB WIDTH: 1.1 Lt 1.1 Rt

EXPANSION JOINTS

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: HMA with membrane

RESURFACING COMMENT

Bridge Inspections indicate significant deck deterioration.

We recommend 0.25' of HMA w/waterproofing membrane be added to this bridge.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
24 / 302	SAGEHILL WASTEWAY	North Central	74.15

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1965	07703	81.35 SD

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 17.0 in.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

BRIDGE WIDTH (curb-curb): 36.5 ft.

BRIDGE LENGTH: 46 ft.

AVERAGE DAILY TRAFFIC (ADT): 3,892

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.7 Lt 0.7 Rt

EXPANSION JOINTS

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: ACP w/Memb

RESURFACING COMMENT

The bridge deck has nearly 2% deterioration. We recommend the deck be patched and a membrane and 0.25' of HMA be applied.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
25 / 130	COLUMBIA R @ NORTHPORT	Eastern	113.92

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1948	03297	39.73 SD

BRIDGE TYPE: ST CTB CG CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 24.0 ft.

BRIDGE LENGTH: 1,540 ft.

AVERAGE DAILY TRAFFIC (ADT): 750

NUMBER OF LANES: 2

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 25

Steel Post - Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 3.0 Lt 3.0 Rt

EXPANSION JOINTS

Coordinate with you Maintenance Office to determine if any repairs are necessary.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspections indicate significant deck deterioration.

A new 1.5" modified concrete overlay is required to rehabilitate the deck. A Hydromilling machine should be used to scarify the bridge deck. This bridge is on the P2 Program Deck priority array.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
82 / 10S	SR 821 OC THRALL RD	South Central	3.22

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1970	08672 , 12857 , 16531	91.18 SD

BRIDGE TYPE: PCG

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 9.5 in.

BRIDGE WIDTH (curb-curb): 53.2 ft.

BRIDGE LENGTH: 357 ft.

AVERAGE DAILY TRAFFIC (ADT): 8,040

NUMBER OF LANES: 3

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2
Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.7 Lt 0.7 Rt

EXPANSION JOINTS

Compression seals at the ends of the bridge may need to be replaced.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Original Concrete

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Mill Hydro

RESURFACING COMMENT

A 3 inch reinforced concrete overlay was added to the existing 6.5 inch concrete deck during the original construction in 1970 due to problems with the original deck. The polymer overlay was added in 1985 as an experiment and removed by contract in 2003.

We recommend placing a 1.5" modified concrete overlay by rotomilling 1" and hydromilling 0.5".

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
82 / 110S	EAST SELAH OC	South Central	29.02

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1967	08089	92.06

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 18.0 in.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

BRIDGE WIDTH (curb-curb): 36.5 ft.

BRIDGE LENGTH: 104 ft.

AVERAGE DAILY TRAFFIC (ADT): 9,192

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.8 Lt 0.8 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

Bridge Inspection results indicate nearly 3.6% of the existing concrete deck is deteriorated.

We recommend hydromilling and applying a 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
82 / 135N	BNI&UPRR OC	South Central	41.53

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1979	11449	88.77 SD

BRIDGE TYPE: PCG

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 38.0 ft.

BRIDGE LENGTH: 920 ft.

AVERAGE DAILY TRAFFIC (ADT): 11,689

NUMBER OF LANES: 2

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Original Conc. & ECR

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

Bridge Inspection results indicate nearly 2.5% of the existing concrete deck is deteriorated.

We recommend hydromilling and applying a 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
82 / 213S	CHANDLER CANAL BRIDGE	South Central	81.86

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1977	10534	94.23 SD

BRIDGE TYPE: PCG

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 0.0 in.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

BRIDGE WIDTH (curb-curb): 38.0 ft.

BRIDGE LENGTH: 113 ft.

AVERAGE DAILY TRAFFIC (ADT): 7,714

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspection reports indicate the deck is more than 5% deteriorated.

We recommend 0.5" scarification by hydromilling and placing 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
82 / 217	I-82 OC, WINE COUNTRY RD	South Central	82.34

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1978	10534	97.00 SD

BRIDGE TYPE: PCG

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.5 in.

BRIDGE WIDTH (curb-curb): 47.1 ft.

BRIDGE LENGTH: 368 ft.

AVERAGE DAILY TRAFFIC (ADT): 6,620

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspection reports indicate the deck is more than 5% deteriorated.

We recommend 0.5" scarification by hydromilling and placing 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 43S	MERCER SL	Northwest	9.24

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1970	08610 , 13846	68.64 FO

BRIDGE TYPE: CBox CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.2 in.

BRIDGE WIDTH (curb-curb): 73.5 ft.

BRIDGE LENGTH: 2,669 ft.

AVERAGE DAILY TRAFFIC (ADT): 60,204

NUMBER OF LANES: 5

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.8 Lt 0.8 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: To Be Determined

RESURFACING COMMENT

Deck protection is required due to the amount of exposed reinforcing steel in the bridge deck.

The type of overlay will be determined during the project design phase. The overlay will likely be either a 3/4" Polyester or a hydromill and 1.5" Rapid Set LMC.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 78N	I-90 OVER SR 18	Northwest	25.55

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1963	06966 , 13941	89.88 SD

BRIDGE TYPE: PCG

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 5.8 in.

BRIDGE WIDTH (curb-curb): 70.0 ft.

BRIDGE LENGTH: 158 ft.

AVERAGE DAILY TRAFFIC (ADT): 19,068

NUMBER OF LANES: 4

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

MMC Overlay

Year Applied - 1991

Overlay Thickness - 6.0 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: HMA mill only

RESURFACING COMMENT

We recommend removing the 2"-6" concrete overlay and placing HMA with membrane. The deck is in good condition.

ACP overlay was removed and replaced with 2"-6" MMC in 1991 widening project. The MMC overlay is too thick. Overlay has fractured into large pieces and has significant rutting at the joint headers.

The Load Rating includes up to 6" of additional overlay Dead Load.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 97.2N	DENNY CRK VIADUCT	South Central	50.44

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1981	10200 , 11882	78.55

BRIDGE TYPE: POBX

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 10.0 in.

BRIDGE WIDTH (curb-curb): 52.0 ft.

BRIDGE LENGTH: 3,620 ft.

AVERAGE DAILY TRAFFIC (ADT): 15,279

NUMBER OF LANES: 3

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1980

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

Bridge Inspection results indicate nearly 1.0% of the existing concrete deck is deteriorated.

We recommend hydromilling and applying a 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 118N	KACHESS R	South Central	69.49

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1958	05702 , 12857	92.30

BRIDGE TYPE: CVS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 23.0 in.

BRIDGE WIDTH (curb-curb): 38.0 ft.

BRIDGE LENGTH: 150 ft.

AVERAGE DAILY TRAFFIC (ADT): 14,037

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1985

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspection reports indicate the deck overlay is deteriorated.

A P2 project will remove the LMC overlay by 1" rotomill, 0.5" scarification by hydromilling and placing 1.5" modified concrete overlay. Rapid Set LMC may be considered to minimize traffic closure.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 120N	YAKIMA R	South Central	71.26

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1959	05872 , 12857 , 14902	88.53 SD

BRIDGE TYPE: CBox

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 39.3 ft.

BRIDGE LENGTH: 317 ft.

AVERAGE DAILY TRAFFIC (ADT): 13,826

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1985

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

Bridge Inspection results indicate nearly 8.0% of the existing concrete overlay and deck is deteriorated.

We recommend removing the existing LMC and using a hydromill and applying a 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 126N	BIG CR	South Central	75.36

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1962	07016 , 12459 , 15306	93.62 SD

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) in.

BRIDGE WIDTH (curb-curb): 38.0 ft.

BRIDGE LENGTH: 55 ft.

AVERAGE DAILY TRAFFIC (ADT): 13,822

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 70.6

Conc Base - Type 1B w/Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Low Slump Mod Conc

Year Applied - 1983

Overlay Thickness - 2.0 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

Bridge Inspection results indicate nearly 9.0% of the existing concrete overlay and deck is deteriorated.

We recommend removing the existing LMC and using a hydromill and applying a 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 126S	BIG CR	South Central	75.36

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1973	09428	92.62 SD

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) in.

BRIDGE WIDTH (curb-curb): 38.0 ft.

BRIDGE LENGTH: 55 ft.

AVERAGE DAILY TRAFFIC (ADT): 13,822

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 63

New Jersey - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: Rapid Set LMC Overlay

RESURFACING COMMENT

Bridge Inspection reports indicate the deck is over 5% deteriorated.

We recommend 0.5" scarification by hydromilling and placing 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 140N	YAKIMA R	South Central	86.20

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1965	07582 , 13438 , 15306	81.50

BRIDGE TYPE: CBOX

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 30.0 ft.

BRIDGE LENGTH: 390 ft.

AVERAGE DAILY TRAFFIC (ADT): 12,827

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 70.6

Conc Base - Type 1B w/Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1989

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod conc

RESURFACING COMMENT

Bridge Inspection results indicate nearly 5.0% of the existing concrete overlay and deck is deteriorated.

We recommend removing the existing LMC and using a hydromill and applying a 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 150N	TANEUM CR	South Central	97.27

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1965	07724 , 14902	91.74 SD

BRIDGE TYPE: PCB

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 5.8 in.

BRIDGE WIDTH (curb-curb): 36.5 ft.

BRIDGE LENGTH: 108 ft.

AVERAGE DAILY TRAFFIC (ADT): 12,472

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.8 Lt 0.8 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Low Slump Mod Conc

Year Applied - 1983

Overlay Thickness - 2.0 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspection reports indicate the deck overlay is more than 10% deteriorated.

We recommend 1.0" rotomill, 0.5" scarification by hydromilling and placing 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 150S	TANEUM CR	South Central	97.27

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1965	07724 , 14902	90.74 SD

BRIDGE TYPE: PCG

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 5.8 in.

BRIDGE WIDTH (curb-curb): 36.5 ft.

BRIDGE LENGTH: 108 ft.

AVERAGE DAILY TRAFFIC (ADT): 12,472

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2
Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.8 Lt 0.8 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Low Slump Mod Conc
Year Applied - 1983
Overlay Thickness - 2.0 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspection reports indicate the deck overlay is more than 10% deteriorated.

We recommend 1.0" rotomill, 0.5" scarification by hydromilling and placing 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 152N	WEST SIDE CANAL	South Central	100.55

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1966	07904 , 12459	88.69 SD

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 12.0 in.

BRIDGE WIDTH (curb-curb): 36.5 ft.

BRIDGE LENGTH: 31 ft.

AVERAGE DAILY TRAFFIC (ADT): 12,472

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.7 Lt 0.7 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Low Slump Mod Conc

Year Applied - 1983

Overlay Thickness - 2.0 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspection reports indicate the deck overlay is more than 10% deteriorated.

We recommend 1.0" rotomill, 0.5" scarification by hydromilling and placing 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 152S	WEST SIDE CANAL	South Central	100.55

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1966	07904 , 12459	86.66 SD

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 12.0 in.

BRIDGE WIDTH (curb-curb): 36.5 ft.

BRIDGE LENGTH: 38 ft.

AVERAGE DAILY TRAFFIC (ADT): 12,472

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.5 Lt 0.5 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Low Slump Mod Conc

Year Applied - 1983

Overlay Thickness - 2.0 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Exclude this bridge from resurfacing projects.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 154S	YAKIMA R	South Central	102.49

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1967	08010 , 12857 , 14632	79.43

BRIDGE TYPE: CBOX

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 30.0 ft.

BRIDGE LENGTH: 595 ft.

AVERAGE DAILY TRAFFIC (ADT): 13,390

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 1.5 Lt 1.5 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1985

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

Bridge Inspection results indicate nearly 2.0% of the existing concrete overlay and deck is deteriorated.

We recommend removing the existing LMC and using a hydromill and applying a 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 156N	DRY CR	South Central	104.71

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1967	08036 , 13131 , 15126	76.31 SD

BRIDGE TYPE: CBOX

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 30.0 ft.

BRIDGE LENGTH: 390 ft.

AVERAGE DAILY TRAFFIC (ADT): 13,390

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 1.4 Lt 1.4 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1986

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspection reports indicate the deck overlay is more than 10% deteriorated.

We recommend 1.0" rotomill, 0.5" scarification by hydromilling and placing 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 156S	DRY CR	South Central	104.71

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1967	08036 , 13131 , 15126	75.31 SD

BRIDGE TYPE: CBox

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 30.0 ft.

BRIDGE LENGTH: 390 ft.

AVERAGE DAILY TRAFFIC (ADT): 13,390

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 1.5 Lt 1.5 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1986

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspection reports indicate the deck overlay is more than 10% deteriorated.

We recommend 1.0" rotomill, 0.5" scarification by hydromilling and placing 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 316N	N PAHA PACKARD RD OC	Eastern	215.24

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1972	09206	93.53 SD

BRIDGE TYPE: PCB

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 38.0 ft.

BRIDGE LENGTH: 105 ft.

AVERAGE DAILY TRAFFIC (ADT): 4,700

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.7 Lt 0.7 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

A chain drag survey was completed in 10/2001 and found 4.1% of the deck has delaminations. Bridge Inspections indicate significant deck deterioration.

A new 1.5" modified concrete overlay is required to rehabilitate the deck. A Hydromilling machine should be used to scarify the bridge deck. This bridge is on the P2 Program Deck priority array.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 316S	N PAHA PACKARD RD OC	Eastern	215.24

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1972	09206	95.51 SD

BRIDGE TYPE: PCB

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 38.0 ft.

BRIDGE LENGTH: 105 ft.

AVERAGE DAILY TRAFFIC (ADT): 5,013

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.7 Lt 0.7 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

A chain drag survey was completed in 10/2001 and found 2.1% of the deck has delaminations. Bridge Inspections indicate significant deck deterioration.

A new 1.5" modified concrete overlay is required to rehabilitate the deck. Remove and replace 1.5" LMC overlay by milling 1" and hydromill 0.5". This bridge is on the P2 Deck Program priority array.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 512N	BN RR OC (NP)	Eastern	270.10

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1966	07903 , 12136	95.17 SD

BRIDGE TYPE: PCB

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 36.5 ft.

BRIDGE LENGTH: 150 ft.

AVERAGE DAILY TRAFFIC (ADT): 8,400

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.7 Lt 0.7 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1981

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Mill & Hydro

RESURFACING COMMENT

Bridge Inspections indicate significant deck deterioration. There are areas in the overlay that have debonded and are now patched.

We recommend removing and replacing the 1.5" LMC overlay by milling 1" and hydromilling 0.5" of overlay. This bridge is on the P2 Deck Program priority array.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 512S	BN RR OC (NP)	Eastern	270.10

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1966	07903 , 12136	92.13 SD

BRIDGE TYPE: PCB

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 36.5 ft.

BRIDGE LENGTH: 150 ft.

AVERAGE DAILY TRAFFIC (ADT): 8,672

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.7 Lt 0.7 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1981

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Mill & Hydro

RESURFACING COMMENT

Bridge Inspections indicate significant deck deterioration. There are areas in the overlay that have debonded and are now patched.

We recommend removing and replacing the 1.5" LMC overlay by milling 1" and hydromilling 0.5" of overlay. This bridge is on the P2 Deck Program priority array.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 540N	HANGMAN CR	Eastern	279.49

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1963	06579 , 12842	65.39

BRIDGE TYPE: CBox

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 8.0 in.

BRIDGE WIDTH (curb-curb): 44.0 ft.

BRIDGE LENGTH: 1,222 ft.

AVERAGE DAILY TRAFFIC (ADT): 40,141

NUMBER OF LANES: 3

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 25

Steel Post - Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 1.5 Lt 1.5 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1985

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

The LMC Overlay is rutted to a depth of 1/2 inch or greater in the center lane.

We recommend removing and replacing the 1.5" LMC overlay by milling 1" and hydromilling 0.5" of overlay. This bridge is on the P2 Deck Program priority array.

The cost of removing and replacing the existing LMC will be affected by the type of new overlay to be used (modified Conc or Polyester).

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 540S	HANGMAN CR	Eastern	279.49

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1963	06579 , 12842	54.04 FO

BRIDGE TYPE: CBox

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 8.0 in.

BRIDGE WIDTH (curb-curb): 44.0 ft.

BRIDGE LENGTH: 1,222 ft.

AVERAGE DAILY TRAFFIC (ADT): 41,300

NUMBER OF LANES: 4

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 70.4

Conc Base - Type 1B

RAIL MEETS CURRENT STANDARDS?: NO

SIDEWALK / CURB WIDTH: 1.5 Lt 1.5 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1985

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

The LMC Overlay is rutted to a depth of 1/2 inch or greater in the center lane.

We recommend removing and replacing the 1.5" LMC overlay by milling 1" and hydromilling 0.5" of overlay. This bridge is on the P2 Deck Program priority array.

The cost of removing and replacing the existing LMC will be affected by the type of new overlay to be used (modified Conc or Polyester).

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 566	ALTAMONT ST OC	Eastern	283.03

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1957	05453 , 12748	82.00 SD

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 18.0 in.

BRIDGE WIDTH (curb-curb): 104.0 ft.

BRIDGE LENGTH: 66 ft.

AVERAGE DAILY TRAFFIC (ADT): 107,710

NUMBER OF LANES: 6

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

If the Region chooses to provide temporary Asphalt Overlay, Standard Plan, Detail 1 should be used at the Back of Pavement Seats.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1984

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: Rapid Set LMC Overlay

RESURFACING COMMENT

There are areas in the LMC overlay that are debonded and are now patched. We recommend removing and replacing the LMC overlay with a 1" Polyester or Rapid Set concrete overlay. This bridge is on the P2 Program Priority Array for a Concrete Overlay.

Region may provide a temporary 1.5" Asphalt Overlay and Standard Plan A7 details (see Expansion Joints).

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
90 / 570	HAVANA ST OC	Eastern	284.35

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1957		81.76 SD

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 18.0 in.

BRIDGE WIDTH (curb-curb): 98.0 ft.

BRIDGE LENGTH: 66 ft.

AVERAGE DAILY TRAFFIC (ADT): 109,988

NUMBER OF LANES: 6

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

If the Region chooses to provide temporary Asphalt Overlay, Standard Plan, Detail 1 should be used at the Back of Pavement Seats.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1984

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: Rapid Set LMC Overlay

RESURFACING COMMENT

There are areas in the LMC overlay that are debonded and are now patched. We recommend removing and replacing the LMC overlay with a 1" Polyester or Rapid Set concrete overlay. This bridge is on the P2 Program Priority Array for a Concrete Overlay.

Region may provide a temporary 1.5" Asphalt Overlay and Standard Plan A7 details (see Expansion Joints).

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
97 / 6	SWALE CR	Southwest	8.08

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1960	06413 , 14687	70.00 SD

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 17.0 in.

BRIDGE WIDTH (curb-curb): 28.0 ft.

BRIDGE LENGTH: 103 ft.

AVERAGE DAILY TRAFFIC (ADT): 5,191

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 70.6

Conc Base - Type 1B w/Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 2.0 Lt 2.0 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

MMC Overlay

Year Applied - 1989

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod conc

RESURFACING COMMENT

Bridge Inspection results indicate nearly 5.0% of the existing concrete overlay and deck is deteriorated.

We recommend removing the existing LMC and using a hydromill and applying a 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
97 / 103	SATUS CR 3RD CROSSING	South Central	37.46

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1975	09780	88.14

BRIDGE TYPE: PCG

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 39.6 ft.

BRIDGE LENGTH: 210 ft.

AVERAGE DAILY TRAFFIC (ADT): 3,594

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

Bridge Inspection results indicate nearly 2.0% of the existing concrete overlay and deck is deteriorated.

We recommend removing the existing LMC and using a hydromill and applying a 1.5" modified concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
110 / 15	BOGACHIEL RIVER	Olympic	8.64

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1967		60.86 SD

BRIDGE TYPE: SB CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 26.0 ft.

BRIDGE LENGTH: 288 ft.

AVERAGE DAILY TRAFFIC (ADT): 1,190

NUMBER OF LANES: 2

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

orig conc with ACPmem

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 74

Conc Base - Type S

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.4 Lt 0.4 Rt

EXPANSION JOINTS

Modifications will be required to accommodate the proposed overlay.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

Bridge Inspection results indicates that nearly 13% of the concrete deck is deteriorated.

We recommend removal of the existing asphalt and membrane then hydromill the concrete deck and apply a 1.5" mod conc overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
128 / 10	SNAKE R - RED WOLF BR	South Central	0.22

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1979	10850	87.47 SD

BRIDGE TYPE: SBOX

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.7 in.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

BRIDGE WIDTH (curb-curb): 32.0 ft.

BRIDGE LENGTH: 1,450 ft.

AVERAGE DAILY TRAFFIC (ADT): 4,209

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 61

New Jersey Barrier w/Type BP

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 4.0 Rt

EXPANSION JOINTS

No Modifications Required at this time.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspection reports indicate the deck is more than 5% deteriorated.

We recommend placing 1.5" modified concrete overlay with 0.5" hydromill scarification.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
153 / 16	METHOW R	North Central	16.85

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1939	03507 , 10053 , 15037	48.16

BRIDGE TYPE: CTB

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 24.0 ft.

BRIDGE LENGTH: 454 ft.

AVERAGE DAILY TRAFFIC (ADT): 1,321

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 41

Balluster Rail

RAIL MEETS CURRENT STANDARDS?: NO

SIDEWALK / CURB WIDTH: 0.5 Lt 3.5 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

ACP w/membrane

Year Applied - 1975

Overlay Thickness - 3.0 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: ACP w/Memb

RESURFACING COMMENT

The concrete bridge deck is showing signs of distress.

We recommend: removing the 0.25' ACP; deck prep; place 0.25' HMA with membrane.

The bridge rails are also in need of replacement.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
153 / 17	METHOW R	North Central	18.91

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1939		49.32

BRIDGE TYPE: CTB

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 24.0 ft.

BRIDGE LENGTH: 302 ft.

AVERAGE DAILY TRAFFIC (ADT): 1,321

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 41
Balluster Rail

RAIL MEETS CURRENT STANDARDS?: NO

SIDEWALK / CURB WIDTH: 0.4 Lt 3.5 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

ACP w/membrane

Year Applied - 1975

Overlay Thickness - 1.8 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: RR 0.15 HMA / mem

RESURFACING COMMENT

The concrete bridge deck is showing signs of distress.

We recommend: removing the 0.15' ACP; deck prep; place 0.25' HMA with membrane. Expansion joint modification is required.

The bridge rails are also in need of replacement.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
195 / 49	PINE CR #1	Eastern	62.98

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1975	09676	92.65

BRIDGE TYPE: PCG

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 40.0 ft.

BRIDGE LENGTH: 300 ft.

AVERAGE DAILY TRAFFIC (ADT): 4,579

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Use Std. Plan A7, Transverse Joint Detail 1 at the ends of the bridge deck.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

ACP w/membrane

Year Applied - 2006

Overlay Thickness - 3.0 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

The bridge deck has nearly 6.7% patches under the HMA and membrane that was applied in 2006.

The bridge is on the P2 Deck Program list due to the amount of patching. If the deck continues to deteriorate then the existing HMA and membrane may need to be removed and replaced with a 1.5" Modified Concrete Overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
195 / 52	MILW RR OC (CMSTP&P)	Eastern	63.30

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1975	09676	95.83

BRIDGE TYPE: PCG

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.0 in.

BRIDGE WIDTH (curb-curb): 40.0 ft.

BRIDGE LENGTH: 142 ft.

AVERAGE DAILY TRAFFIC (ADT): 4,579

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Use Std. Plan A7, Transverse Joint Detail 1 at the ends of the bridge deck.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

ACP w/membrane

Year Applied - 2006

Overlay Thickness - 3.0 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

The bridge deck has nearly 8.4% patches under the HMA and membrane that was applied in 2006.

The bridge is on the P2 Deck Program list due to the amount of patching. If the deck continues to deteriorate then the existing HMA and membrane may need to be removed and replaced with a 1.5" Modified Concrete Overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
203 / 3	SLOUGH	Northwest	0.49

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1945	02999	89.96 FO

BRIDGE TYPE: TTC

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 7.5 in.

BRIDGE WIDTH (curb-curb): 36.0 ft.

BRIDGE LENGTH: 52 ft.

AVERAGE DAILY TRAFFIC (ADT): 7,993

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 42

Balluster Rail w/Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Std. Plan A7, Detail 1should be used at the end of the bridge deck.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: HMA/Memb

RESURFACING COMMENT

Bridge Ispection data incicates nearly 1.5% of the deck is deteriorated.

We recommend repairing the deck and applying a membrane and 0.15' of HMA.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
203 / 104	DRAINAGE OVERFLOW	Northwest	22.05

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1954	04825	60.44 SD

BRIDGE TYPE: CS

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 14.0 in.

BRIDGE WIDTH (curb-curb): 26.0 ft.

BRIDGE LENGTH: 89 ft.

AVERAGE DAILY TRAFFIC (ADT): 11,317

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 42

Balluster Rail w/Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 2.5 Lt 2.5 Rt

EXPANSION JOINTS

Std. Plan A7, Detail 1should be used at the end of the bridge deck.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay

RESURFACING COMMENT

Bridge Inspection reports indicate the deck is more than 5% deteriorated.

We recommend placing 1.5" modified concrete overlay with 0.5" hydromill scarification.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
203 / 106	SKYKOMISH R	Northwest	23.20

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1957	05294 , 14227	48.00 FO

BRIDGE TYPE: ST CBOX

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 28.0 ft.

BRIDGE LENGTH: 582 ft.

AVERAGE DAILY TRAFFIC (ADT): 14,166

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 42

Balluster Rail w/Thrie Beam

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 2.5 Lt 2.5 Rt

EXPANSION JOINTS

Coordinate with your Region's Maintenance Office to determine if any repairs are required.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

3/8in Polymer-Epoxy

Year Applied - 1993

Overlay Thickness - 0.4 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: Rapid Set LMC Overlay

RESURFACING COMMENT

Exclude bridge from resurfacing projects.
The existing thin polymer overlay has failed. Deck protection is warranted. P2 project wil remove existing polymer overlay and place new Polyester Concrete or RSLMC overlay. Joint modifications will be required to accommodate a new concrete overlay.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
261 / 120	TUCANNON R	South Central	10.27

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1967		88.24 SD

BRIDGE TYPE: PCG

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 5.8 in.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

BRIDGE WIDTH (curb-curb): 26.0 ft.

BRIDGE LENGTH: 211 ft.

AVERAGE DAILY TRAFFIC (ADT): 495

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 73.2

Conc Base - Type R

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 1.5 Lt 1.5 Rt

EXPANSION JOINTS

Modifications are required to accomodate the new overlay, please coordinate with the Bridge Office.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspection reports indicate the deck is more than 18% deteriorated with exposed rebar through out. Many of the small delams are over the girder stirrups.

A new 1.5" modified concrete overlay is required using a 0.5" hydomill scarification.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
290 / 4.6S	2ND AVE OC	Eastern	1.18

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1974	09622 , 12748	97.48

BRIDGE TYPE: CBOX

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 38.0 ft.

BRIDGE LENGTH: 167 ft.

AVERAGE DAILY TRAFFIC (ADT): 5,369

NUMBER OF LANES: 2

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

LMC Overlay

Year Applied - 1985

Overlay Thickness - 1.5 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: Mod Conc

RESURFACING COMMENT

The existing LMC has nearly 24% patched and deteriorated areas. The existing LMC needs to be removed, the deck repaired, then a new modified concrete overlay applied.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
303 / 12	PORT WASHINGTON CS1840	Olympic	0.73

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1958	05565 , XE2784 , 13916 , 14490	48.91 SD

BRIDGE TYPE: SG CBOX CTB

DECK TYPE: Lightweight Conc

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 55.0 ft.

BRIDGE LENGTH: 1,717 ft.

AVERAGE DAILY TRAFFIC (ADT): 40,253

NUMBER OF LANES: 4

VERTICAL CLEARANCE

VC Type:

NA

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 71.1
Conc Base - Type 2

RAIL MEETS CURRENT STANDARDS?: NO

SIDEWALK / CURB WIDTH: 4.0 Lt 4.0 Rt

EXPANSION JOINTS

No modifications required at this time.

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

Polyester Overlay
Year Applied - 1991
Overlay Thickness - 0.8 inches

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: Yes

TYPE RECOMMENDED: ACP w/Memb

RESURFACING COMMENT

Bridge Inspections indicate existing overlay is deteriorating.

We recommend removal of the existing 3/4" Polyester overlay and adding a new bembrane and 0.12' HMA.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

Washington State Department of Transportation

Bridge Deck Condition Report

BRIDGE NUMBER:	BRIDGE NAME:	REGION:	MILEPOST:
432 / 10S	COWLITZ R & NP RY OC	Southwest	9.58

YEAR BUILT / YR WIDENED:	CONTRACT NO.(S):	SUFFICIENCY RATING:
1961 / 1971	06321	52.27

BRIDGE TYPE: STrus CBox

DECK TYPE: Conc cast-in-place

DECK THICKNESS: (Main Span) 6.5 in.

BRIDGE WIDTH (curb-curb): 29.5 ft.

BRIDGE LENGTH: 1,676 ft.

AVERAGE DAILY TRAFFIC (ADT): 17,581

NUMBER OF LANES: 2

EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:

original concrete

VERTICAL CLEARANCE

VC Type:

Minimum VC = 16 FT 03 in

BRIDGE RAIL

BRIDGE RAIL TYPE: WSDOT CODE - 60

New Jersey Barrier

RAIL MEETS CURRENT STANDARDS?: YES

SIDEWALK / CURB WIDTH: 0.0 Lt 0.0 Rt

EXPANSION JOINTS

Coordinate with your Region Bridge Maintenance to determine if any repairs are needed.

DECK PROTECTIVE SYSTEM RECOMMENDATIONS

PROTECTIVE OVERLAY RECOMMENDED?: YES

TYPE RECOMMENDED: MC Overlay / Hydro

RESURFACING COMMENT

Bridge Inspection reports indicate the deck is more than 2% deteriorated with a significant amount of exposed rebar in the top of the deck near piers 9 and 12.

We recommend a 1.5" modified concrete overlay be placed with 0.5" hydromill scarification.

REVIEWED BY: *Bruce Thill*

DATE: 2/26/2010

P2 Bridge Preservation - Steel Bridge Painting Projects

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile Post	Region	Yr Work Planned	Total Project$
1	101/1(B)	COL R ASTORIA (TRUSS)		Southwest	2011	$18,599,000
1	433/1	COLUMBIA R-LEWIS&CLARK	0.00	Southwest	2010	$22,000,000
2	5/40W	LEWIS R	19.83	Southwest	2012	$9,984,000
3	5/40E	LEWIS R	19.87	Southwest	2012	$7,260,500
4	5/232W	SKOOKUMCHUCK R	82.28	Southwest	2012	$1,267,000
5	5/232E	SKOOKUMCHUCK R	82.28	Southwest	2012	$1,267,000
6	5/828W	NOOKSACK R	263.05	Northwest	2012	$1,407,000
7	5/828E	NOOKSACK R	263.05	Northwest	2012	$1,554,000
8	5/345W	NISQUALLY R	114.86	Olympic	2012	$3,303,835
9	5/345E	NISQUALLY RIVER	114.86	Olympic	2012	$3,445,000
10	141/5	WHITE SALMON RIVER	8.70	Southwest	2012	$700,000
11	97/1	BIGGS RAPIDS-SAM HILL BR	0.00	Southwest	2014	$6,000,000
12	101/125W	HOQUIAM R-SIMPSON CS141	86.76	Olympic	2012	$4,147,000
13	90/180	COLUMBIA R VANTAGE	137.19	South Central	2015	$5,000,000
14	18/17S	GREEN R (NEELEY BRIDGE)	6.62	Northwest	2014	$1,281,000
15	99/560	AURORA AVE-G WASH MEM	34.14	Northwest	2015	$50,000,000
16	90/25S	LACEY V. MURROW BRIDGE	4.24	Northwest	2015	$18,850,000
17	409/10	JULIA BUTLER HANSEN BR	2.92	Southwest	2015	$7,761,000
18	101/125E	HOQUIAM R-RIVERSIDE 1417	87.31	Olympic	2015	$3,939,000
19	12/309	WILDCAT CR	165.95	Southwest	2015	$200,000
20	207/4	WENATCHEE RIVER	4.22	North Central	2015	$1,015,000
21	101/310	SOL DUC R	194.30	Olympic	2015	$756,000
22	101/322	SOL DUC RIVER #5	212.46	Olympic	2015	$1,029,000
23	107/4	CHEHALIS R	6.83	Olympic	2015	$2,233,000
24	101/256	BIG QUILCENE R	296.67	Olympic	2015	$847,000
25	109/10	HUMPTULIPS R	10.24	Olympic	2015	$1,582,000
26	21/334	KETTLE R	181.00	Eastern	2015	$1,260,000
27	9/118	SNOHOMISH R	9.17	Northwest	2015	$2,240,000
28	202/60	SNOQUALMIE R	26.00	Northwest	2015	$1,491,000
29	9/122	SR 9 OC, BICKFORD AVE	10.87	Northwest	2015	$196,000
30	5/670W	STILLAGUAMISH R	209.35	Northwest	2015	$2,846,250
31	5/203W	COWLITZ R	59.06	Southwest	2017	$2,205,000
32	5/203E	COWLITZ R	59.06	Southwest	2017	$2,205,000

P2 Bridge Preservation - Steel Bridge Painting Projects

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile Post	Region	Yr Work Planned	Total Project$
33	5/532W	SB VIADUCT STA 1918	160.07	Northwest	2017	$1,146,750
34	5/650W	EBEY SL BN RY SR 529 OC	198.51	Northwest	2017	$1,223,750
35	5/105W	BN RR OC (NP)	26.01	Southwest	2017	$1,100,000
36	5/104W	DIKE ACCESS RD & RR OC	22.72	Southwest	2017	$2,227,500
37	82/280S	COLUMBIA R BR @ UMATILLA	132.36	South Central	2017	$12,000,000
38	432/10S	COWLITZ R & NP RY OC	9.58	Southwest	2017	$2,226,000
39	410/101	WHITE R	21.99	Northwest	2017	$1,673,000
40	99/538	SPOKANE ST OC	29.15	Northwest	2017	$863,500
41	167/127W	BN RR OC (NP)	20.96	Northwest	2017	$412,500
42	167/127E	BN RR OC (NP)	20.96	Northwest	2017	$412,500
43	12/328S	NACHES R NELSON	198.66	South Central	2017	$2,100,000
44	12/328N	NACHES R NELSON	198.66	South Central	2017	$1,185,000
45	24/105	COLUMBIA R VERNITA	43.60	South Central	2019	$1,822,500
46	97/420	COLUMBIA R BEEBE	235.06	North Central	2019	$4,860,000
47	285/10	SEN. GEORGE SELLAR BR.	0.25	North Central	2019	$8,550,000
48	395/545	COLUMBIA R KETTLE FALLS	241.49	Eastern	2019	$10,712,000
49	2/40	S FK SKYKOMISH R	35.21	Northwest	2019	$1,652,000
50	20/204	DECEPTION PASS	41.81	Northwest	2019	$7,592,000
51	12/241	TWIN CANYON CR	89.48	Southwest	2019	$486,750
52	101/115	CHEHALIS R	83.12	Olympic	2019	$9,142,500
53	305/10	AGATE PASS	6.82	Olympic	2019	$10,289,500
54	25/130	COLUMBIA R @ NORTHPORT	113.92	Eastern	2019	$7,585,500
55	6/118	CHEHALIS R ADNA	46.59	Southwest	2019	$783,750
56	20/244	SCOTT PAPER RD OVR SR 20	76.94	Northwest	2019	$200,000
57	5/526.1	ARCHIE CODIGA BRIDGE	156.48	Northwest	2019	$682,000
58	504/15	N FK TOUTLE R KID VALLEY	17.29	Southwest	2019	$602,250
59	4/209	HALF BR W OF BUNKER HILL	49.80	Southwest	2019	$200,000
60	101/29	SOUTH NEMAH R NO 1	32.52	Southwest	2021	$200,000
61	202/66	S FK SNOQUALMIE R	29.50	Northwest	2021	$214,500
62	4/106A	GRAYS R ROSBURG	15.07	Southwest	2021	$264,000
63	27/12	N FK PALOUSE R	15.02	Eastern	2021	$574,000
64	507/114	DESCHUTES R	20.43	Olympic	2021	$412,500
65	20/311	HALF BR STA 155	122.41	Northwest	2021	$200,000

P2 Bridge Preservation - Steel Bridge Painting Projects

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile Post	Region	Yr Work Planned	Total Project$
66	542/33	GLACIER CR	33.49	Northwest	2021	$200,000
67	7/105	MASHEL R	27.91	Olympic	2021	$272,250
68	153/4	METHOW R	4.22	North Central	2021	$813,750
69	153/101	COLUMBIA R GRAND COULE	28.26	North Central	2021	$5,625,000
70	530/290	ROCKPORT BRIDGE	67.34	Northwest	2021	$673,750
71	165/10	CARBON RIVER	11.50	Olympic	2021	$671,250
73	101/308	CALAWAH R	192.36	Olympic	2021	$1,113,000
74	536/15	SKAGIT R CS2907	4.72	Northwest	2021	$3,471,000
75	4/120	SKAMOKAWA CR CS3505	28.92	Southwest	2021	$547,500

Total Number of Bridges = 75

Total Project $ = $294,854,335

P2 Bridge Preservation - Steel Bridge Painting Projects

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile Post	Region	Yr Work Planned	Total Project$
49	2/40	S FK SKYKOMISH R	35.21	Northwest	2019	$1,652,000
62	4/106A	GRAYS R ROSBURG	15.07	Southwest	2021	$264,000
75	4/120	SKAMOKAWA CR CS3505	28.92	Southwest	2021	$547,500
59	4/209	HALF BR W OF BUNKER HILL	49.80	Southwest	2019	$200,000
3	5/40E	LEWIS R	19.87	Southwest	2012	$7,260,500
2	5/40W	LEWIS R	19.83	Southwest	2012	$9,984,000
36	5/104W	DIKE ACCESS RD & RR OC	22.72	Southwest	2017	$2,227,500
35	5/105W	BN RR OC (NP)	26.01	Southwest	2017	$1,100,000
32	5/203E	COWLITZ R	59.06	Southwest	2017	$2,205,000
31	5/203W	COWLITZ R	59.06	Southwest	2017	$2,205,000
5	5/232E	SKOOKUMCHUCK R	82.28	Southwest	2012	$1,267,000
4	5/232W	SKOOKUMCHUCK R	82.28	Southwest	2012	$1,267,000
9	5/345E	NISQUALLY RIVER	114.86	Olympic	2012	$3,445,000
8	5/345W	NISQUALLY R	114.86	Olympic	2012	$3,303,835
57	5/526.1	ARCHIE CODIGA BRIDGE	156.48	Northwest	2019	$682,000
33	5/532W	SB VIADUCT STA 1918	160.07	Northwest	2017	$1,146,750
34	5/650W	EBEY SL BN RY SR 529 OC	198.51	Northwest	2017	$1,223,750
30	5/670W	STILLAGUAMISH R	209.35	Northwest	2015	$2,846,250
7	5/828E	NOOKSACK R	263.05	Northwest	2012	$1,554,000
6	5/828W	NOOKSACK R	263.05	Northwest	2012	$1,407,000
55	6/118	CHEHALIS R ADNA	46.59	Southwest	2019	$783,750
67	7/105	MASHEL R	27.91	Olympic	2021	$272,250
27	9/118	SNOHOMISH R	9.17	Northwest	2015	$2,240,000
29	9/122	SR 9 OC, BICKFORD AVE	10.87	Northwest	2015	$196,000
51	12/241	TWIN CANYON CR	89.48	Southwest	2019	$486,750
19	12/309	WILDCAT CR	165.95	Southwest	2015	$200,000
44	12/328N	NACHES R NELSON	198.66	South Central	2017	$1,185,000
43	12/328S	NACHES R NELSON	198.66	South Central	2017	$2,100,000
14	18/17S	GREEN R (NEELEY BRIDGE)	6.62	Northwest	2014	$1,281,000
50	20/204	DECEPTION PASS	41.81	Northwest	2019	$7,592,000
56	20/244	SCOTT PAPER RD OVR SR 20	76.94	Northwest	2019	$200,000
65	20/311	HALF BR STA 155	122.41	Northwest	2021	$200,000
26	21/334	KETTLE R	181.00	Eastern	2015	$1,260,000

P2 Bridge Preservation - Steel Bridge Painting Projects

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile Post	Region	Yr Work Planned	Total Project$
45	24/105	COLUMBIA R VERNITA	43.60	South Central	2019	$1,822,500
54	25/130	COLUMBIA R @ NORTHPORT	113.92	Eastern	2019	$7,585,500
63	27/12	N FK PALOUSE R	15.02	Eastern	2021	$574,000
37	82/280S	COLUMBIA R BR @ UMATILLA	132.36	South Central	2017	$12,000,000
16	90/25S	LACEY V. MURROW BRIDGE	4.24	Northwest	2015	$18,850,000
13	90/180	COLUMBIA R VANTAGE	137.19	South Central	2015	$5,000,000
11	97/1	BIGGS RAPIDS-SAM HILL BR	0.00	Southwest	2014	$6,000,000
46	97/420	COLUMBIA R BEEBE	235.06	North Central	2019	$4,860,000
40	99/538	SPOKANE ST OC	29.15	Northwest	2017	$863,500
15	99/560	AURORA AVE-G WASH MEM	34.14	Northwest	2015	$50,000,000
1	101/1(B)	COL R ASTORIA (TRUSS)		Southwest	2011	$18,599,000
60	101/29	SOUTH NEMAH R NO 1	32.52	Southwest	2021	$200,000
52	101/115	CHEHALIS R	83.12	Olympic	2019	$9,142,500
18	101/125E	HOQUIAM R-RIVERSIDE 1417	87.31	Olympic	2015	$3,939,000
12	101/125W	HOQUIAM R-SIMPSON CS141	86.76	Olympic	2012	$4,147,000
24	101/256	BIG QUILCENE R	296.67	Olympic	2015	$847,000
73	101/308	CALAWAH R	192.36	Olympic	2021	$1,113,000
21	101/310	SOL DUC R	194.30	Olympic	2015	$756,000
22	101/322	SOL DUC RIVER #5	212.46	Olympic	2015	$1,029,000
23	107/4	CHEHALIS R	6.83	Olympic	2015	$2,233,000
25	109/10	HUMPTULIPS R	10.24	Olympic	2015	$1,582,000
10	141/5	WHITE SALMON RIVER	8.70	Southwest	2012	$700,000
68	153/4	METHOW R	4.22	North Central	2021	$813,750
69	153/101	COLUMBIA R GRAND COULE	28.26	North Central	2021	$5,625,000
71	165/10	CARBON RIVER	11.50	Olympic	2021	$671,250
42	167/127E	BN RR OC (NP)	20.96	Northwest	2017	$412,500
41	167/127W	BN RR OC (NP)	20.96	Northwest	2017	$412,500
28	202/60	SNOQUALMIE R	26.00	Northwest	2015	$1,491,000
61	202/66	S FK SNOQUALMIE R	29.50	Northwest	2021	$214,500
20	207/4	WENATCHEE RIVER	4.22	North Central	2015	$1,015,000
47	285/10	SEN. GEORGE SELLAR BR.	0.25	North Central	2019	$8,550,000
53	305/10	AGATE PASS	6.82	Olympic	2019	$10,289,500
48	395/545	COLUMBIA R KETTLE FALLS	241.49	Eastern	2019	$10,712,000

P2 Bridge Preservation - Steel Bridge Painting Projects

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile Post	Region	Yr Work Planned	Total Project$
17	409/10	JULIA BUTLER HANSEN BR	2.92	Southwest	2015	$7,761,000
39	410/101	WHITE R	21.99	Northwest	2017	$1,673,000
38	432/10S	COWLITZ R & NP RY OC	9.58	Southwest	2017	$2,226,000
1	433/1	COLUMBIA R-LEWIS&CLARK	0.00	Southwest	2010	$22,000,000
58	504/15	N FK TOUTLE R KID VALLEY	17.29	Southwest	2019	$602,250
64	507/114	DESCHUTES R	20.43	Olympic	2021	$412,500
70	530/290	ROCKPORT BRIDGE	67.34	Northwest	2021	$673,750
74	536/15	SKAGIT R CS2907	4.72	Northwest	2021	$3,471,000
66	542/33	GLACIER CR	33.49	Northwest	2021	$200,000

Total Number of Bridges = 75

Total Project $ = $294,854,335

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
2 / 40	S FK SKYKOMISH R	35.21	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1933	ST CTB	240 ft.	24 ft.	236

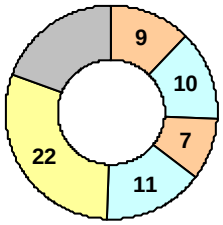
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Evergreen	35,400 sqft	2,500 sqft	1,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	49	Due			$1,652,000

Past Paint History

Years	Cycle
1988	11
1977	7
1970	10
1960	9
1951	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:
Painted stringers, floorbeams, and truss has some peeling and curling paint. Paint protection has failed at the floorbeam and stringer top flange to deck interface. Rust with section loss, up to 5%, in top flanges of the stringers at interface with the deck. Floorbeams top flanges show up to 10% section loss.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
4 / 106A	GRAYS R ROSBURG	15.07	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1947	SG PCTB	192 ft.	28 ft.	96

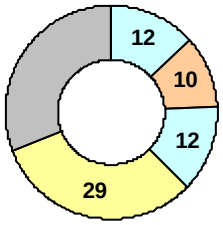
Paint Age:	Paint Color: N/A	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
29	Light Green	10,560 sqft	2,150 sqft	75 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	62	Due			$264,000

Past Paint History

Years	Cycle
1981	12
1969	10
1959	12
1947	

Painting Cycle



= Current Paint Age

This road was turned over to the county as part of the 1991 RJT transfer. WSDOT still has maintenance responsibility on the bridge. The old bridge number was 403/7.

The paint is still in good condition with a few spot rusting areas on the bottom flange of some steel beams. The next paint contract should exclude the steel members constructed as part of the seismic retrofit at the north and south ends of the steel beam spans.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:		Milepost:	Region:
4 / 120	SKAMOKAWA CR	CS3505	28.92	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1939	SG CTB TTT	105 ft.	24 ft.	146

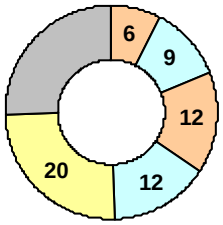
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Light Gray	21,900 sqft	9,000 sqft	200 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	75	Due			$547,500

Past Paint History

Years	Cycle
1990	12
1978	12
1966	9
1957	6
1951	

Painting Cycle



= Current Paint Age

No Photo Available

No Photo Available

This bridge was originally designed to be a movable bridge.

There is dirt and debris up to 6" deep on the bottom flanges of steel through girders at floor beam gussets and next to drain pipes. Many rust spots and blistered paint on top flange. Light rust pack on top flanges of floor beams near ends.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
4 / 209	HALF BR W OF BUNKER HILL	49.80	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1930	SB CS	29 ft.	26 ft.	8

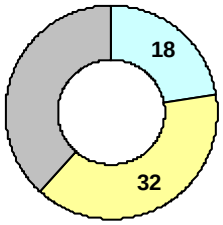
Paint Age:	Paint Color: N/A	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
32	Light Green	880 sqft	390 sqft	50 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	59	Due			$200,000

Past Paint History

Years	Cycle
1978	18
1950	

Painting Cycle



= Current Paint Age

No Photo Available

No Photo Available

The bridge is located at the east approach to the half bridge. The roadway is very narrow in this location making the access and inspection difficult.

The paint is in fair condition. None of the steel beams have significant rusting but a couple of the bolts in the diaphrams are very rusty.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 40E	LEWIS R	19.87	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1968	ST CBOX	810 ft.	48 ft.	1,117

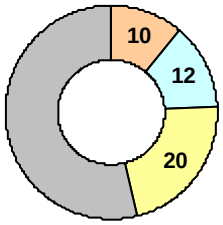
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Evergreen	167,550 sqft	55,850 sqft	50,265 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2012	3	Past Due			$7,260,500

Past Paint History

Years	Cycle
1990	12
1978	10
1968	

Painting Cycle



= Current Paint Age

The top chords, bottom chords, end posts, end portals and some of the sways need to have full paint removal. The rest of the bridge could be overcoated.
Testing of the paint is needed to see if it can be overcoated.

Bridge Inspector's Note:
Peeling and cracking paint on stringers and floor beams. Up to 30% of surface area of upper truss has surface rust. Paint is peeling on the inside of the bottom chord. Some blistering on the tops of the diagonals.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 40W	LEWIS R	19.83	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1940	ST CTB	810 ft.	48 ft.	1,536

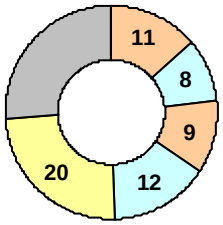
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Evergreen	230,400 sqft	138,240 sqft	11,520 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2012	2	Past Due			$9,984,000

Past Paint History

Years	Cycle
1990	12
1978	9
1969	8
1961	11
1950	

Painting Cycle



= Current Paint Age

The top chords, bottom chords, end posts, end portals and some of the sways need to have full paint removal.

Bridge Inspector's notes:
Paint is peeling and cracking over large areas of the steel truss surface. Freckeled rust spots throughout the truss. Primer is visible in many areas due to the loss of the top coat. Portal frame faces are rusty. Top chord, top surfaces of top chords from U1 thru U29 have bare metal visible. Sway frames and cross bracing have bare metal visible. Floorbeams and stringers have many areas of peeling paint with surface rust.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 104W	DIKE ACCESS RD & RR OC	22.72	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1972	SB	675 ft.	52 ft.	810

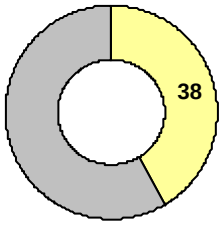
Paint Age:	Paint Color: G-148	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
38	Steel Gray	89,100 sqft	1,000 sqft	0 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	36	Due			$2,227,500

Past Paint History

Years	Cycle
1972	

Painting Cycle



= Current Paint Age

No Photo Available

No Photo Available

The paint still looks to be in good condition. There are a few areas of rust staining on the bottom flange of the steel beams.

The cost to replace this bridge is approximately 52'x 675'x $400/SF = $14.0 million.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 105W	BN RR OC (NP)	26.01	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1972	SB	384 ft.	52 ft.	400

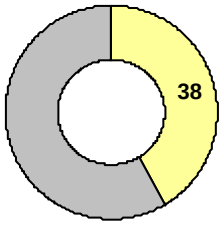
Paint Age:	Paint Color: G-148	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
38	Steel Gray	44,000 sqft	0 sqft	880 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	35	Due			$1,100,000

Past Paint History

Years	Cycle
1972	

Painting Cycle



= Current Paint Age

The paint still looks to be in good condition. There are a few areas of rust staining on the bottom flange of the steel beams.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 203E	COWLITZ R	59.06	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1953	ST CTB	483 ft.	33 ft.	588

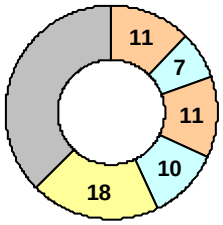
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
18	Evergreen	88,200 sqft	40,000 sqft	1,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	32	Due			$2,205,000

Past Paint History

Years	Cycle
1992	10
1982	11
1971	7
1964	11
1953	

Painting Cycle



= Current Paint Age

First project to use the current 3-part; Zinc prime coat , MC urethane intermediate and final coat.

Bridge Inspection Notes:
There are rust blooms and bare spots throughout. Paint on top of the top chords is weathered with some rust blooms and peeling paint. The sides of top chords, the verticals, and the diagonals are typically moss stained.
The tops of the floorbeam bottom flanges have thick paint with some cracking and flaking over about 10 percent of the surface area.
The tops of stringer bottom flanges have scattered areas of peeling paint.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 203W	COWLITZ R	59.06	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1953	ST CTB	483 ft.	31.9 ft.	588

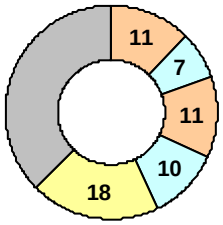
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
18	Evergreen	88,200 sqft	800 sqft	100 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	31	Due			$2,205,000

Past Paint History

Years	Cycle
1992	10
1982	11
1971	7
1964	11
1953	

Painting Cycle



= Current Paint Age

No Photo Available

First project to use the current 3-part; Zinc prime coat , MC urethane intermediate and final coat.

The cost to replace this bridge is approximately 36'x 760'x $400/SF = $11.0 million.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 232E	SKOOKUMCHUCK R	82.28	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1951	ST CTB	160 ft.	31 ft.	181

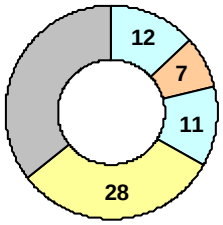
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
28	Evergreen	27,150 sqft	14,297 sqft	572 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2012	5	Past Due			$1,267,000

Past Paint History

Years	Cycle
1982	11
1971	7
1964	12
1952	

Painting Cycle



= Current Paint Age

This bridge was going to be replaced but due to estimated high project costs the SW Region decided to leave this bridge in service and build a parallel Collector/Distributer ramp bridge.

This paint on this bridge is the oldest of any WSDOT steel truss bridge not to be replaced.

The next painting project (around 2013) will require full removal of the existing paint using an SSPC-SP6 standard and then applying a new zinc-moisture cured urethane paint system.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 232W	SKOOKUMCHUCK R	82.28	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1951	ST CTB	160 ft.	31 ft.	181

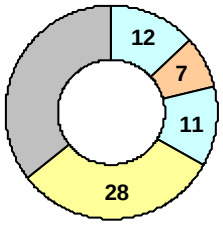
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
28	Evergreen	27,150 sqft	5,000 sqft	1,500 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2012	4	Past Due			$1,267,000

Past Paint History

Years	Cycle
1982	11
1971	7
1964	12
1952	

Painting Cycle



= Current Paint Age

This bridge was going to be replaced but due to estimated high project costs the SW Region decided to leave this bridge in service and build a parallel Collector/Distributer ramp bridge.

This paint on this bridge is the oldest of any WSDOT bridge not to be replaced.

The next painting project (around 2013) will require full removal of the existing paint using an SSPC-SP6 standard and then applying a new zinc-moisture cured urethane paint system.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 345E	NISQUALLY RIVER	114.86	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1937	ST PCB	323 ft.	42.6 ft.	530

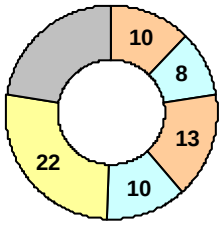
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Evergreen	79,500 sqft	23,850 sqft	4,500 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2012	9	Past Due			$3,445,000

Past Paint History

Years	Cycle
1988	10
1978	13
1965	8
1957	10
1947	

Painting Cycle



= Current Paint Age

May 2009 bridge inspection report notes:
Heavy accumulation of dirt and debris on and inside the truss bottom chords, heaviest in many panel point connections. Rust blooms and some rivet section loss inside bottom chords. Some pack rust noted. Some Laminar rust along top flange of steel floor beams. Top flange rust on steel stringers. Many of the top sway braces between the two truss over the roadway deck are heavily rusted.
Fatigue cracks in the steel stringers were repaired by contract in 2009.

Next Paint Project:
Full removal of the existing lead paint system is required. The new paint system will include a zinc primer and moisture cured urethane.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 345W	NISQUALLY R	114.86	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1967	ST PCB	322 ft.	48 ft.	506

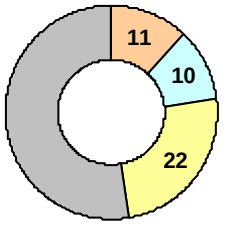
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Evergreen	75,900 sqft	26,565 sqft	3,795 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2012	8	Past Due			$3,303,835

Past Paint History

Years	Cycle
1988	10
1978	11
1967	

Painting Cycle



= Current Paint Age

April 2009 bridge inspection report notes:

The paint is thin and chalky throughout. There is peeling paint, surface rust and rust blooms inside the steel bottom chord and other members.

Next Paint Project:
Full removal of the existing lead paint system is required. The new paint system will include a zinc primer and moisture cured urethane.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 526.1	ARCHIE CODIGA BRIDGE	156.48	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1966	SB TTT	645 ft.	26 ft.	248

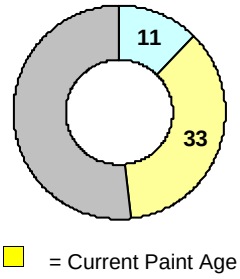
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
33	Light Gray	27,280 sqft	1,400 sqft	1,300 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	57	Due			$682,000

Past Paint History

Years	Cycle
1977	11
1966	

Painting Cycle



= Current Paint Age

Bridge Inspector's Notes:
Top flange rust in exterior stringers at sidewalk joints. Rust blooms in both top and bottom flanges. Large piles of pigeon guano on bottom lateral gusset plates. Fire damage at east abutment burnt an area of the paint but no significant damage. Peeling paint is more prevalent in Spans 1 and 2.

Bridge Office Recommendation:
Contain steel spans, use a SP7 Sweep blast, overcoat with a 2 coat moisture cured urethane.

Estimate Bridge Item costs using $20/SF steel area. Total cost = Br$ x 1.5

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 532W	SB VIADUCT STA 1918	160.07	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1967	SG	529 ft.	76.9 ft.	417

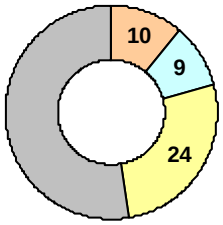
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
24	Light Gray	45,870 sqft	2,300 sqft	800 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	33	Due			$1,146,750

Past Paint History

Years	Cycle
1986	9
1977	10
1967	

Painting Cycle



= Current Paint Age

No Photo Available

This bridge was widened as part of contract #14543. Two new steel beams were added to the west outside of the bridge (131 tons). These new beams have a paint thickness of 7.0mils and used a "Washington Gray" color. The next paint project on this bridge should exclude the new beam since it was painted with a zinc primer and moisture cured urethane top coat.

Bridge Inspection Notes:
The paint is chalky throughout with areas that are peeling and flaking, especially along the bottom of the girder top flanges. There are many areas of spot rusting.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 650W	EBEY SL BN RY SR 529 OC	198.51	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1954	SG CTB	300 ft.	54 ft.	445

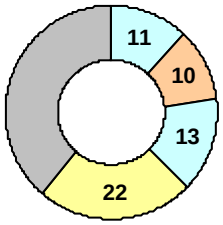
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Light Gray	48,950 sqft	2,500 sqft	250 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	34	Due			$1,223,750

Past Paint History

Years	Cycle
1988	13
1975	10
1965	11
1954	

Painting Cycle



= Current Paint Age

The inspection report says:

"A few small areas of missing paint on the bottom flanges. Light top flange rust on beams and cross brace channels below the deck slab joint over piers 24 and 25. Pigeon nests and guano on lateral gusset plates and bottom flanges. Center wind locks over plate under south link & pins in span 24 is rusted and jammed with 5/8" of rust pack."

The cost to replace the steel spans is approximately 54'x 300'x $400/SF = $6.5 million.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 670W	STILLAGUAMISH R	209.35	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1933	ST CTB	600 ft.	48 ft.	759

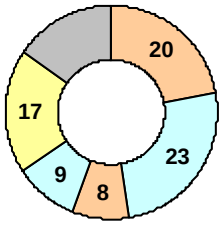
Paint Age:	Paint Color: 26329	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
17	Steel Gray	113,850 sqft	3,500 sqft	1,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	30	Due			$2,846,250

Past Paint History

Years	Cycle
1993	9
1984	8
1976	23
1953	20
1933	

Painting Cycle



= Current Paint Age

The 1993 painting contract was one of the first in the state that required the containment and disposal of the abrasives used to prepare the steel surfaces. The inspection report says that there is "small rust blooms scattered throughout. Some rust at bottom gusset connections to the bottom chord. Rust staining on top flanges of stringers and floorbeams." As part of the cost estimate for the next painting project, an assumption of 15% of the total steel area will need abrasive blasting.

The bridge deck is scheduled to be replaced in the 2013-15 biennium. The bridge painting should follow the deck replacement in a separate project.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 828E	NOOKSACK R	263.05	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1955	ST CTB	220 ft.	28 ft.	222

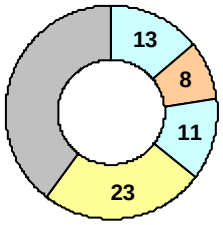
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
23	Light Gray	33,300 sqft	10,000 sqft	3,330 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2012	7	Past Due		100595E	$1,554,000

Past Paint History

Years	Cycle
1987	11
1976	8
1968	13
1955	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:

The paint system is chalking, peeling, and curling. Paint has peeled up to 10% of area to exposed rusty metal. Paint has peeled up to 30% of area without exposed metal.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
5 / 828W	NOOKSACK R	263.05	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1971	ST PCB	220 ft.	38 ft.	201

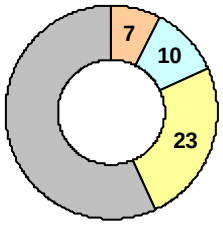
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
23	Light Gray	30,150 sqft	20,000 sqft	500 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2012	6	Past Due		100595E	$1,407,000

Past Paint History

Years	Cycle
1987	10
1977	7
1970	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:

STEEL STRINGERS - Some of the ends near the floor beams are rusting in the top flange.
FLOOR BEAMS - Top flange of the floor beams are rusting with up to 5% section loss. The top flange at the ends has the most advanced rusting.
TRUSS BOTTOM CHORD - Pack rust between the bottom lateral gusset plates and the bottom chord with a few starting to bulge. Paint is peeling with over 40% gone exposing the previous paint. The top paint is not adhering to the bottom paint. Pigeon quano noted.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
6 / 118	CHEHALIS R ADNA	46.59	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1971	SB	406 ft.	40 ft.	285

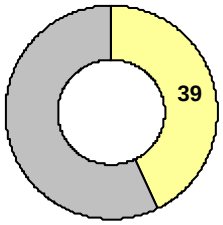
Paint Age:	Paint Color: G-148	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
39	Steel Gray	31,350 sqft	12,000 sqft	30 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	55	Due			$783,750

Past Paint History

Years	Cycle
1971	

Painting Cycle



= Current Paint Age

The steel beams are a combination of A588 weathering steel and A441. The areas under the expansion joints at piers 1 & 4 are A441.

Bridge Inspection Notes:
Chalky thin paint on body of girder webs. Several 1" diameter paint chips on outside girders. Girders have newer paint on the west face compared to the rest of the girders. Girder 2B has paint blistered off the flange connection bolts.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
7 / 105	MASHEL R	27.91	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1948	SB	195 ft.	24 ft.	99

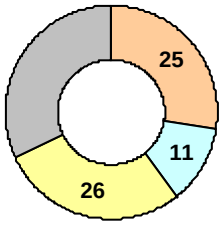
Paint Age:	Paint Color: 26329	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
26	Steel Gray	10,890 sqft	700 sqft	500 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	67	Due			$272,250

Past Paint History

Years	Cycle
1984	11
1973	25
1948	

Painting Cycle



= Current Paint Age

Bridge Inspection note:
Paint is peeling on the outside edges of bottom flange of rolled girders and riveted girders. Top flange surface rust on steel girders.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
9 / 118	SNOHOMISH R	9.17	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1959	ST CBOX CTB	300 ft.	29.3 ft.	320

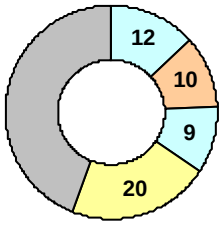
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Evergreen	48,000 sqft	9,435 sqft	1,572 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	27	Past Due			$2,240,000

Past Paint History

Years	Cycle
1990	9
1981	10
1971	12
1959	

Painting Cycle



= Current Paint Age

No Photo Available

Bridge Inspection Notes:
Truss members are moss covered and have peeling paint. Inside faces have more peeling paint than the outside faces. There is bird guano and dirt accumulations up to 3" deep in joint areas. The gray primer is exposed and peeling paint as noted: Top Chord - 80% gone; Diagonals - 40% gone; Bottom Chord - 50% gone.

Full removal of the paint is warranted based on the condition of the existing paint.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
9 / 122	SR 9 OC, BICKFORD AVE	10.87	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1963	SB TTT	64 ft.	30 ft.	28

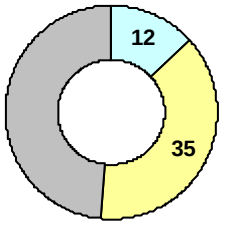
Paint Age:	Paint Color: N/A	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
35	N/A	3,080 sqft	1,500 sqft	600 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	29	Past Due			$196,000

Past Paint History

Years	Cycle
1975	12
1963	

Painting Cycle



= Current Paint Age

Bridge Inspector's Notes:

Spots of surface rust throughout. Peeled paint and sheet rust on girder end bottom flanges and on flange edges. Rust freckles on many bolts and end cross bracing elements.

Bridge Office Recommendation:

Use a containment system, prepare steel using SP7 Sweep blast, apply a three coat rust penatrating sealer paint system.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
12 / 241	TWIN CANYON CR	89.48	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1967	SB	410 ft.	28 ft.	177

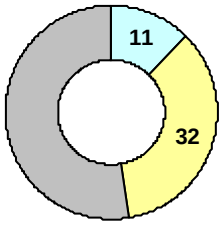
Paint Age:	Paint Color: 30277	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
32	Light Brown	19,470 sqft	402 sqft	27 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	51	Due			$486,750

Past Paint History

Years	Cycle
1978	11
1967	

Painting Cycle



= Current Paint Age

The bridge has three steel girders with a 7'-4" height and spaced 11.5' apart.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
12 / 309	WILDCAT CR	165.95	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1936	SB TTT	35 ft.	26 ft.	10

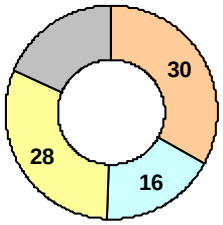
Paint Age:	Paint Color: 30318	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
28	Warm Conc Gray	1,100 sqft	110 sqft	110 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	19	Past Due			$200,000

Past Paint History

Years	Cycle
1982	16
1966	30
1936	

Painting Cycle



= Current Paint Age

Bridge Inspector's Notes:
Paint has failed in many areas but mostly at east end of girders and diaphragm over Pier 5. Rust blooms in several areas of the girder flanges.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
12 / 328N	NACHES R NELSON	198.66	South Central

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1958	ST	304 ft.	28 ft.	316

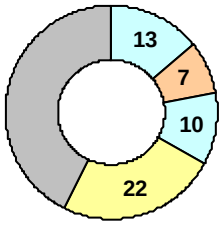
Paint Age:	Paint Color: 30277	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Light Brown	47,400 sqft	15,000 sqft	1,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	44	Due			$1,185,000

Past Paint History

Years	Cycle
1988	10
1978	7
1971	13
1958	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:
Paint is peeling on all members except stringers, mostly in locations where the pigeons are. The green base paint is exposed along the top of the bottom chords. Surface rust is visible on vertical faces exposed to sunlight.
Floorbeams - Most have rusting in the top flange. A few small areas of paint peeling scattered throughout.
Truss - Pack rust in bottom chord splice plate L6-L7.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
12 / 328S	NACHES R NELSON	198.66	South Central

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1966	ST	304 ft.	30.2 ft.	300

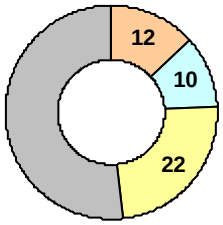
Paint Age:	Paint Color: 30277	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Light Brown	45,000 sqft	20,000 sqft	10,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	43	Due			$2,100,000

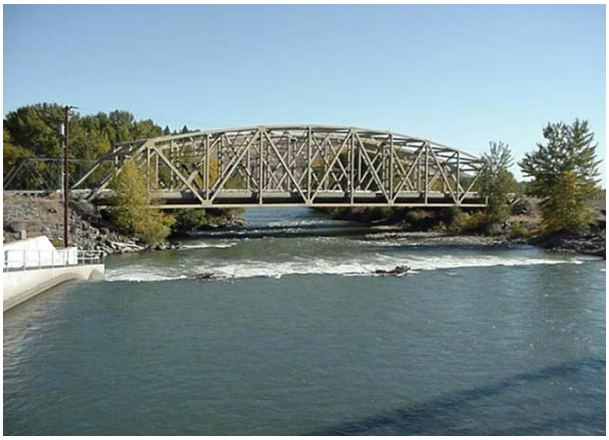
Past Paint History

Years	Cycle
1988	10
1978	12
1966	

Painting Cycle



= Current Paint Age



Bridge Inspector's notes:
Paint is peeling on all members except stringers, mostly in locations with pigeons guano. The green base paint is exposed along the top of the bottom chords. Surface rust is visible on vertical faces exposed to sunlight.

A paint inspection will be needed to determine if the existing paint can be overcaoted or if it needs to be removed.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
18 / 17S	GREEN R (NEELEY BRIDGE)	6.62	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1959	ST CBOX	200 ft.	29.5 ft.	183

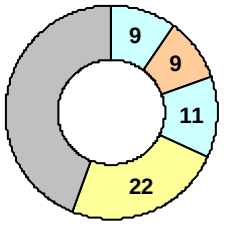
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Evergreen	27,450 sqft	5,500 sqft	3,700 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2014	14	Past Due			$1,281,000

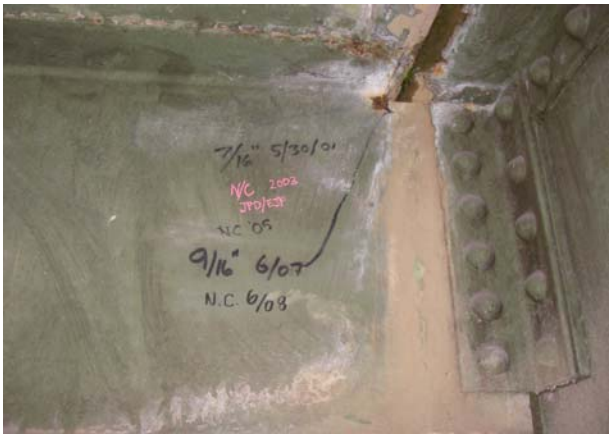
Past Paint History

Years	Cycle
1988	11
1977	9
1968	9
1959	

Painting Cycle



= Current Paint Age



Bridge Inspector's notes:
Rusting in sliding joints at stringers and on top flanges of stringer near floor beams. Rusting in several exposed areas at floor beams.
TRUSS: Mossy growth on paint with a few pits and rust blooms. Rust blooms on portals and top sways throughout. Paint peeling off in sheets on W. portal frame.
FLOOR BEAMS: Mud and rust staining on the top flanges, webs and bottom flanges. Sheet rust on the bottom side of the top flange up to 1/8" deep. Top flange has 5-10% section loss, mostly near the end of the floor beams.

Full removal of the paint is warranted based on existing paint condition.

Steel Bridge Paint Form

Bridge Number:	Bridge Name:	Milepost:	Region:
20 / 204	DECEPTION PASS	41.81	Northwest

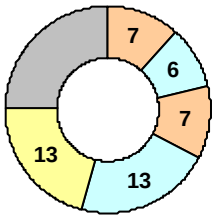
Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1935	ST CTB	900 ft.	22 ft.	1,168

Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
13	Evergreen	175,200 sqft	87,600 sqft	10,260 sqft

Next Paint Year:	2011-13 Rank:	Past Due/Due/OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	50	Due			$7,592,000

Years	Cycle
1997	13
1984	7
1977	6
1971	7
1954	

Painting Cycle



= Current Paint Age

Full removal of the existing paint was required to the floor beams and stringers in the last painting contract.

Up to 10% section loss was noted in the top and bottom flanges of the stringers prior to being painted in 1998. Rust at interface between top flanges and deck. Surface rust with some pitting. Pack rust in the bottom flanges and bearing seats with up to 50% section loss, especially Stringers A and E. There are many areas that are rusting through the paint. Paint preparation and thickness varied greatly throughout the bridge from several layers of paint protection to over spray with no preparation to the metal. Rust stains on several of the members. Surface rust on several of the stringers and truss members.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
20 / 244	SCOTT PAPER CO RD UC	76.94	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1967	SB TTT	41 ft.	14 ft.	7

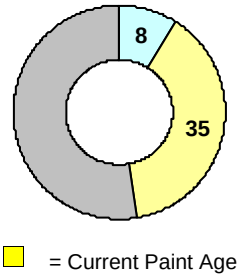
Paint Age:	Paint Color: 30099	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
35	Warm Brown	770 sqft	77 sqft	0 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	56	Due			$200,000

Past Paint History

Years	Cycle
1975	8
1967	

Painting Cycle



= Current Paint Age

No Photo Available

No Photo Available

The last inspection report says there are a few small paint blisters on the web of beam 3C. There is also light top flange rust on all stringers.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
20 / 311	HALF BR STA 155	122.41	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1900	SB	62 ft.	28 ft.	38

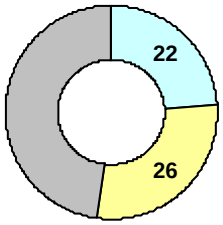
Paint Age:	Paint Color: 26329	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
26	Steel Gray	4,180 sqft	418 sqft	41 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	65	Due			$200,000

Past Paint History

Years	Cycle
1984	22
1962	

Painting Cycle



= Current Paint Age

This bridge has an open grid deck that has been filled with concrete.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
21 / 334	KETTLE R	181.00	Eastern

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1960	ST	205 ft.	26 ft.	180

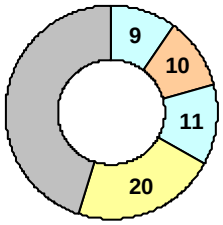
Paint Age:	Paint Color: 30099	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Warm Brown	27,000 sqft	21,600 sqft	5,400 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	26	Past Due			$1,260,000

Past Paint History

Years	Cycle
1990	11
1979	10
1969	9
1960	

Painting Cycle



= Current Paint Age

The top flange of the floor beams and stringers are embedded in concrete.

Bridge Inspector's Notes:
Paint is chalky and peeling, heavy in spots, on the diagonals and portals of the truss with rust blooms, approximately 15%. The paint on the stringers and floor beams is in good condition except for scattered rock chips from kids throwing rocks at swallow nests. The sand build up on the lower chord has been flushed, revealing the failed paint system.

Full removal of the paint is warranted on the top and bottom chords and the connection areas.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
24 / 105	COLUMBIA R VERNITA	43.60	South Central

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1965	ST PCB	579 ft.	28 ft.	486

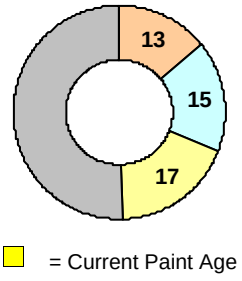
Paint Age:	Paint Color: 30266	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
17	Gold	72,900 sqft	5,832 sqft	1,458 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	45	Due			$1,822,500

Past Paint History

Years	Cycle
1993	15
1978	13
1965	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:
Stringers - Bottom flanges have up to 12 square inch areas of peeling paint. A few small areas of peeled rusty paint. Some paint chips.
Bottom Chord -The paint is thin in places and has small areas of peeling; a few rusty. Rusty peeling paint in isolated areas of the bottom chord for total of 1% of area. Through Truss - There are scattered small areas of peeling paint on a few diagonals. There are small areas of thin paint on the top chord total area less than 3%. The top chord has peeling paint on the bottom side. Truss diagonals and verticals have scattered peeling rusty areas 2% of total area. Truss top laterals have peeling paint with some rust on 5% of the area. Floorbeams - There is peeling paint on the bottom flanges, and within the bottom chord, and on the lateral bracing.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
25 / 130	COLUMBIA R @ NORTHPORT	113.92	Eastern

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1948	ST CTB CG CS	840 ft.	24 ft.	1,167

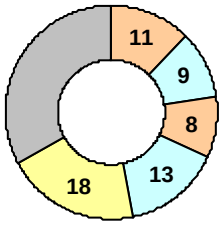
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
18	Evergreen	175,050 sqft	10,000 sqft	930 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	54	Due			$7,585,500

Past Paint History

Years	Cycle
1992	13
1979	8
1971	9
1962	11
1951	

Painting Cycle



= Current Paint Age

Bridge Inspector's note:
Paint is missing from most steel members due to the impact of snow removal with gravel. Steel Floorbeams; Peeling paint throughout webs. Steel Truss Members; The primer is exposed in places with some light rust where the paint has failed completely. The top paint coat is also peeling off in places with scattered rust blooms, particularly at top sways and laterals and inside top chords. Surface rust on the truss members at the deck level to about 6 ft. off of the deck. Paint is peeling inside most of the enclosed truss members. Metal Bridge Railing; All members are rusty with paint peeling or missing on 30% of the surface.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
27 / 12	N FK PALOUSE R	15.02	Eastern

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1938	SG CTB	95 ft.	24 ft.	82

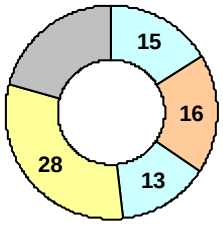
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
28	Light Gray	12,300 sqft	4,800 sqft	100 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	63	Due			$574,000

Past Paint History

Years	Cycle
1982	13
1969	16
1953	15
1938	

Painting Cycle



= Current Paint Age

All the paint on the top flange of the open girder should be removed to bare metal.

Bridge Inspector's notes:

Thin and peeling paint with surface rust on most of the top flange of the girders (Photo 15). Paint is worn and peeling on lower portions of webs and bottom flanges of girders (approximately 20%). Rust blooms on lower webs and bottom flanges of girder (approximately 5%). Top coat of paint is peeling on floorbeams exposing primer (approximately 20% - Photo 22). A few areas of surface rust (less than 5%) on floorbeams.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
82 / 280S	COLUMBIA R BR @ UMATILLA	132.36	South Central

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1955	ST SB	3380 ft.	27.5 ft.	3,737

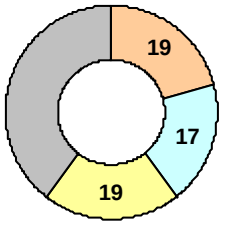
Paint Age:	Paint Color: 30318	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
19	Warm Conc Gray	560,550 sqft	30,000 sqft	2,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	37	Due			$12,000,000

Past Paint History

Years	Cycle
1991	17
1974	19
1955	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:
Truss Floor System - The truss stringer diaphragms have flaking paint top coat in many places over approximately 10% of area. Many stringers have very thin paint. Approximately 5% of the stringer area is affected. There is extensive peeling paint on the stringers in the east bays of the east truss span. The truss floor beam bottom flanges have peeled paint in 2 sq.ft. areas (approximately 2% peeling).
Truss Bottom Chord - There are areas on the bottom of the bottom chord and inside the bottom chord that have missing or peeled off top coat, amounting to approximately 5% of the total painted area. The drop in span bottom of the South bottom chord has up to 10% peeled paint. The girder cross brace chord angles have flaking top coat of paint on approximately 5% of the area.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
90 / 25S	LACEY V. MURROW BRIDGE	4.24	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1940	CFP SA ST CBOX S	884 ft.	52 ft.	2,900

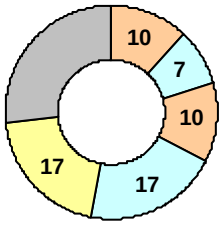
Paint Age:	Paint Color: N/A	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
17	Wa. Gray	435,000 sqft	145,000 sqft	0 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	16	Due			$18,850,000

Past Paint History

Years	Cycle
1993	17
1976	10
1966	7
1959	10
1949	

Painting Cycle



= Current Paint Age

The steel truss spans were spread apart and rehabilitated as part of the bridge widening project in 1993. Full containment was used during the painting work.
Bridge Inspection Notes:
Exterior stringers in the deck truss have approximately 30% of the surface paint layer flaking off and areas of freckle rust. Stringers in the tied arch spans have approximately 50% of the top coat peeling throughout. Surface layer of paint is flaking off on approximately 5% of the truss members. Approximately 10% of the top coat of paint is peeling off of the outside flanges of the tied arch hangers, and 5% off of the arch ties. All floorbeams in deck truss have top layer of paint flaking off.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
90 / 180	COLUMBIA R VANTAGE	137.19	South Central

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1962	ST SA SG	2504 ft.	56 ft.	4,063

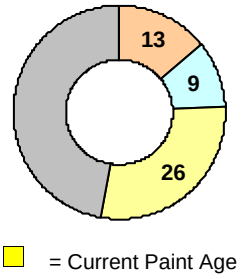
Paint Age:	Paint Color: 33448	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
26	Gold	446,930 sqft	300 sqft	80 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	13	Past Due			$5,000,000

Past Paint History

Years	Cycle
1984	9
1975	13
1962	

Painting Cycle



= Current Paint Age

The paint on the steel girder approaches and the upper portion of the truss was last painted in 1984. These elements still should be coded with the BMS element 901.

A 2002 project (contract 16387)painted the steel elements under the deck in the truss spans and truss elements 10' above the roadway deck. The quantity was approximately 141,400 sq ft.

The steel surface above the roadway deck need to be painted.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
97 / 1	BIGGS RAPIDS-SAM HILL BR	0.00	Southwest

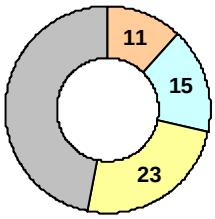
Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1962	ST SB	2567 ft.	26 ft.	1,847

Paint Age:	Paint Color: 30099	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3
23	Warm Brown	277,050 sqft	133,000 sqft	81,200 sqft

Next Paint Year:	2011-13 Rank:	Past Due/Due/OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2014	11	Past Due	5/7/2014	409712P	$12,605,100

Years	Cycle
1988	15
1973	11
1962	

Painting Cycle



= Current Paint Ag

This is a border bridge that is maintained by Washington and reimbursed 50% by Oregon. There is one steel truss main span with steel girder approach spans. The bridge deck was replaced in 2009.

Bridge Inspection notes:
The paint is peeling and curling with exposed and rusty spots on the webs of the girders.

Bridge Office Recommendations:
Full removal of the existing paint and apply a new three coat moisture cured urethane paint.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
97 / 420	COLUMBIA R BEEBE	235.06	North Central

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1962	SA CBOX	1040 ft.	26 ft.	1,296

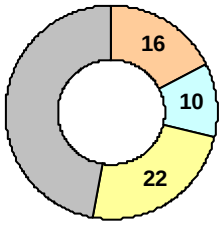
Paint Age:	Paint Color: 20040	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Dark Brown	194,400 sqft	20,000 sqft	3,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	46	Due			$4,860,000

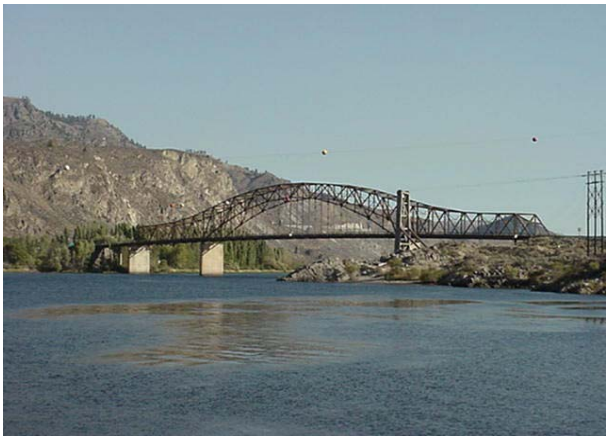
Past Paint History

Years	Cycle
1988	10
1978	16
1962	

Painting Cycle



= Current Paint Age



The vertical hangers are color Fed No 30318 - Light Brown.

Bridge Inspection Notes:
Various members of Spans 1, 2, and 3 have areas of peeled paint and primer exposing bare steel and have surface rust. Some of stringers show areas of laminar rust in the top flange at the floorbeam connections. Most of the bottom chord vertical gussets where three members in the vertical plane frame that were filled with dirt are now cleaned. Some of stringers show areas of laminar rust in the top flange at the floorbeam connections. Steel arch in Span 2. Light surface rust on many of the members.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
99 / 538	SPOKANE ST OC	29.15	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1959	SB CBOX TTT	192 ft.	76 ft.	314

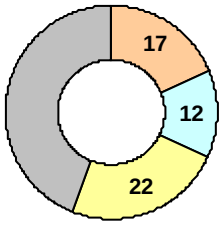
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Light Gray	34,540 sqft	1,500 sqft	1,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	40	Due			$863,500

Past Paint History

Years	Cycle
1988	12
1976	17
1959	

Painting Cycle



= Current Paint Age

No Photo Available

No Photo Available

The paint thickness was not specified in contract 13456.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
99 / 560	AURORA AVE-G WASH MEM BR	34.14	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1931	ST CG	1950 ft.	56.5 ft.	7,983

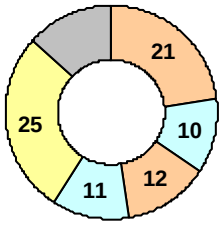
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
25	Light Gray	1,197,450 sqft	957 sqft	120 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	15	Past Due		109947B	$50,000,000

Past Paint History

Years	Cycle
1985	11
1974	12
1962	10
1952	21
1931	

Painting Cycle



= Current Paint Age

In 1995 (C#14547) 0.75' of the sidewalk and 3.75' of the roadway slab on both sides of the bridge was removed and replaced. The steel supporting this area was rehabilitated and painted with a MC Urethane.

Inspection of the paint is needed to determine if it can be overcoated or not.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
101 / 29	SOUTH NEMAH R NO 1	32.52	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1957	SB	48 ft.	29 ft.	20

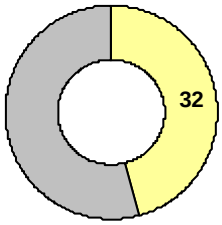
Paint Age:	Paint Color:	N/A	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
32	N/A		2,200 sqft	1,750 sqft	220 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	60	Due			$200,000

Past Paint History

Years	Cycle
1978	

Painting Cycle



= Current Paint Age

Since this bridge has a small tonnage the region's maintenance personel may be able to paint the rusted areas with the "Devoe" rust penetrating sealer.

Bridge Inspector's note:
Paint blisters along girder flanges with rust under the blisters and rust blooms all over webs. Paint failed with heavy rust at several bottom flange splice plates.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
101 / 115	CHEHALIS R	83.12	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1955	BAS SG CBOX CTB	606 ft.	28 ft.	2,438

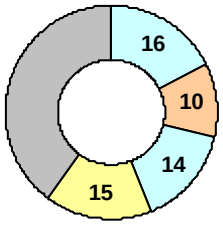
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
15	Light Gray	365,700 sqft	0 sqft	0 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	52	Due			$9,142,500

Past Paint History

Years	Cycle
1995	14
1981	10
1971	16
1955	

Painting Cycle



= Current Paint Age

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
101 / 125E	HOQUIAM R-RIVERSIDE 1417	87.31	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1970	SL SB	465 ft.	28 ft.	606

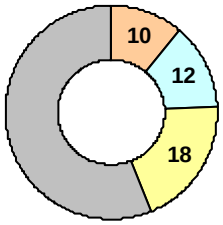
Paint Age:	Paint Color: 26329	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
18	Steel Gray	90,900 sqft	10,000 sqft	0 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	18	Past Due			$3,939,000

Past Paint History

Years	Cycle
1992	12
1980	10
1970	

Painting Cycle



= Current Paint Age

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
101 / 125W	HOQUIAM R-SIMPSON CS1412	86.76	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1928	BAS ST CG CST	470 ft.	20 ft.	638

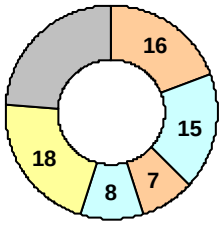
Paint Age:	Paint Color: 26329	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
18	Steel Gray	95,700 sqft	87,200 sqft	8,500 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2012	12	Past Due			$4,147,000

Past Paint History

Years	Cycle
1992	8
1984	7
1977	15
1962	16
1946	

Painting Cycle



= Current Paint Age

The bridge was rehabilitated in 2007 thru 2008.
Bridge Inspector's notes:
Primer coat on bascule span stringer and floorbeams is failed. Paint is peeled off exposing red lead primer. Paint is failed on floor system bracing. Paint is moldy on the bascule floor system beams and is peeled off in large areas exposing red lead. The paint is covered with wet dirt and moss in many parts of the floor system. Paint on the west 150 ft. steel truss bottom chord is rusted through and blistered along the 4" diameter utility.

Next Painting Project - Full removal of all the existing paint is required.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
101 / 1(B)	COL R ASTORIA - OR SIDE	0.00	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
	ST SG	ft.	ft.	

Paint Age:	Paint Color:	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
		sqft	sqft	sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2011	1				$18,599,000

Past Paint History

Years

Cycle

Painting Cycle

= Current Paint Age

No Photo Available

No Photo Available

The Oregon DOT maintains the US 101 Astoria bridge. ODOT is scheduled to repaint the steel spans on the Oregon/Astoria side in 2011. WSDOT will pay 1/2 of the project costs.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
101 / 256	BIG QUILCENE R	296.67	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1936	ST CTB	240 ft.	24 ft.	121

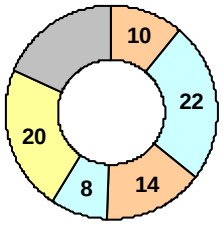
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Evergreen	18,150 sqft	5,000 sqft	1,500 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	24	Past Due			$847,000

Past Paint History

Years	Cycle
1990	8
1982	14
1968	22
1946	10
1936	

Painting Cycle



= Current Paint Age

The 1990 painting project specified that areas on top of the bottom chord that entrap water on the sidewalk side of the bridge were to receive 16 mils of coal tar epoxy. Bridge Inspectors Notes:
Top coat of paint is peeling on bottom flanges of steel stringers. Paint underneath is still intact with very little rust, mostly on top flange at the deck. Paint peeling on face of top chord of thru truss approximately 30% to previous layer of paint.

Next Paint Project will require full paint removal.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
101 / 308	CALAWAH R	192.36	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1938	ST CTB	170 ft.	24 ft.	159

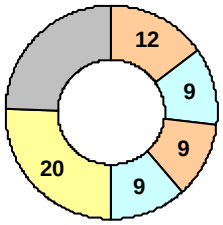
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Evergreen	23,850 sqft	23,350 sqft	500 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	73	Due			$1,113,000

Past Paint History

Years	Cycle
1990	9
1981	9
1972	9
1963	12
1951	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:
The paint system has widespread flaking, especially on inside surfaces of members. The top surfaces of the top chords, top lateral and sway bracing have extensive areas of exposed rusty steel.

Next Paint Project will require full paint removal.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
101 / 310	SOL DUC R	194.30	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1958	ST CTB	150 ft.	26 ft.	108

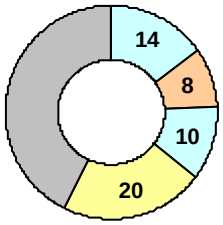
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Evergreen	16,200 sqft	8,100 sqft	1,620 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	21	Past Due			$756,000

Past Paint History

Years	Cycle
1990	10
1980	8
1972	14
1958	

Painting Cycle



= Current Paint Age

Bridge Inspection Note:
The steel stringers have scattered areas of peeling paint. The top surfaces of the top chord members have rust blooms and peeling paint. The bottom chord interiors have paint failure causing active corrosion on the inside surfaces, at the rivet heads, and at the plate edges.

Next Paint Project will require full paint removal.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
101 / 322	SOL DUC RIVER #5	212.46	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1948	ST CTB	160 ft.	24 ft.	147

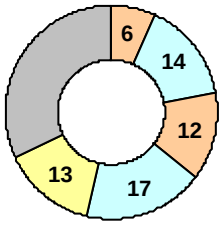
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
13	Evergreen	22,050 sqft	4,400 sqft	1,100 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	22	Past Due			$1,029,000

Past Paint History

Years	Cycle
1997	17
1980	12
1968	14
1954	6
1948	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:
Paint on the stringers is starting to peel in the webs and flanges with light rust. Some areas of the bottom chord has peeling paint. 15% of the paint is missing on the top chords of the truss.

Next Paint Project will require full paint removal.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
107 / 4	CHEHALIS R	6.83	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1958	ST CBOX TTT	300 ft.	26 ft.	319

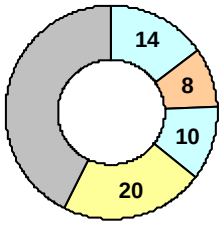
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Evergreen	47,850 sqft	32,000 sqft	3,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	23	Past Due			$2,233,000

Past Paint History

Years	Cycle
1990	10
1980	8
1972	14
1958	

Painting Cycle



= Current Paint Age

Bridge Inspector's Notes:
Peeling paint is typical, especially on and in the bottom chords. The stringer and floorbeam top flanges as well as the truss portal tops and west truss above deck members all have surface rust. The truss also has a few rust blooms.

Next Paint Project:
Pressure wash bridge with 5,000psi
Assume about 15% of the bridge will need rust to be spot blasted
Prime blasted areas then Overcoat with two new paint layers

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
109 / 10	HUMPTULIPS R	10.24	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1956	ST CTB	234 ft.	26 ft.	226

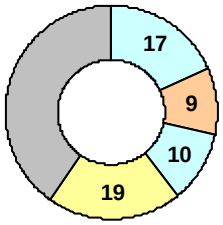
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
19	Evergreen	33,900 sqft	8,500 sqft	7,800 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	25	Past Due			$1,582,000

Past Paint History

Years	Cycle
1991	10
1981	9
1972	17
1955	

Painting Cycle



= Current Paint Age

Bridge Inspector's Notes:
Paint is chalky throughout with scattered rust blooms especially on the upper areas of the truss. Many areas of peeling paint and rusty rivet heads on the bottom chord of the truss with areas of exposed metal. Top flanges of upper cross bracing have areas of peeling paint and exposed metal.
Scattered small areas of peeling paint in a few places on lower 10 feet of vertical and diagonal members.
Floorbeams have areas of paint missing on both top and bottom flanges exposing metal which is rusting.
Next Paint Project:
Pressure wash bridge with 5,000psi
Assume about 20% of the bridge will need rust to be spot blasted
Prime blasted areas then Overcoat with two new paint layers

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
141 / 5	WHITE SALMON RIVER	8.70	Southwest

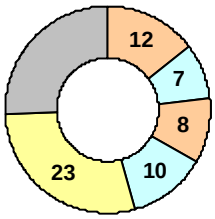
Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1940	ST CTB	120 ft.	27 ft.	96

Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3
23	Evergreen	21,717 sqft	4,600 sqft	7,200 sqft

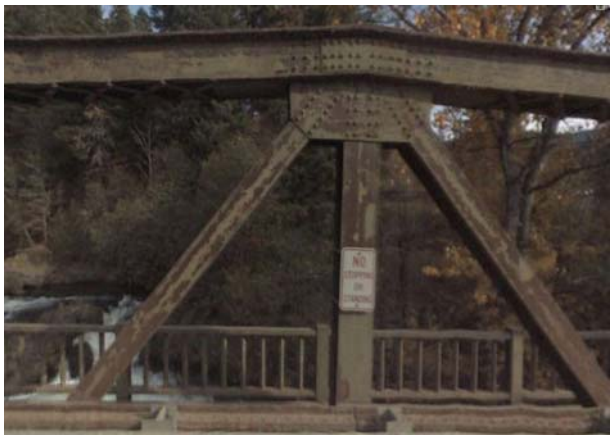
Next Paint Year:	2011-13 Rank:	Past Due/Due/OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2014	10	Past Due	5/7/2014	414110P	$860,524

Years	Cycle
1988	10
1978	8
1970	7
1963	12
1951	

Painting Cycle



= Current Paint Ag



STRINGERS: Rust stains and light rust on the top flanges.
TRUSS: The paint has failed on many members of the steel truss.
The amount of paint failure (over 53%) on the trusses warrants full removal.
Planned costs are estimated to be:
Total cost per surface Area is $39.6/SF (21,717 / $860,524)
Total cost per tonnage is $8,963/ton ($860,524 / 96)
Total cost per deck area is $265.6/SF ($860,524 / 3,240)
Bridge Replacement cost is estimated to be $7.7 million (40'x193' x $1,000)

Bridge Office Recommendations:
Full removal of the existing paint and apply a new three coat moisture cured urethane paint.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
153 / 4	METHOW R	4.22	North Central

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1950	ST CTB	220 ft.	24 ft.	217

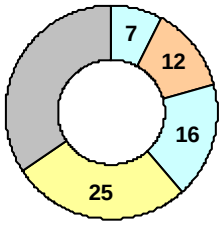
Paint Age:	Paint Color: 30318	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
25	Warm Conc Gray	32,550 sqft	5,000 sqft	5 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	68	Due			$813,750

Past Paint History

Years	Cycle
1985	16
1969	12
1957	7
1950	

Painting Cycle



= Current Paint Age

Inspector's notes:
BOTTOM CHORD - Light crevice rust with no section loss noted.
FLOORBEAM - Minor surface rust at interface with deck. No section loss.
PAINT - Very thin and peeling on inside face of top chords.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
155 / 101	COLUMBIA R GRAND COULEE	28.26	North Central

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1935	ST CTB	952 ft.	20.2 ft.	1,500

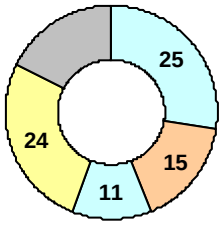
Paint Age:	Paint Color: 30318	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
24	Warm Conc Gray	225,000 sqft	25,000 sqft	300 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	69	Due			$5,625,000

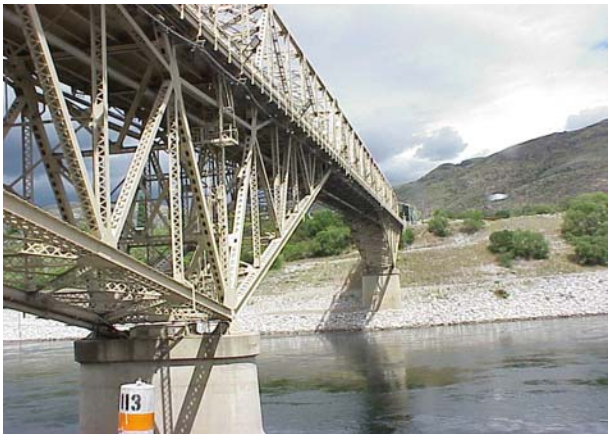
Past Paint History

Years	Cycle
1986	11
1975	15
1960	25
1935	

Painting Cycle



= Current Paint Age



The bridge deck is orthotropic. The bottom side of the deck needs to be painted when the bridge is painted. The deck joints may need to be rehabilitated.

The next paint project will likely require full removal of the paint.

Inspection Notes:
TRUSS BOTTOM CHORD - Very light surface rust with minor areas of peeling paint. A few scattered rust blooms. There is some pack rust at the bottom chord/gusset plate connections at a few scattered locations with some minor section loss.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
165 / 10	CARBON R	11.50	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1921	SA TTT	240 ft.	17.4 ft.	179

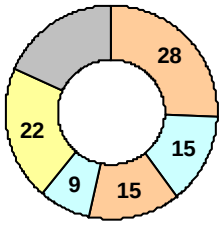
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Evergreen	26,850 sqft	1,000 sqft	270 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	71	Due			$671,250

Past Paint History

Years	Cycle
1988	9
1979	15
1964	15
1949	28
1921	

Painting Cycle



= Current Paint Age

No Photo Available

No Photo Available

The timber bridge deck was replaced in 1995 as part of contract 14575.

A fire started on the north timber approaches in March of 1998. The fire damaged the paint on a portion of the north tower and arch.

The inspection report indicates:
The steel arches and compression struts have areas of thin paint with moss growth and rust blooms on rivets and between plates. The paint on the stringers and floor beams is generally in good condition with a few rust blooms.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
167 / 127E	BN RR OC (NP)	20.96	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1967	SB	314 ft.	56 ft.	150

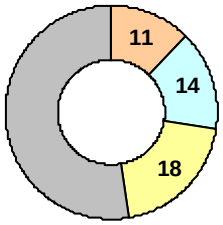
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
18	Light Gray	16,500 sqft	2,000 sqft	200 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	42	Due			$412,500

Past Paint History

Years	Cycle
1992	14
1978	11
1967	

Painting Cycle



= Current Paint Age

No Photo Available

The thickness of the paint was not specified in contract 14057.

This bridge was widened as part of contract 14771. There are two new girders placed on the north side and one new girder placed on the south side. These girders should be excluded from the next paint contract.

Bridge Inspection Notes:
There are several areas of thin, peeling paint and spots of surface rust.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
167 / 127W	BN RR OC (NP)	20.96	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1967	SB	314 ft.	50 ft.	150

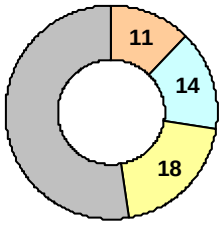
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
18	Light Gray	16,500 sqft	800 sqft	500 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	41	Due			$412,500

Past Paint History

Years	Cycle
1992	14
1978	11
1967	

Painting Cycle



= Current Paint Age

The thickness of the paint was not specified in contract 14057.This bridge was widened as part of contract 14771. There are two new girders placed on the south side. These girders should be excluded from the next paint contract.

There are rust blooms throughout, especially on the bottom flanges. There is peeling paint in the webs and bottom flanges. Girders E and F were installed when the bridge was widened in 1998. There are a few spots of rust on the original girders where the paint is thin.

The cost estimate is based on overcoat. The quantity of steel used in 1967 is estimated to be about 14,500 sq ft.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
202 / 60	SNOQUALMIE R	26.00	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1931	ST CTB	220 ft.	24 ft.	213

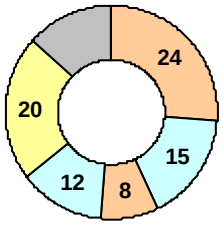
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Evergreen	31,950 sqft	16,000 sqft	1,500 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	28	Past Due			$1,491,000

Past Paint History

Years	Cycle
1990	12
1978	8
1970	15
1955	24
1931	

Painting Cycle



= Current Paint Age

The last paint contract (13767) did not specify the thickness of the paint.

Bridge Inspection Notes:
Steel truss has peeling and cracking paint throughout, and rusting in some of the members. Rust in the top and bottom flanges of stringers and floorbeams. Some rust staining along web of sidewalk stringers.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
202 / 66	S FK SNOQUALMIE R	29.50	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1936	SG CS	95 ft.	24 ft.	78

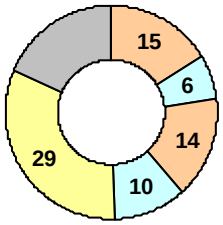
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
29	Light Gray	8,580 sqft	1,000 sqft	100 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	61	Due			$214,500

Past Paint History

Years	Cycle
1981	10
1971	14
1957	6
1951	15
1936	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:

Paint has failed with many paint blister spots on the steel open girder top flanges over 15 percent of the area. The paint blisters range from 1" to 12" in diameter. The steel open girders have areas of surface rust with no section loss. The bottom flanges and crossbraces have built up debris.
Girder 9A at Floorbeam 9-8 has minor pack rust pushing the bottom plate out 1/8". Girder 9A at Floorbeam 9-9 has a rivet with 50 percent section loss (not found in 2006). Girder 9B at Floorbeam 9-9 has a rivet with 15% section loss (not found in 2006)."

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
207 / 4	WENATCHEE RIVER	4.22	North Central

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1940	ST CTB	160 ft.	24 ft.	145

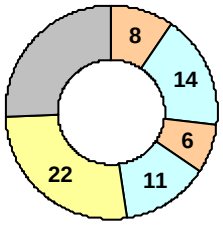
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Evergreen	21,750 sqft	5,000 sqft	1,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	20	Past Due			$1,015,000

Past Paint History

Years	Cycle
1988	11
1977	6
1971	14
1957	8
1949	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:
Areas of peeling paint and blistered paint on steel stringers. Rust blooms and peeling paint scattered throughout top of truss and upper lateral brace members. STEEL TRUSS - Some rust pitting of panel point gusset plates. Heavy amounts of gravel and sand on the top of and inside of the bottom chord and lower panel point gusset plates. STEEL FLOOR BEAMS - Minor rust in top flanges at deck interface, due to leaking joints above.

Next Paint Project:
Remove all the existing paint and add a new zinc primer and moisture cured urethane.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
225 / 1	BENTON CITY KIONA BRIDGE	0.03	South Central

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1957	SB CG	ft.	25.7 ft.	168

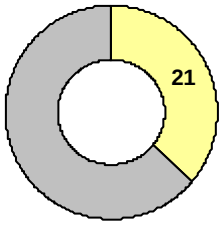
Paint Age:	Paint Color:	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
21	Light Green	18,480 sqft	2,000 sqft	5 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	72	Due			$462,000

Past Paint History

Years	Cycle
1989	

Painting Cycle



= Current Paint Age

This bridge was transferred to the State as part of the 1991 Route Transfer. The year this bridge was last painted is unknown.

The inspection report indicates that the paint is starting to peel on the steel girders. There are some areas of rust visible on the steel box beam that spans between the pier towers. The steel bridge rail has a lot of areas with exposed bare metal.

The town of Benton City repainted the steel above the roadway deck.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
285 / 10	SEN. GEORGE SELLAR BR.	0.25	North Central

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1950	SA CTB	928 ft.	54 ft.	2,280

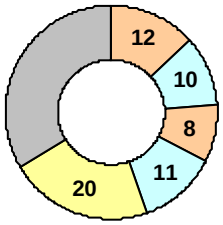
Paint Age:	Paint Color: 30318	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Warm Conc Gray	342,000 sqft	120,000 sqft	300 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	47	Due			$8,550,000

Past Paint History

Years	Cycle
1990	11
1979	8
1971	10
1961	12
1949	

Painting Cycle



= Current Paint Age

Inspection Notes:

There are areas of peeling paint to the primer on all the truss and arch members, especially the bottom surfaces of most diagonals and horizontal members, and the bottom flanges and webs of the stringers and floorbeams. Any paint that is not peeling is slightly chalky. There is seam rust in some areas of the truss, arch and floorbeams. The metal pedestrian railing has a moderate amount of peeling paint.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
305 / 10	AGATE PASS	6.82	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1950	ST CTB	1020 ft.	26 ft.	1,583

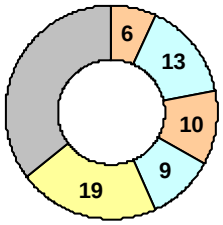
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
19	Evergreen	237,450 sqft	71,000 sqft	23,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	53	Due			$10,289,500

Past Paint History

Years	Cycle
1991	9
1982	10
1972	13
1959	6
1953	

Painting Cycle



= Current Paint Age

Bridge Instpector's notes:
Floorbeams in general have thin chalky paint and essentially no topcoat. Many stringers have thin and flaking paint on flanges. Welded steel girders in Span 13 have small areas of flaking and thin paint as well as holidays.
Piers 16 and 17 steel columns have peeling rough paint on struts and cross bracing. Paint is generally in deteriorating condition due to age, weather and poor surface preparation.

Next Paint Project:
Pressure wash bridge with 5,000psi
Assume about 10% of the bridge will need rust to be spot blasted
Prime blasted areas then Overcoat with two new paint layers

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
395 / 545	COLUMBIA R KETTLE FALLS	241.49	Eastern

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1941	ST CTB	1051 ft.	24 ft.	1,648

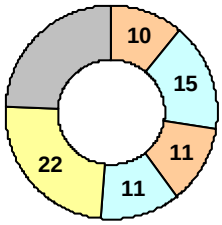
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Evergreen	247,200 sqft	9,600 sqft	2,400 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	48	Due			$10,712,000

Past Paint History

Years	Cycle
1988	11
1977	11
1966	15
1951	10
1941	

Painting Cycle



= Current Paint Age

No Photo Available

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
409 / 10	JULIA BUTLER HANSEN BR	2.92	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1938	ST PCB SG CTB	1274 ft.	20 ft.	1,194

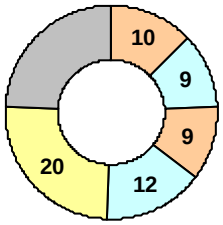
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Light Gray	179,100 sqft	89,550 sqft	17,910 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2015	17	Past Due			$7,761,000

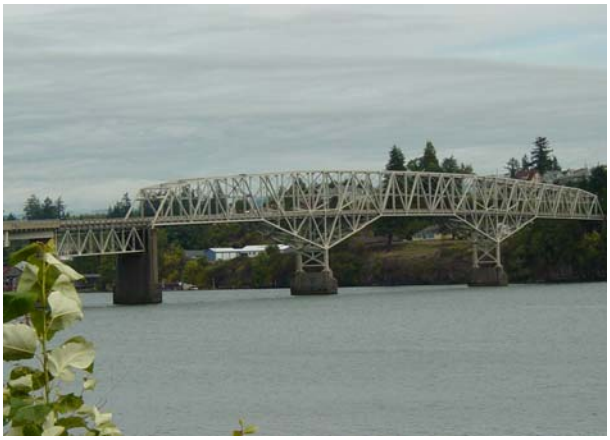
Past Paint History

Years	Cycle
1990	12
1978	9
1969	9
1960	10
1950	

Painting Cycle



= Current Paint Age



Portions of the bridge will require full removal of the exiting paint.
Bridge Inspector's notes:
Floorbeams in general have thin chalky paint and essentially no topcoat. Many stringers have thin and flaking paint on flanges. Welded steel girders in Span 13 have small areas of flaking and thin paint as well as holidays.
Piers 16 and 17 steel columns have peeling rough paint on struts and cross bracing. There are many areas of peeling paint and thin or no paint inside the bottom chord especially at the joints. Thin, missing, peeled off and rusty paint on 25% of the bottom chord and diagonals. L21-L22 west truss shows typical rust blooms and paint condition of truss members. Top sways, cross bracing and top chords have many paint holidays in the topcoat, thin paint and rusty spots on 10% of area.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
410 / 101	WHITE R	21.99	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1949	ST CTB	200 ft.	32 ft.	239

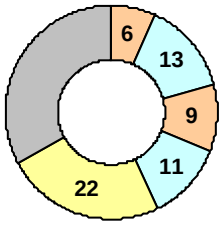
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
22	Evergreen	35,850 sqft	17,000 sqft	1,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	39	Due			$1,673,000

Past Paint History

Years	Cycle
1988	11
1977	9
1968	13
1955	6
1949	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:

Paint is failing in several areas. The top flange of the bottom sway braces have areas of peeling paint. The top of truss has many rust blooms and areas of peeling paint - chalky throughout. Paint is chipped and peeling on bottom of diagonals and on verticals. Paint is peeling and failing on the bottom chord, bottom lateral gussets, top chord connections, floor beam to truss connections, and bottom of stringer to floor beam connections. There are areas of blistered and peeling paint on floorbeams.

Assume full paint removal to estimate next painting project cost.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
432 / 10S	COWLITZ R & NP RY OC	9.58	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1961	ST CBOX	300 ft.	29.5 ft.	318

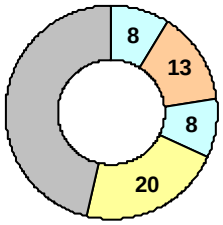
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Evergreen	47,700 sqft	13,000 sqft	1,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2017	38	Due			$2,226,000

Past Paint History

Years	Cycle
1990	8
1982	13
1969	8
1961	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:
Peeling paint is typical throughout the truss. There is surface rust on the stringers, floorbeams, and sway bracing. The truss shows bare metal in places, especially on the south side surfaces.
Stringers - There are five stringers per panel. There is rusting in spots, including surface pitting and minor section loss at the top flange including the copes. There are mud and rust stains at all the seats.
Floorbeams - There are eleven 2ft. 10in. deep floorbeams in Span 7 that have rusting top flanges and laminar rust forming at some locations. The floorbeams are covered with mud and rust staining.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
433 / 1	COLUMBIA R-LEWIS&CLARK B	0.00	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1929	ST SB	5478 ft.	34.2 ft.	14,236

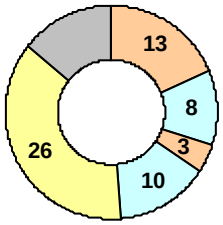
Paint Age:	Paint Color: 26329	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
26	Steel Gray	2,135,400 sqft	438,600 sqft	110,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2010	1	Past Due			$22,000,000

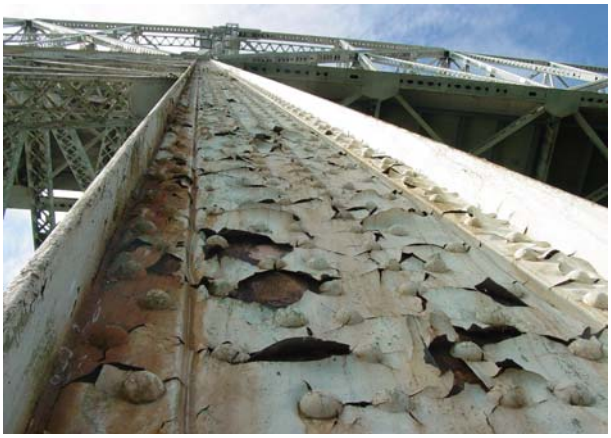
Past Paint History

Years	Cycle
1984	10
1974	3
1971	8
1963	13
1950	

Painting Cycle



= Current Paint Age



A contract from 2006 thru 2008 painted the Oregon approach to the main truss span and the superstructure of the Washington approach.
The existing paint is deteriorating and in need of replacement with a new paint system. A contract in 2009 will paint the main span towers (Piers 1,2,3)and the towers under the Washington Approach span. Based on a visual inspection a decision has been made to totally removal all the existing paint and replace it with a new 3 coat system.

A Stimulus funded project in the amount of $12.5 million is planned for 2010
to paint portions of the main truss. A future project in 2012 or 2013 will finish painting the main truss span. The painting project will be administered by WSDOT with ODOT participating in 1/2 of the total costs.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
504 / 15	N FK TOUTLE R KID VALLEY	17.29	Southwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1965	SB PCB	424 ft.	28 ft.	219

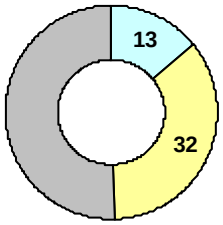
Paint Age:	Paint Color: 30277	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
32	Light Brown	24,090 sqft	200 sqft	50 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2019	58	Due			$602,250

Past Paint History

Years	Cycle
1978	13
1965	

Painting Cycle



= Current Paint Age

No Photo Available

Bridge Inspector's Note:

The paint has rusty scatches and occational rust blooms throughout.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
507 / 114	DESCHUTES R	20.43	Olympic

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1943	SB	202 ft.	26.4 ft.	150

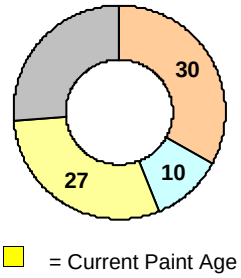
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
27	Evergreen	16,500 sqft	500 sqft	200 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	64	Due			$412,500

Past Paint History

Years	Cycle
1983	10
1973	30
1943	

Painting Cycle



= Current Paint Age

No Photo Available

This bridge is a riveted steel girder with a wood deck.

The inspection report notes that the top flange of steel stringers have laminar and seam rust up to 1/8". Stringers are mud stained, with rust stains and peeling paint on webs and bottom flanges.

The paint looks in relatively good condition. There is some rusting along the edges of the top and bottom flange.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
530 / 290	ROCKPORT BRIDGE	67.34	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1961	SB CTB	456 ft.	24.2 ft.	245

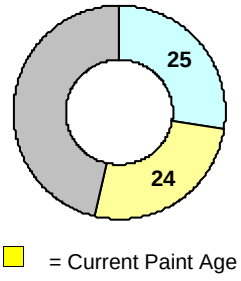
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
24	Evergreen	26,950 sqft	1,000 sqft	1,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	70	Due			$673,750

Past Paint History

Years	Cycle
1986	25
1961	

Painting Cycle



= Current Paint Age

A LMC overlay was applied to the bridge deck in 1995 (C#14696). The bridge rails and expansion joints were also replaced.

Bridge Inspection Notes:
Girder paint system is starting to peel and flake in some locations. The top flange of the outside girders are starting to rust in few areas.
Light rust in bottom flange and diaphragms at hinges. Areas of rust in top flanges at interface with deck.

Cost estimate based on overcoating the existing paint system.

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
536 / 15	SKAGIT R	4.72	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1953	SS ST CTB	451 ft.	28 ft.	534

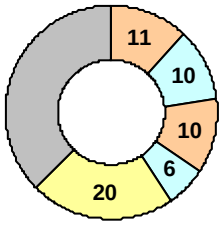
Paint Age:	Paint Color: 26307	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
20	Light Gray	80,100 sqft	20,000 sqft	4,000 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	74	Due			$3,471,000

Past Paint History

Years	Cycle
1990	6
1984	10
1974	10
1964	11
1953	

Painting Cycle



= Current Paint Age

Bridge Inspection Notes:
Top layer of paint has failed on the bottom chord. Paint breaking down and steel surface is rusting in hand holds, bottom half of truss diagonals, end posts and portal frames, top chords and sway frames.

Bridge Office Recommendation:
Containment system, Prepare bridge with 3,000psi pressure wash or SP7 Sweep Blast, spot blast rust areas.

Bridge Item cost based on $25/SF steel surface area. Total Cost = Br$ x 1.5

Steel Bridge Paint Form

2011-13 Biennium Priorities

Bridge Number:	Bridge Name:	Milepost:	Region:
542 / 33	GLACIER CR	33.49	Northwest

Year Built	Bridge Type:	Steel Span Length:	Width (curb-curb):	Steel Tonnage:
1956	SB	84 ft.	26 ft.	35

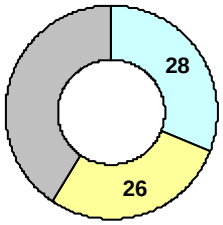
Paint Age:	Paint Color: 34097	Steel Surf. Area:	BMS Cond State 2:	BMS Cond State 3:
26	Evergreen	3,850 sqft	2,050 sqft	200 sqft

Next Paint Year:	2011-13 Rank:	Past Due / Due / OK	CPMS Ad date:	Paint Pin Number:	Future Paint Cost:
2021	66	Due			$200,000

Past Paint History

Years	Cycle
1984	28
1956	

Painting Cycle



= Current Paint Age

No Photo Available

No Photo Available

The last inspection report indicates that there are many paint chips on the bottom flange of the steel beams. The top flanges have laminar rust near abutments. The top flanges of cross brace channels are rusty.

Many of the roadway rail posts have peeling paint. The bearing plates and bolts are heavily corroded.

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
1	5/445E	SR7&CW RR OC (CMSTP&P)	133.71	Olympic		$2,000,000
2	522/138	SNOHOMISH R	20.50	Northwest	$1,129,000	$2,691,000
3	8/104S	SR 101 OC MUD BAY	20.63	Olympic		$626,500
4	8/104N	SR 101 OC MUD BAY	20.63	Olympic		$626,500
5	20/15	SNC RR OC (CMSTPP)	9.16	Olympic	$84,000	$386,000
6	9/128	GETCHELL BRIDGE	21.09	Northwest	$82,000	$272,000
7	167/111W-N	W-N RAMP N-E RAMP OC	14.28	Northwest	$88,000	$295,000
8	12/114	BN RR OC (NP)	44.92	Olympic	$102,000	$443,000
9	107/4	CHEHALIS R	6.83	Olympic	$134,000	$435,000
10	410/115	SCATTER CR	31.06	Northwest	$176,000	$810,000
11	101/427	US 101 OC, LOST LK RD	348.08	Olympic	$69,000	$286,000
12	5/570	LAKE WASH SHIP CANAL	169.63	Northwest		$5,000,000
13	5/433	S-N RAMP OC	132.26	Olympic	$503,000	$891,238
14	5/437	S M ST OC	132.84	Olympic	$379,000	$668,547
15	5/445W	SR7&CW RR OC (CMSTP&P)	133.71	Olympic	$1,518,000	$2,696,582
16	5/455	EAST T ST SEWER OC	135.17	Olympic	$526,000	$933,045
17	5/503E	SR 18 OC	142.00	Northwest	$900,000	$1,800,000
18	5/503W	SR 18 OC	142.00	Northwest	$900,000	$1,800,000
19	5/504W	S 336TH ST OC	142.79	Northwest	$146,000	$258,588
20	5/504E	S 336TH ST OC	142.79	Northwest	$178,000	$314,048
21	5/506W	MILITARY RD OC	144.65	Northwest	$183,000	$322,403
22	5/506E	MILITARY RD OC	144.65	Northwest	$190,000	$335,283
23	5/507E	S 288TH ST OC	145.79	Northwest	$264,000	$467,973
24	5/507W	S 288TH ST OC	145.79	Northwest	$246,000	$436,838
25	5/508W	MILITARY RD OC	146.43	Northwest	$608,000	$1,082,466
26	5/508E	MILITARY RD OC	146.44	Northwest	$434,000	$772,646
27	5/509W	S 272ND ST OC	146.81	Northwest	$243,000	$431,353
28	5/509E	S 272ND ST OC	146.81	Northwest	$248,000	$440,451
29	5/510E	S 260TH ST OC	147.64	Northwest	$153,000	$271,003
30	5/510W	S 260TH ST OC	147.64	Northwest	$111,000	$195,812
31	5/511E	SR 516 OC	149.17	Northwest	$455,000	$806,424
32	5/516W	ORILLA RD OC-SO188TH ST	152.26	Northwest	$388,000	$685,466
33	5/516E	ORILLA RD OC	152.26	Northwest	$304,000	$539,590
34	5/520W	KLICKITAT DR OC	154.13	Northwest	$220,000	$389,704
35	5/521W	E-N RAMP OC	154.52	Northwest	$186,000	$329,621
36	5/521E	E-N S-N RAMPS OC	154.52	Northwest	$285,000	$505,148
37	5/531W	MILITARY RD OC	159.67	Northwest	$215,000	$379,932
38	5/531E	MILITARY RD OC	159.67	Northwest	$235,000	$416,869
39	5/534W	LUCILE ST OC	161.27	Northwest	$441,000	$783,189

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
40	5/534E	LUCILE ST OC	161.27	Northwest	$470,000	$836,699
41	5/535W	SB VIADUCT STA 2032	162.24	Northwest	$1,638,000	$2,916,293
42	5/536E	NB VIADUCT STA 2064	162.98	Northwest	$742,000	$1,311,067
43	5/536W	SB VIADUCT STA 2064	162.98	Northwest	$965,000	$1,702,147
44	5/538E	NB VIADUCT STA 2075	162.98	Northwest	$1,438,000	$2,531,717
45	5/539W	SB VIADUCT STA 2075	162.98	Northwest	$9,795,000	$17,299,191
46	5/539E	NB VIADUCT STA 2085	163.24	Northwest	$8,585,000	$15,166,523
47	5/543SCD	SBCD KING JACKSON ST OC	164.41	Northwest	$512,105	$921,789
48	5/332	PACIFIC AVE OC	107.45	Olympic	$233,261	$419,869
49	5/543E	KING-JACKSON ST OC	164.41	Northwest	$384,214	$691,584
50	5/543W	KING-JACKSON ST OC	164.41	Northwest	$372,961	$671,329
51	5/542E	DEARBORN ST OC	164.41	Northwest	$121,787	$219,216
52	5/542W	DEARBORN ST OC	164.41	Northwest	$108,746	$195,743
53	5/542SCD	SBCD DEARBORN ST OC	164.41	Northwest	$221,529	$398,752
54	5/543NCD	NBCD KING JACKSON ST OC	164.41	Northwest	$453,195	$815,750
55	5/539NCD	NBCD RAMP BR	164.41	Northwest	$70,730	$127,314
56	5/542NCD	NBCD DEARBORN ST OC	164.41	Northwest	$153,527	$276,349
56	405/1	I-5 OC	0.00	Northwest	$319,539	$575,170
57	5/539SCD	SBCD VIADUCT STA 2133	164.41	Northwest	$1,070,091	$1,926,164
58	5/545W	SB VIADUCT STA 2195	165.69	Northwest	$398,646	$717,562
59	5/545E	NB VIADUCT STA 2195	165.69	Northwest	$4,311,269	$7,760,283
60	5/545SCD	SBCD VIADUCT STA 2195	165.71	Northwest	$559,460	$1,007,028
61	5/566W	DENNY WAY-LAKEVIEW V	166.98	Northwest	$12,064,641	$21,716,353
62	5/562E	NB LANES VIADUCT	166.98	Northwest	$187,798	$338,036
63	5/588SCD	SBCD NORTHGATE WAY OC	172.76	Northwest	$200,767	$361,380
64	5/588W	NORTHGATE WAY OC	172.76	Northwest	$376,272	$677,289
65	5/588E	NORTHGATE WAY OC	172.76	Northwest	$421,702	$759,063
66	5/463	I-5 OC, PORTER WAY	139.06	Olympic	$184,000	$329,779
67	5/501	I-5 OC, S 375TH	140.15	Northwest	$287,271	$517,087
68	5/505	I-5 OC, S320TH	143.83	Northwest	$410,000	$726,620
69	5/513	I-5 OC, S 216TH	150.33	Northwest	$247,000	$437,194
70	5/517A	S-W RAMP OC	152.48	Northwest	$228,000	$403,088
71	5/518	I-5 OC, S 178TH ST	153.15	Northwest	$207,000	$366,211
72	5/528	I-5 OC, S 107TH ST	158.01	Northwest	$495,000	$876,724
73	5/532.1	N-SWIFT RAMP	161.27	Northwest	$299,442	$538,996
74	5/534A	N-W RAMP AIRPORT W. OC	161.27	Northwest	$870,843	$1,567,517
75	5/533.5W	N-W RAMP OC	161.27	Northwest	$1,024,111	$1,843,400
76	5/536N-W	NB I5 to WB W SEA FRWY	162.98	Northwest	$423,924	$763,062
77	5/538S-E	S-E RAMP I-5 OC	162.99	Northwest		$500,000

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
78	5/537N	S-E RAMP WB LANES	162.99	Northwest	$1,273,000	$2,241,707
79	5/537E-S	E-S RAMP BR	162.99	Northwest	$213,131	$383,635
80	5/537W-W	W-6TH RAMP BR	163.00	Northwest	$97,895	$176,210
81	5/537S	EB LANES I-5 OC	163.00	Northwest	$919,000	$1,617,323
82	5/544	I-5 OC, YESLER ST	165.69	Northwest	$678,513	$1,221,323
83	5/546	I-5 OC, MADISON ST	165.69	Northwest	$485,546	$873,982
84	5/547	I-5 OC, SPRING ST	165.69	Northwest	$612,150	$1,101,870
85	5/548	I-5 OC, SENECA ST	165.69	Northwest	$616,594	$1,109,869
86	5/549	I-5 UC, 8TH AVE	165.69	Northwest	$218,609	$393,495
87	5/550	I-5 OC, PIKE ST	166.06	Northwest	$723,195	$1,301,751
88	5/551	I-5 OC, PINE ST-BOREN	166.06	Northwest	$1,326,650	$2,387,969
89	5/596	I-5 OC, NE 185TH ST	176.72	Northwest	$372,444	$670,398
90	5/629A	BROADWAY AVE UC	192.59	Northwest	$299,783	$539,609
91	405/11	SR 181 OC	0.96	Northwest	$764,044	$1,375,278
92	405/12	BN RR OC (CMSTPP & NP)	1.14	Northwest	$928,439	$1,671,189
93	405/15	SR 167 OC	2.30	Northwest	$560,313	$1,008,563
94	405/16	SR 515 OC	2.77	Northwest	$318,247	$572,844
95	405/41E	SE 8TH ST OC	12.78	Northwest	$144,216	$259,588
96	405/41W	WILBURTON INTERCHANGE	12.79	Northwest	$144,799	$260,637
97	405/45E	N-W N-E RAMP OC	14.82	Northwest	$106,788	$192,218
98	405/45W	N-W & N-E RAMPS OC	14.82	Northwest	$107,569	$193,624
99	405/46E	SR 520 OC	14.83	Northwest	$212,993	$383,387
100	405/46W	SR 520 OC	14.83	Northwest	$208,093	$374,567
101	405/47E	NORTHUP WAY OC	14.83	Northwest	$120,599	$217,077
102	405/47W	NORTHUP WAY OC	14.83	Northwest	$327,124	$588,822
103	405/48E	BNRR & 115th AVE NE OC	15.00	Northwest	$288,915	$520,047
104	405/48W	BNRR & 115 AVE NE OC	15.00	Northwest	$392,293	$706,127
105	405/52E	SR 908 OC	18.11	Northwest	$158,142	$284,655
106	405/52NCD	NBCD, SR 908 OC	17.84	Northwest	$158,296	$284,932
107	405/52SCD	SBCD, SR 908 OC	18.11	Northwest	$236,269	$425,284
108	405/52W	SR 908 OC	18.11	Northwest	$156,866	$282,358
109	405/56E	BN RR OC (NP)	20.05	Northwest	$252,604	$454,687
110	405/56W	BN RR OC (NP)	20.05	Northwest	$73,508	$132,314
111	405/59E	NE 132ND ST OC	20.90	Northwest	$163,059	$293,505
112	405/59W	NE 132ND ST OC	20.90	Northwest	$138,958	$250,124
113	405/103E	228TH ST OC	26.31	Northwest	$206,234	$371,220
114	405/103W	228TH ST OC	26.33	Northwest	$191,345	$344,421
115	405/5	I-405 OC, 61ST AVE S	0.34	Northwest	$203,880	$366,983
116	405/44	I-405 OC, 12TH ST	14.12	Northwest	$263,852	$474,933

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
117	405/48S-W	S-W RAMP BNRR OC	14.83	Northwest	$72,710	$130,878
118	405/64	I-405 OC, NE 160TH ST	22.62	Northwest	$188,381	$339,085
119	405/73	I-405 OC, 195TH ST	24.48	Northwest	$138,342	$249,015
120	5/418	I-5 OC, BRIDGEPORT WAY	125.86	Olympic	$728,794	$1,311,829
121	5/411W	FT LEWIS RD OC	120.87	Olympic	$472,098	$849,776
122	5/411SCD	SBCD FT LEWIS RD OC	120.87	Olympic	$311,592	$560,865
123	5/411NCD	NBCD FT LEWIS RD OC	120.87	Olympic	$247,440	$445,391
124	5/411E	FT LEWIS RD OC	120.87	Olympic	$331,881	$597,386
125	5/406	I-5 OC, OLD NISQUALLY RD	116.70	Olympic	$45,733	$82,319
126	5/345W	NISQUALLY R	114.86	Olympic	$387,998	$698,396
127	5/342W	MCALLISTER CR	114.09	Olympic	$231,875	$417,374
128	5/342E	MCALLISTER CR	114.09	Olympic	$232,304	$418,146
129	5/341	I-5 OC, MERIDIAN RD	113.08	Olympic	$139,953	$251,915
130	5/339	I-5 OC, CARPENTER RD	110.40	Olympic	$148,319	$266,973
131	5/337W	MARTIN WAY OC	109.14	Olympic	$364,012	$655,222
132	5/337E	MARTIN WAY OC	109.14	Olympic	$253,578	$456,440
134	5/325S-W	HENDERSON BLVD,UPRR OC	105.46	Olympic	$240,603	$433,085
135	5/325A	N-14TH RAMP,OWR&N RR OC	105.45	Olympic	$485,942	$874,695
136	5/321	CAPITOL LAKE	104.52	Olympic	$1,505,059	$2,709,105
137	5/309	I-5 OC, 113TH AVE SW	97.22	Olympic	$111,326	$200,386
138	5/304	I-5 OC, 183RD AVE SW	89.84	Olympic	$436,942	$786,496
140	5/233	HARRISON AVE OC	82.74	Southwest	$322,817	$581,071
141	5/232W	SKOOKUMCHUCK R	82.28	Southwest	$11,000	$19,800
142	5/232E	SKOOKUMCHUCK R	82.28	Southwest	$11,000	$19,800
143	5/230	SR 507 MELLEN ST OC	81.67	Southwest	$712,426	$1,282,367
144	5/642	I-5 OC, 23RD ST	194.44	Northwest	$53,614	$96,505
145	5/645E	SNOHOMISH R BN RR	194.81	Northwest	$1,317,844	$2,372,119
146	5/645W	SNOHOMISH R BN RR	194.81	Northwest	$1,317,844	$2,372,119
147	5/701	I-5 OC, STARBIRD RD	218.54	Northwest	$284,086	$511,355
148	5/707	I-5 OC, BLACKBURN ST	225.64	Northwest	$243,254	$437,857
149	18/5	PEASLEY CANYON RD OC	1.86	Northwest	$833,162	$1,499,692
150	18/6	W VALLEY HIGHWAY OC	2.30	Northwest	$268,191	$482,744
151	18/9	NP RY OC	3.82	Northwest	$2,730,904	$4,915,627
152	526/20	CASINO RD OC	3.74	Northwest	$203,082	$365,548
153	526/14	HARDESON ROAD OC	2.90	Northwest	$167,382	$301,287
154	410/31	WHITE R (STUCK R)	8.99	Olympic	$712,547	$1,282,585
155	167/121E	GREEN R	19.04	Northwest	$329,670	$593,406
156	167/121W	GREEN R	19.04	Northwest	$329,698	$593,456
157	16/12E	CEDAR ST OC	0.62	Olympic		

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
158	16/12W	CEDAR ST OC	0.62	Olympic		
159	518/18N	42ND AVE S OC	2.91	Northwest	$241,434	$434,580
160	518/18S	42ND AVE S OC	2.91	Northwest	$176,567	$317,820
161	167/126E	4TH ST OC	20.70	Northwest	$112,860	$203,148
162	167/126W	4TH AVE OC	20.70	Northwest	$112,596	$202,673
163	16/20W	SNAKE LAKE BR	1.57	Olympic	$163,000	$292,377
164	167/124E	JAMES ST OC	20.20	Northwest	$87,439	$157,390
165	167/124W	JAMES ST OC	20.20	Northwest	$94,639	$170,349
166	167/125E	UP RR OC (CMSTPP)	20.40	Northwest	$122,540	$220,572
167	167/125W	UP RR OC (CMSTPP)	20.40	Northwest	$122,540	$220,572
168	167/127E	BN RR OC (NP)	20.96	Northwest	$193,996	$349,193
169	167/127W	BN RR OC (NP)	20.96	Northwest	$193,397	$348,114
170	16/20E	SNAKE LAKE BR	1.57	Olympic	$243,000	$436,550
171	7/122	SR 512 OC	52.54	Olympic	$147,274	$265,092
172	16/15W	UNION AVE OC	1.15	Olympic		
173	16/15E	UNION AVE OC	1.15	Olympic		
174	167/122E	SR 516 OC	19.60	Northwest	$33,666	$60,598
175	167/122W	SR 516 OC	19.60	Northwest	$34,348	$61,826
176	167/123E	MEEKER ST OC	19.83	Northwest	$110,831	$199,495
177	167/123W	MEEKER ST OC	19.83	Northwest	$76,467	$137,640
178	167/128E	84TH AVE SOUTH O'XING	21.31	Northwest	$112,228	$202,010
179	167/128W	84TH AVE SOUTH O'XING	21.31	Northwest	$110,682	$199,228
180	167/133	SR 167 OC, S 180TH ST	24.42	Northwest	$264,523	$476,141
181	18/8N	UP RR OC (CMSTPP)	3.49	Northwest	$403,524	$726,343
182	18/8S	UP RR OC (CMSTPP)	3.49	Northwest	$299,371	$538,867
183	167/112W	SR 18 OC	14.28	Northwest	$308,022	$554,440
184	512/21N	WOODLAND AVE OC	6.84	Olympic	$216,579	$389,842
185	512/21S	WOODLAND AVE OC	6.84	Olympic	$216,832	$390,298
186	512/23N	FRUITLAND AVE OC	7.22	Olympic	$213,593	$384,467
187	512/23S	FRUITLAND AVE OC	7.22	Olympic	$190,108	$342,194
188	512/15N	WALLER RD 0C	4.35	Olympic	$120,918	$217,652
189	512/15S	WALLER RD OC	4.35	Olympic	$120,918	$217,652
190	512/29S	15TH AVE SW OC	9.84	Olympic	$168,597	$303,475
191	512/31N	MERIDIAN ST OC	10.06	Olympic	$148,676	$267,617
192	512/31S	MERIDIAN ST OC	10.06	Olympic	$163,636	$294,545
193	900/30	I-90 OC	21.58	Northwest	$150,667	$271,201
194	303/12	PORT WASHINGTON CS1840	0.73	Olympic	$3,257,122	$5,862,820
195	167/34E	WEST VALLEY HWY OC	7.56	Olympic	$313,291	$563,924
196	512/29N	15TH AVE SW OC	9.84	Olympic	$245,355	$441,639

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
197	512/19	SR 512 OC, CANYON RD	5.86	Olympic	$288,365	$519,057
198	16/130E	ROSEDALE RD OC	12.76	Olympic	$407,006	$732,610
199	16/130W	ROSEDALE RD OC	12.77	Olympic	$216,409	$389,535
200	167/129	SR 167OC S 212TH	22.38	Northwest	$110,985	$199,772
201	161/10	SR 161 OVER SR 512	25.67	Olympic	$159,231	$286,615
202	99/400	I-5 OC	0.00	Olympic	$366,212	$659,182
203	18/14N	NP RY OC - NORTH	4.95	Northwest	$112,404	$202,326
204	167/30E	W-S RAMP OC	7.05	Olympic	$150,695	$271,250
205	167/32E	VALLEY AVE & UPRR O'XING	7.22	Olympic	$1,374,142	$2,473,456
206	167/116	SR 167 OC, 15TH ST NW	15.77	Northwest	$91,091	$163,964
207	526/10	AIRPORT RD OC	1.43	Northwest	$146,603	$263,885
208	522/136	CATHCART RD OC	20.41	Northwest	$163,103	$293,585
209	522/142	W. Main Street OC	23.14	Northwest	$137,346	$247,223
210	3/123E	ERLAND POINT RD OC	40.44	Olympic	$108,301	$194,941
211	3/123W	ERLAND POINT RD OC	40.44	Olympic	$99,292	$178,725
212	410/39N	166TH AVE E OC	11.46	Olympic	$97,114	$174,804
213	3/124E	CHICO I/C OC	41.09	Olympic	$108,603	$195,485
214	3/124W	CHICO I/C OC	41.09	Olympic	$121,077	$217,939
215	101/350	MORSE CR	252.16	Olympic	$149,127	$268,429
216	18/17S	GREEN R (NEELEY BRIDGE)	6.62	Northwest	$72,600	$130,680
217	7/130	SR 7 OC, 38TH ST	57.45	Olympic	$717,503	$1,291,505
218	16/120	SR 16 OC, OLYMPIC I/C	10.74	Olympic	$75,708	$136,274
219	2/17	FRENCH CR	11.41	Northwest	$322,179	$579,922
220	2/18	FARM RD OC	11.68	Northwest	$322,179	$579,922
221	9/118	SNOHOMISH R	9.17	Northwest	$904,607	$1,628,293
222	18/16S	BNRR OC-SOUTH	6.41	Northwest	$352,176	$633,917
223	18/20N	KENT-BLACK DIAMOND RD O	10.31	Northwest	$31,647	$56,965
224	18/24N	SOOS CR	10.87	Northwest	$126,187	$227,136
225	512/40N	SR 167 OC	11.99	Olympic	$185,620	$334,115
226	3/130W	ANDERSON HILL RD OC	44.70	Olympic	$118,349	$213,028
227	305/10	AGATE PASS	6.82	Olympic	$385,457	$693,822
228	18/34	RAGING RIVER	26.30	Northwest	$282,557	$508,603
229	2/26	SULTAN R	22.04	Northwest	$1,033,720	$1,860,695
230	2/22	WOODS CR	15.37	Northwest	$277,717	$499,891
231	3/128E	NEWBERRY HILL RD OC	43.48	Olympic	$82,819	$149,074
232	3/128W	NEWBERRY HILL RD OC	43.48	Olympic	$98,720	$177,695
233	90/83N	424TH AVE SE OC	31.94	Northwest	$140,547	$252,985
234	90/83S	424TH AVE SE OC	31.94	Northwest	$138,402	$249,124
235	12/25	WYNOOCHEE R	8.33	Olympic	$85,800	$154,440

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
236	162/2	SR 410 OC	0.01	Olympic	$123,761	$222,770
237	167/110	SR 167 OC, 15TH ST SW	13.81	Northwest	$208,632	$375,537
238	410/32	SR 410 OC, LINDEN DR	9.32	Olympic	$88,391	$159,103
239	9/121	72ND STREET SE OC	10.69	Northwest	$258,687	$465,637
240	532/6	GN RY COUNTY RD OC	4.98	Northwest	$568,178	$1,022,720
241	101/428	MILL CREEK	348.44	Olympic	$96,899	$174,418
242	522/144	179TH AVE SE OC	24.14	Northwest	$160,490	$288,882
243	522/150	US 2 & BN RR OC	24.65	Northwest	$383,521	$690,337
245	18/26	SR 18 OC, SE 231ST ST	15.73	Northwest	$195,085	$351,153
246	90/85N	BN RR OC (CMSTPP) TANNER	33.39	Northwest	$72,919	$131,254
247	90/85S	BN RR OC (CMSTPP) TANNER	33.39	Northwest	$73,546	$132,383
248	529/8E	WALNUT ST OC	4.93	Northwest	$83,782	$150,807
249	20/209N	ABANDONED RR OC	49.86	Northwest	$177,430	$319,374
250	529/8W	WALNUT ST OC	4.93	Northwest	$82,489	$148,480
251	529/15E	UNION SL	5.12	Northwest	$2,288,370	$4,119,065
252	90/90N	S FK SNOQUALMIE R LOWER	36.62	South Central	$112,552	$202,594
253	90/90S	S FK SNOQUALMIE R LOWER	36.62	South Central	$66,435	$119,582
254	9/119	2ND ST OC	9.56	Northwest	$153,901	$277,022
255	512/13	SR 512 OC, PORTLAND AVE	3.71	Olympic	$44,715	$80,487
256	90/89N	EDGEWICK RD OC	34.63	South Central	$138,039	$248,470
257	90/89S	EDGEWICK RD OC	34.63	South Central	$137,720	$247,896
258	203/106	SKYKOMISH R	23.20	Northwest	$46,200	$83,160
259	101/425	GOLDSBOROUGH CR & RR O	346.51	Olympic	$475,585	$856,053
260	101/426	MATLOCK RD OC	346.79	Olympic	$140,822	$253,480
261	530/115	I-5 OC	16.95	Northwest	$182,903	$329,225
262	101/430E	SKOOKUM CR NP RY OC	353.81	Olympic	$303,815	$546,866
263	101/430W	SKOOKUM CR NP RY OC	353.81	Olympic	$303,573	$546,431
264	510/9	BN RR OC (NP)	6.48	Olympic	$34,056	$61,301
265	510/10	BN RR OC (NP)	6.63	Olympic	$61,276	$110,296
266	9/130	BN RR (NP) & SSH 1-E OC	28.88	Northwest	$265,106	$477,190
267	169/12	BN RR OC (NP)	10.41	Northwest	$352,831	$635,095
268	526/12S-E	S-E RAMP, SR 526 0C	1.98	Northwest	$134,453	$242,015
269	12/59N	BN RR OC (NP)	20.59	Olympic	$167,387	$301,297
270	12/59S	BN RR OC (NP)	20.59	Olympic	$157,229	$283,011
271	121/15	I-5 OC, SR 121	7.63	Olympic	$134,431	$241,976
272	203/33	CHERRY CR	17.22	Northwest	$374,693	$674,447
273	522/28N	NORTH CR	10.85	Northwest	$89,722	$161,499
274	522/28S	NORTH CR	10.85	Northwest	$91,586	$164,855
275	3/15	SHERWOOD CR	20.36	Olympic	$269,500	$485,100

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
276	12/31N	SYLVIA CR NP RY OC	9.65	Olympic	$629,008	$1,132,214
277	12/31S	SYLVIA CR NP RY OC	9.65	Olympic	$638,066	$1,148,519
278	525/10	BN RR OC (GN)	8.36	Northwest	$40,700	$73,260
279	18/4	SR 18 OC, MILITARY RD	1.75	Northwest	$437,096	$786,773
280	18/31N	HOLDER CR HOBART RD OC	20.34	Northwest	$206,525	$371,745
281	8/7N	CLOQUALLAM CR	1.10	Olympic	$97,339	$175,210
282	8/7S	CLOQUALLAM CR	1.10	Olympic	$97,009	$174,616
283	534/1	I-5 OC	0.00	Northwest	$131,280	$236,303
284	202/60	SNOQUALMIE R	26.00	Northwest	$105,600	$190,080
285	512/25	9TH ST SW OVER SR 512	8.37	Olympic	$158,147	$284,665
286	7/113	S. FORK MUCK CR	36.92	Olympic	$182,441	$328,393
287	12/60N	US 12 OC	21.34	Olympic	$142,824	$257,083
288	12/60S	US 12 OC	21.34	Olympic	$142,780	$257,004
289	12/34N	SR 107 OC CMSTPP RR	10.24	Olympic	$1,150,853	$2,071,535
290	12/34S	SR 107 OC CMSTPP RR	10.24	Olympic	$1,164,515	$2,096,127
291	105/108	JOHNS R	37.23	Olympic	$473,209	$851,776
292	105/104	SOUTH BAY - ELK RIVER	32.07	Olympic	$579,744	$1,043,539
293	167/130	SR 167 OC, S 208TH ST	22.63	Northwest	$223,328	$401,990
294	167/115	SR 167 OC, W MAIN ST	14.77	Northwest	$278,647	$501,564
295	99/507E	SR 599 OC	22.94	Northwest	$92,000	$163,578
296	18/3	SR 18 OC, 32ND AVE S	0.77	Northwest	$459,289	$826,719
297	166/24	SR 166 OC	4.04	Olympic	$342,513	$616,523
298	507/116	WEYERHAEUSER RR OC	21.18	Olympic	$80,322	$144,580
299	167/117	SR 167 OC 37TH	17.00	Northwest	$91,223	$164,201
300	101/310	SOL DUC R	194.30	Olympic	$63,800	$114,840
301	101/312	LAKE CR	198.49	Olympic	$148,748	$267,746
302	509/103	JOES CREEK	9.93	Northwest	$35,200	$63,360
303	101/314	SOL DUC RIVER #2	203.15	Olympic	$246,554	$443,797
304	101/316	SOL DUC RIVER	203.66	Olympic	$63,800	$114,840
305	512/33	SR 512 UC 7TH	10.86	Olympic	$245,636	$442,144
306	104/1	S-E RAMP, US 101 OC	0.02	Olympic	$246,367	$443,461
307	401/10	NASELLE R	11.37	Southwest	$375,293	$675,527
308	101/266	DUCKABUSH R	310.22	Olympic	$63,800	$114,840
309	7/25	NISQUALLY R	16.74	Southwest	$22,000	$39,600
310	16/8	SR 16 OC, S25TH ST	0.40	Olympic		
311	507/102	SKOOKUMCHUCK RIVER BR	6.10	Olympic	$53,570	$96,426
312	101/138	W FK HOQUIAM R	96.69	Olympic	$144,639	$260,350
313	101/147	BIG CREEK	102.61	Olympic	$238,524	$429,343
314	101/320	SOL DUC R	211.55	Olympic	$346,935	$624,482

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
315	101/322	SOL DUC RIVER #5	212.46	Olympic	$263,010	$473,418
316	101/149	HUMPTULIPS OVERFLOW	108.84	Olympic	$435,639	$784,149
317	101/150	HUMPTULIPS R	109.00	Olympic	$483,681	$870,626
318	116/5	PORTAGE CANAL	2.67	Olympic	$770,484	$1,386,871
319	112/20	CLALLAM R	19.00	Olympic	$120,291	$216,523
320	6/13	WILLAPA R	14.02	Southwest	$170,478	$306,860
321	117/1	US 101 OC, SR 117	0.00	Olympic	$144,579	$260,241
322	7/105	MASHEL R	27.91	Olympic	$36,300	$65,340
323	82/120N	OVERFLOW CHANNEL	31.99	South Central	$93,126	$167,627
323	512/38	SR 512 OC, BENSTON DR	11.59	Olympic	$117,898	$212,216
324	82/120S	OVERFLOW CHANNEL	31.99	South Central	$93,126	$167,627
325	82/121N	NP RY OC MOXEE	32.47	South Central	$151,261	$272,270
326	82/121S	NP RY OC MOXEE	32.47	South Central	$151,261	$272,270
327	90/154N	YAKIMA R	102.49	South Central	$337,090	$606,761
328	90/154S	YAKIMA R	102.49	South Central	$335,258	$603,464
329	90/156N	DRY CR	104.71	South Central	$267,460	$481,427
330	90/156S	DRY CR	104.71	South Central	$266,888	$480,398
331	90/140S	YAKIMA R	86.20	South Central	$134,129	$241,431
332	90/140N	YAKIMA R	86.20	South Central	$135,262	$243,471
333	90/136S	I-90 OVR CLE ELUM RD, BN	83.53	South Central	$245,020	$441,035
334	90/136N	I-90 OVR CLE ELUM RD, BN	83.53	South Central	$238,640	$429,551
335	82/117S	N 1ST ST N-W RAMP OC	31.36	South Central	$59,411	$106,940
336	2/228N	WENATCHEE R	107.03	North Central	$218,515	$393,327
337	2/228S	WENATCHEE R	107.03	North Central	$235,032	$423,057
338	28/12	DOUGLAS CR	15.78	North Central	$157,058	$282,704
339	12/331N	BN RY (ABAND) & RAMP OC	199.95	South Central	$221,766	$399,178
340	12/331S	W-W RAMP OC	199.95	South Central	$244,470	$440,045
341	82/122N-W	82N RAMP OVR I-82	33.24	South Central	$335,363	$603,653
342	82/123N-W	82N RAMP OVR TERRACE HT	33.24	South Central	$115,874	$208,573
343	97/508	METHOW R	253.49	North Central	$445,330	$801,593
344	2/233A	WENATCHEE R DIVISION ST	111.09	North Central	$83,908	$151,034
345	82/2S	W-E RAMP, E-E RAMP OC	0.00	South Central	$65,412	$117,741
346	82/1N	I-82 OVER I-90	0.00	South Central	$265,034	$477,061
347	82/1S	I-82 OVER I-90	0.00	South Central	$121,006	$217,810
348	20/259	BAKER R	89.35	Northwest	$290,114	$635,036
349	6/124E-S	E-S RAMP DILLENBAUGH CR	51.33	Southwest		$3,926,000
350	5/223N-W	N-W RAMP DILLENBAUGH CR	77.96	Southwest		
351	90/135E-N	E-N RAMP I-90 OC	83.12	South Central	$99,627	$179,329
352	20/280	BACON CR	110.75	Northwest	$93,005	$167,409

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
353	90/119	WEST EASTON RD OVER I-90	70.28	South Central	$85,344	$153,618
354	20/609	EARLY WINTERS CR	175.98	North Central	$110,231	$198,416
355	90/167	I-90 OC, RD #6	111.46	South Central	$34,408	$61,934
356	90/172	I-90 OC, MUNDY RD	117.82	South Central	$34,452	$62,014
357	90/94	I-90 OC, TINKHAM RD	42.32	South Central	$130,818	$259,019
358	90/95.8	I-90 OC HANSEN CR RD	47.73	South Central	$70,802	$140,187
359	512/1	I-5 OC	0.00	Olympic	$219,000	$393,258
360	5/712	SKAGIT R	228.25	Northwest	$1,348,391	$2,427,104
361	5/708	SR 536 OC KINCAID ST	226.39	Northwest	$331,887	$597,396
362	5/711	SR 538 OC	227.73	Northwest	$252,296	$454,133
363	5/710	GN RY OC	226.99	Northwest	$2,847,125	$5,124,824
364	5/228	SALZER CR	80.21	Southwest	$62,150	$111,870
365	5/40W	LEWIS R	19.83	Southwest	$1,400,768	$2,521,382
366	5/222	CM&E RR OC (CW)	77.51	Southwest	$305,415	$549,747
367	5/221	NP RY O'XING	77.12	Southwest	$1,886,033	$3,394,859
368	5/812	IOWA ST OC	253.79	Northwest	$329,890	$593,802
369	5/813	KENTUCKY ST OC	253.88	Northwest	$411,708	$741,074
370	5/206	LACAMAS CR	61.31	Southwest	$587,384	$1,057,290
371	500/6	I-205 OC	4.77	Southwest	$274,780	$494,604
372	205/16W	BURTON RD OC	29.79	Southwest	$93,396	$168,112
373	205/16E	BURTON RD OC	29.79	Southwest	$92,835	$167,102
374	14/25	WEST CAMAS SL	12.62	Southwest		
375	5/714	SR 20 & BN RY OC	230.14	Northwest	$824,527	$1,484,149
376	500/5	SR 500 OC, 4TH PLAIN RD	4.44	Southwest	$387,596	$697,673
377	4/230	COWLITZ R-P CRAWFORD BR	61.08	Southwest	$3,996,955	$7,194,518
378	5/102E	SR 503 OC	21.08	Southwest	$147,890	$266,201
379	5/36W	E FK LEWIS R	18.21	Southwest	$897,507	$1,615,512
380	5/102W	SR 503 OC	21.08	Southwest	$144,656	$260,380
381	5/216W	NEWAUKUM R	72.23	Southwest	$49,500	$89,100
382	5/216E	NEWAUKUM R	72.23	Southwest	$49,500	$89,100
383	5/104W	DIKE ACCESS RD & RR OC	22.72	Southwest	$11,000	$19,800
384	5/107W	TODD RD OC	27.70	Southwest	$119,812	$215,662
385	5/105W	BN RR OC (NP)	26.01	Southwest	$150,656	$271,181
386	161/102	I-5 OC	34.21	Northwest	$276,172	$497,109
387	90/104	SR 906 0C	54.69	South Central	$270,699	$487,258
388	5/127W	C&C RY & COUNTY RD OC	42.02	Southwest	$232,903	$419,225
389	5/127E	C&C RY & COUNTY RD OC	42.02	Southwest	$217,267	$391,080
390	5/810W	MEADOR AVE OC	253.53	Northwest	$134,739	$242,530
391	5/28W	SR 502 OC	9.51	Southwest	$131,731	$237,115

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
392	5/28E	SR 502 OC KOZY KAMP	9.51	Southwest	$127,958	$230,324
393	5/806E	SR 11 (CONNELLY AVE)	250.73	Northwest	$151,470	$272,646
394	5/806W	SR 11 (CONNELLY AVE)	250.73	Northwest	$152,653	$274,775
395	5/801W	NULLE RD OC	242.86	Northwest	$193,490	$348,282
396	5/801E	NULLE RD OC	242.86	Northwest	$204,100	$367,379
397	5/724W	COLONY RD OC	240.02	Northwest	$156,514	$281,724
398	5/724E	COLONY RD OC	240.02	Northwest	$155,513	$279,923
399	5/133E	HUNTINGTON AVE OC	47.97	Southwest	$126,456	$227,621
400	5/133W	HUNTINGTON AVE OC	47.97	Southwest	$136,510	$245,718
401	5/822W	SR 539 OC MERIDIAN ST	256.21	Northwest	$43,863	$78,953
402	5/824E	NORTHWEST AVE OC	256.98	Northwest	$104,638	$188,348
403	5/824W	NORTHWEST AVE OC	256.98	Northwest	$109,010	$196,218
404	90/99	SR 906 W-W RAMP OC	52.24	South Central	$273,059	$491,505
405	90/101	ACCESS RD OC	52.95	South Central	$406,225	$731,204
406	205/20	I-205 OC, 4TH PLAIN BLVD	31.11	Southwest	$460,427	$828,769
407	536/15	SKAGIT R CS2907	4.72	Northwest	$427,972	$770,349
408	5/203W	COWLITZ R	59.06	Southwest	$427,801	$770,042
409	5/203E	COWLITZ R	59.06	Southwest	$427,801	$770,042
410	5/829W	N FERNDALE OC	263.46	Northwest	$258,786	$465,815
411	5/829E	N FERNDALE OC	263.46	Northwest	$201,636	$362,944
412	5/828W	NOOKSACK R	263.05	Northwest		
413	205/28	I-205 OC, NE 78TH ST	32.61	Southwest	$384,615	$692,307
414	432/10S	COWLITZ R & NP RY OC	9.58	Southwest	$1,294,502	$2,330,104
415	432/10N	HARRY MORGAN BRIDGE	9.58	Southwest	$1,167,172	$2,100,909
416	205/42W	SALMON CR & AVE OC	36.00	Southwest	$99,825	$179,685
417	205/34E	LP & N RY OC	34.00	Southwest	$133,359	$240,045
418	205/34W	LP & N RY	34.00	Southwest	$134,156	$241,481
419	205/36E	ST JOHNS RD OC	34.29	Southwest	$94,232	$169,617
420	205/42E	SALMON CR & AVE OC	36.00	Southwest	$107,470	$193,446
421	205/36W	ST JOHNS RD OC	34.29	Southwest	$89,342	$160,816
422	432/12	SR 432 OC I-5	10.29	Southwest	$246,895	$444,411
423	5/227	I-5 OC, CHAMBER WAY	79.08	Southwest	$176,000	$316,800
424	20/209S	ABANDONED RR OC	49.86	Northwest	$165,275	$297,495
425	90/133	I-90 OC, BULLFROG RD	80.31	South Central	$180,054	$324,096
426	529/10W	SNOHOMISH R CS3114	3.85	Northwest		$10,000,000
427	14/30	27TH ST & BN RY OC	16.73	Southwest	$190,267	$342,481
428	11/1	I-5 OC	0.00	Northwest	$214,148	$385,466
429	90/120N	YAKIMA R	71.26	South Central	$242,583	$436,649
430	90/120S	YAKIMA R	71.26	South Central	$252,126	$453,826

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
431	90/141N	PEOH RD OC	86.63	South Central	$241,736	$435,125
432	90/141S	PEOH RD OC	86.63	South Central	$247,649	$445,767
433	90/134N	CLE ELUM R	80.79	South Central	$63,800	$114,840
434	90/134S	CLE ELUM R	80.79	South Central	$63,800	$114,840
435	90/97.8N	FRANKLIN FALLS BR	51.12	South Central	$38,500	$69,300
436	90/96S	S FK SNOQUALMIE R	47.95	South Central	$184,283	$331,709
437	90/96.5N	DENNY CRK RD O-XING	47.96	South Central	$194,453	$350,015
438	90/98.6N	UPPER SNOQUALMIE R BR	51.83	South Central	$581,515	$1,046,727
439	90/124S	LAKE VALLEY RD OC	74.05	South Central	$198,864	$357,954
440	90/124N	LAKE VALLEY RD OC	74.05	South Central	$197,549	$355,588
441	5/836W	DAKOTA CR	273.86	Northwest	$580,261	$1,044,470
442	5/836E	DAKOTA CR	273.86	Northwest	$580,261	$1,044,470
443	90/130S	NELSON RD OC	78.06	South Central	$183,970	$331,145
444	90/130N	NELSON RD OC	78.06	South Central	$180,395	$324,710
445	90/118N	KACHESS R	69.49	South Central	$65,302	$117,543
446	9/215	SKAGIT R	54.38	Northwest	$147,087	$264,756
447	14/12	SR 14 OC, LIESER RD	4.35	Southwest	$48,296	$86,932
448	548/1	I-5 OC	0.00	Northwest	$284,647	$512,365
449	5/842E	SR 548 OC	276.20	Northwest	$76,373	$137,471
450	5/842W	SR 548 OC	276.20	Northwest	$95,502	$171,904
451	504/1	I-5 OC	0.00	Southwest	$80,498	$144,896
452	205/32	I-205 OC, NE ANDRESEN RD	33.52	Southwest	$153,428	$276,170
453	205/14	I-205 OC, NE 18TH ST	29.34	Southwest	$103,109	$185,595
454	122/10	MOSSYROCK	6.56	Southwest	$417,027	$750,648
455	12/221	I-5 OC	66.54	Southwest	$166,188	$299,138
456	432/8S	3RD AVE OC	7.62	Southwest	$297,314	$535,164
457	543/1	I-5 OC, SR 543	0.00	Northwest	$135,256	$243,461
458	205/30S	I-205 OC, NE 83RD ST	33.04	Southwest	$119,070	$214,325
459	205/30N	PADDEN PKWY OVER I-205	33.04	Southwest	$174,856	$314,741
460	205/10	I-205 OC, NE 9TH ST	28.83	Southwest	$190,025	$342,045
461	5/834	I-5 OC, BIRCH BAY	270.24	Northwest	$270,947	$487,704
462	6/118	CHEHALIS R ADNA	46.59	Southwest	$55,000	$99,000
463	5/841	I-5 OC, H ST	275.81	Northwest	$207,081	$372,745
464	5/825.2	I-5 OC, SLATER RD	260.13	Northwest	$194,178	$349,520
465	970/5	NP RY OC	0.29	South Central	$160,936	$289,684
466	970/1	SR 970 OVER I-90	0.00	South Central	$180,527	$324,948
467	205/38	I-205 OC, NE 50TH AVE	34.82	Southwest	$99,468	$179,042
468	2/119	S FORK SKYKOMISH RIVER	51.02	Northwest	$390,280	$702,504
469	2/126	TYE RIVER 2ND X-ING	58.19	North Central	$241,318	$434,372

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
470	2/127	TYE R 1ST CROSSING	58.77	North Central	$220,270	$396,485
471	14/35	BN RR OC	18.77	Southwest	$220,864	$397,554
472	12/265	COWLITZ R CORA	122.76	Southwest	$358,160	$644,688
473	14/13	SR 14 OC, ELLSWORTH RD	5.57	Southwest	$59,043	$106,277
474	530/128	N FK STILLAGUAMISH R OSO	33.86	Northwest	$30,250	$54,450
475	12/245	LAKE CR	96.88	Southwest	$118,008	$212,414
476	205/44	I-205 OC, NE 134TH ST	36.75	Southwest	$284,169	$511,503
477	205/40	I-205 OC, NE 119TH ST	35.65	Southwest	$194,970	$350,945
478	205/46	I-205 OC, NE 20TH AVE	36.90	Southwest	$279,158	$502,484
479	90/137	I-90 OC, OAKES AVE	84.20	South Central	$182,815	$329,066
480	5/830	I-5 OC, PORTAL WAY	265.21	Northwest	$229,389	$412,899
481	14/115	BN OC	40.48	Southwest	$227,172	$408,910
482	501/24	I-5 OC	19.84	Southwest	$163,273	$293,891
483	7/9	CW RR OC(CMSTPP)LINDBER	2.47	Southwest	$646,140	$1,163,052
484	530/132	BOULDER CR	40.13	Northwest	$55,666	$100,198
485	5/840	I-5 OC, MITCHEL ST	275.54	Northwest	$168,949	$304,108
486	505/125	I-5 OC	2.94	Southwest	$312,802	$563,043
487	90/144	I-90 OC THORP	89.77	South Central	$203,379	$366,082
488	2/130N	TUNNEL CREEK	60.31	North Central	$229,323	$412,781
489	410/123	SLIPPERY CR	42.49	Northwest	$77,754	$139,956
490	5/826	I-5 OC, SMITH RD	261.51	Northwest	$211,272	$380,289
491	20/262	JACKMAN CR	91.03	Northwest	$295,323	$531,581
492	5/837N-W	N-W RAMP	274.17	Northwest	$140,756	$253,361
493	12/282	CLEAR FORK CR	138.06	Southwest	$830,610	$1,495,098
494	5/225	I-5 OC (WEST ST)	78.40	Southwest	$209,039	$376,269
495	122/5	TILTON	3.57	Southwest	$814,000	$1,465,200
496	12/304	N FK CLEAR CR	153.44	Southwest	$202,516	$364,528
497	20/268	SWIFT CR	99.67	Northwest	$78,705	$141,669
498	4/125	ELOCHOMAN RIVER	33.71	Southwest	$11,000	$19,800
499	12/280	PURCELL CREEK	137.19	Southwest	$89,964	$161,934
500	12/289	GULCH	144.89	Southwest	$294,949	$530,907
501	9/315	N FK NOOKSACK R U S	78.87	Northwest	$99,000	$178,200
502	20/338	GORGE LAKE	126.12	Northwest	$333,179	$599,722
503	409/5	BIRNIE SL	1.78	Southwest	$82,500	$148,500
504	5/110	I-5 OC, OAK STREET	30.65	Southwest	$158,026	$284,447
505	5/835	I-5 OC, LOOMIS	271.60	Northwest	$278,834	$501,900
506	4/110	GRAYS R	19.30	Southwest	$11,000	$19,800
507	5/833	I-5 OC, CUSTER	268.93	Northwest	$219,472	$395,050
508	5/838	I-5 OC, HUGHES AVE	274.52	Northwest	$248,716	$447,688

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Priority Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
509	503/112	JIM CR	39.55	Southwest	$186,445	$335,600
510	6/20	BN RR OC (NP)	19.90	Southwest	$261,800	$471,240
511	5/725	I-5 OC, ALGER RD	240.93	Northwest	$206,756	$372,161
512	506/108	I-5 OC	11.50	Southwest	$158,059	$284,506
513	5/29	NE 199TH ST OVER I-5	10.53	Southwest	$202,065	$363,716
514	542/34	N FK NOOKSACK R	35.32	Northwest	$129,872	$233,769
515	506/102	STILLWATER CR	4.69	Southwest	$233,382	$420,087
516	5/803	I-5 OC, LAKE SAMISH RD	246.24	Northwest	$286,770	$516,186
517	5/129	I-5 OC, PLEASANT HILL RD	43.20	Southwest	$135,515	$243,926
518	5/827	I-5 OC, MAIN ST	262.57	Northwest	$110,710	$199,277
519	505/102	SALMON CR	16.40	Southwest	$251,774	$453,192
520	205/24	I-205 OC, NE 63RD ST	31.79	Southwest	$137,390	$247,302
521	5/128	I-5 OC, ROCKY PT	42.66	Southwest	$135,212	$243,382
522	508/32	TILTON R	32.25	Southwest	$160,094	$288,169
523	506/2	CAMPBELL CR	0.90	Southwest	$72,188	$129,938
524	5/31	I-5 OC, CARTY RD	12.56	Southwest	$110,715	$199,287
525	5/131	I-5 OC, HQ RD	46.13	Southwest	$184,113	$331,403
526	90/147	I-90 OC, ELK HT	93.62	South Central	$128,002	$230,403
527	90/121	EAST EASTON UC	71.56	South Central	$275,556	$496,000
528	5/134	I-5 OC, POWELL	49.17	Southwest	$195,767	$352,381
529	5/33	NW LA CENTER RD OVER I-5	16.80	Southwest	$140,388	$252,698
530	542/46	GALENA CR UPPER X-ING	53.65	Northwest	$249,695	$449,450
531	5/722	I-5 OC, BOW HILL RD	236.39	Northwest	$164,060	$295,307
532	14/23S-E	SR 14 OC, NE 6TH AVE	12.32	Southwest	$128,332	$230,997
533	5/113	I-5 OC, KALAMA R RD	32.28	Southwest	$36,284	$65,310
534	90/113	STAMPEDE RD OVER I-90	62.97	South Central	$135,691	$244,243
535	90/114	CABIN CR RD OVER I-90	63.98	South Central	$254,914	$458,845
Total Number of Bridges = 534				Total$ =	$191,699,595	$369,362,855

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
219	2/17	FRENCH CR	11.41	Northwest	$322,179	$579,922
220	2/18	FARM RD OC	11.68	Northwest	$322,179	$579,922
230	2/22	WOODS CR	15.37	Northwest	$277,717	$499,891
229	2/26	SULTAN R	22.04	Northwest	$1,033,720	$1,860,695
468	2/119	S FORK SKYKOMISH RIVER	51.02	Northwest	$390,280	$702,504
469	2/126	TYE RIVER 2ND X-ING	58.19	North Central	$241,318	$434,372
470	2/127	TYE R 1ST CROSSING	58.77	North Central	$220,270	$396,485
488	2/130N	TUNNEL CREEK	60.31	North Central	$229,323	$412,781
336	2/228N	WENATCHEE R	107.03	North Central	$218,515	$393,327
337	2/228S	WENATCHEE R	107.03	North Central	$235,032	$423,057
344	2/233A	WENATCHEE R DIVISION ST	111.09	North Central	$83,908	$151,034
275	3/15	SHERWOOD CR	20.36	Olympic	$269,500	$485,100
210	3/123E	ERLAND POINT RD OC	40.44	Olympic	$108,301	$194,941
211	3/123W	ERLAND POINT RD OC	40.44	Olympic	$99,292	$178,725
213	3/124E	CHICO I/C OC	41.09	Olympic	$108,603	$195,485
214	3/124W	CHICO I/C OC	41.09	Olympic	$121,077	$217,939
231	3/128E	NEWBERRY HILL RD OC	43.48	Olympic	$82,819	$149,074
232	3/128W	NEWBERRY HILL RD OC	43.48	Olympic	$98,720	$177,695
226	3/130W	ANDERSON HILL RD OC	44.70	Olympic	$118,349	$213,028
506	4/110	GRAYS R	19.30	Southwest	$11,000	$19,800
498	4/125	ELOCHOMAN RIVER	33.71	Southwest	$11,000	$19,800
377	4/230	COWLITZ R-P CRAWFORD BR	61.08	Southwest	$3,996,955	$7,194,518
392	5/28E	SR 502 OC KOZY KAMP	9.51	Southwest	$127,958	$230,324
391	5/28W	SR 502 OC	9.51	Southwest	$131,731	$237,115
513	5/29	NE 199TH ST OVER I-5	10.53	Southwest	$202,065	$363,716
524	5/31	I-5 OC, CARTY RD	12.56	Southwest	$110,715	$199,287
529	5/33	NW LA CENTER RD OVER I-5	16.80	Southwest	$140,388	$252,698
379	5/36W	E FK LEWIS R	18.21	Southwest	$897,507	$1,615,512
365	5/40W	LEWIS R	19.83	Southwest	$1,400,768	$2,521,382
378	5/102E	SR 503 OC	21.08	Southwest	$147,890	$266,201
380	5/102W	SR 503 OC	21.08	Southwest	$144,656	$260,380
383	5/104W	DIKE ACCESS RD & RR OC	22.72	Southwest	$11,000	$19,800
385	5/105W	BN RR OC (NP)	26.01	Southwest	$150,656	$271,181
384	5/107W	TODD RD OC	27.70	Southwest	$119,812	$215,662
504	5/110	I-5 OC, OAK STREET	30.65	Southwest	$158,026	$284,447
533	5/113	I-5 OC, KALAMA R RD	32.28	Southwest	$36,284	$65,310
389	5/127E	C&C RY & COUNTY RD OC	42.02	Southwest	$217,267	$391,080
388	5/127W	C&C RY & COUNTY RD OC	42.02	Southwest	$232,903	$419,225
521	5/128	I-5 OC, ROCKY PT	42.66	Southwest	$135,212	$243,382
517	5/129	I-5 OC, PLEASANT HILL RD	43.20	Southwest	$135,515	$243,926

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
525	5/131	I-5 OC, HQ RD	46.13	Southwest	$184,113	$331,403
399	5/133E	HUNTINGTON AVE OC	47.97	Southwest	$126,456	$227,621
400	5/133W	HUNTINGTON AVE OC	47.97	Southwest	$136,510	$245,718
528	5/134	I-5 OC, POWELL	49.17	Southwest	$195,767	$352,381
409	5/203E	COWLITZ R	59.06	Southwest	$427,801	$770,042
408	5/203W	COWLITZ R	59.06	Southwest	$427,801	$770,042
370	5/206	LACAMAS CR	61.31	Southwest	$587,384	$1,057,290
382	5/216E	NEWAUKUM R	72.23	Southwest	$49,500	$89,100
381	5/216W	NEWAUKUM R	72.23	Southwest	$49,500	$89,100
367	5/221	NP RY O'XING	77.12	Southwest	$1,886,033	$3,394,859
366	5/222	CM&E RR OC (CW)	77.51	Southwest	$305,415	$549,747
350	5/223N-W	N-W RAMP DILLENBAUGH CR	77.96	Southwest		
494	5/225	I-5 OC (WEST ST)	78.40	Southwest	$209,039	$376,269
423	5/227	I-5 OC, CHAMBER WAY	79.08	Southwest	$176,000	$316,800
364	5/228	SALZER CR	80.21	Southwest	$62,150	$111,870
143	5/230	SR 507 MELLEN ST OC	81.67	Southwest	$712,426	$1,282,367
142	5/232E	SKOOKUMCHUCK R	82.28	Southwest	$11,000	$19,800
141	5/232W	SKOOKUMCHUCK R	82.28	Southwest	$11,000	$19,800
140	5/233	HARRISON AVE OC	82.74	Southwest	$322,817	$581,071
138	5/304	I-5 OC, 183RD AVE SW	89.84	Olympic	$436,942	$786,496
137	5/309	I-5 OC, 113TH AVE SW	97.22	Olympic	$111,326	$200,386
136	5/321	CAPITOL LAKE	104.52	Olympic	$1,505,059	$2,709,105
135	5/325A	N-14TH RAMP,OWR&N RR OC	105.45	Olympic	$485,942	$874,695
134	5/325S-W	HENDERSON BLVD,UPRR OC	105.46	Olympic	$240,603	$433,085
48	5/332	PACIFIC AVE OC	107.45	Olympic	$233,261	$419,869
132	5/337E	MARTIN WAY OC	109.14	Olympic	$253,578	$456,440
131	5/337W	MARTIN WAY OC	109.14	Olympic	$364,012	$655,222
130	5/339	I-5 OC, CARPENTER RD	110.40	Olympic	$148,319	$266,973
129	5/341	I-5 OC, MERIDIAN RD	113.08	Olympic	$139,953	$251,915
128	5/342E	MCALLISTER CR	114.09	Olympic	$232,304	$418,146
127	5/342W	MCALLISTER CR	114.09	Olympic	$231,875	$417,374
126	5/345W	NISQUALLY R	114.86	Olympic	$387,998	$698,396
125	5/406	I-5 OC, OLD NISQUALLY RD	116.70	Olympic	$45,733	$82,319
124	5/411E	FT LEWIS RD OC	120.87	Olympic	$331,881	$597,386
123	5/411NCD	NBCD FT LEWIS RD OC	120.87	Olympic	$247,440	$445,391
122	5/411SCD	SBCD FT LEWIS RD OC	120.87	Olympic	$311,592	$560,865
121	5/411W	FT LEWIS RD OC	120.87	Olympic	$472,098	$849,776
120	5/418	I-5 OC, BRIDGEPORT WAY	125.86	Olympic	$728,794	$1,311,829
13	5/433	S-N RAMP OC	132.26	Olympic	$503,000	$891,238
14	5/437	S M ST OC	132.84	Olympic	$379,000	$668,547

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
1	5/445E	SR7&CW RR OC (CMSTP&P)	133.71	Olympic		$2,000,000
15	5/445W	SR7&CW RR OC (CMSTP&P)	133.71	Olympic	$1,518,000	$2,696,582
16	5/455	EAST T ST SEWER OC	135.17	Olympic	$526,000	$933,045
66	5/463	I-5 OC, PORTER WAY	139.06	Olympic	$184,000	$329,779
67	5/501	I-5 OC, S 375TH	140.15	Northwest	$287,271	$517,087
17	5/503E	SR 18 OC	142.00	Northwest	$900,000	$1,800,000
18	5/503W	SR 18 OC	142.00	Northwest	$900,000	$1,800,000
20	5/504E	S 336TH ST OC	142.79	Northwest	$178,000	$314,048
19	5/504W	S 336TH ST OC	142.79	Northwest	$146,000	$258,588
68	5/505	I-5 OC, S320TH	143.83	Northwest	$410,000	$726,620
22	5/506E	MILITARY RD OC	144.65	Northwest	$190,000	$335,283
21	5/506W	MILITARY RD OC	144.65	Northwest	$183,000	$322,403
23	5/507E	S 288TH ST OC	145.79	Northwest	$264,000	$467,973
24	5/507W	S 288TH ST OC	145.79	Northwest	$246,000	$436,838
26	5/508E	MILITARY RD OC	146.44	Northwest	$434,000	$772,646
25	5/508W	MILITARY RD OC	146.43	Northwest	$608,000	$1,082,466
28	5/509E	S 272ND ST OC	146.81	Northwest	$248,000	$440,451
27	5/509W	S 272ND ST OC	146.81	Northwest	$243,000	$431,353
29	5/510E	S 260TH ST OC	147.64	Northwest	$153,000	$271,003
30	5/510W	S 260TH ST OC	147.64	Northwest	$111,000	$195,812
31	5/511E	SR 516 OC	149.17	Northwest	$455,000	$806,424
69	5/513	I-5 OC, S 216TH	150.33	Northwest	$247,000	$437,194
33	5/516E	ORILLA RD OC	152.26	Northwest	$304,000	$539,590
32	5/516W	ORILLA RD OC-SO188TH ST	152.26	Northwest	$388,000	$685,466
70	5/517A	S-W RAMP OC	152.48	Northwest	$228,000	$403,088
71	5/518	I-5 OC, S 178TH ST	153.15	Northwest	$207,000	$366,211
34	5/520W	KLICKITAT DR OC	154.13	Northwest	$220,000	$389,704
36	5/521E	E-N S-N RAMPS OC	154.52	Northwest	$285,000	$505,148
35	5/521W	E-N RAMP OC	154.52	Northwest	$186,000	$329,621
72	5/528	I-5 OC, S 107TH ST	158.01	Northwest	$495,000	$876,724
38	5/531E	MILITARY RD OC	159.67	Northwest	$235,000	$416,869
37	5/531W	MILITARY RD OC	159.67	Northwest	$215,000	$379,932
73	5/532.1	N-SWIFT RAMP	161.27	Northwest	$299,442	$538,996
75	5/533.5W	N-W RAMP OC	161.27	Northwest	$1,024,111	$1,843,400
74	5/534A	N-W RAMP AIRPORT W. OC	161.27	Northwest	$870,843	$1,567,517
40	5/534E	LUCILE ST OC	161.27	Northwest	$470,000	$836,699
39	5/534W	LUCILE ST OC	161.27	Northwest	$441,000	$783,189
41	5/535W	SB VIADUCT STA 2032	162.24	Northwest	$1,638,000	$2,916,293
42	5/536E	NB VIADUCT STA 2064	162.98	Northwest	$742,000	$1,311,067
76	5/536N-W	NB I5 to WB W SEA FRWY	162.98	Northwest	$423,924	$763,062

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
43	5/536W	SB VIADUCT STA 2064	162.98	Northwest	$965,000	$1,702,147
79	5/537E-S	E-S RAMP BR	162.99	Northwest	$213,131	$383,635
78	5/537N	S-E RAMP WB LANES	162.99	Northwest	$1,273,000	$2,241,707
81	5/537S	EB LANES I-5 OC	163.00	Northwest	$919,000	$1,617,323
80	5/537W-W	W-6TH RAMP BR	163.00	Northwest	$97,895	$176,210
44	5/538E	NB VIADUCT STA 2075	162.98	Northwest	$1,438,000	$2,531,717
77	5/538S-E	S-E RAMP I-5 OC	162.99	Northwest		$500,000
46	5/539E	NB VIADUCT STA 2085	163.24	Northwest	$8,585,000	$15,166,523
55	5/539NCD	NBCD RAMP BR	164.41	Northwest	$70,730	$127,314
57	5/539SCD	SBCD VIADUCT STA 2133	164.41	Northwest	$1,070,091	$1,926,164
45	5/539W	SB VIADUCT STA 2075	162.98	Northwest	$9,795,000	$17,299,191
51	5/542E	DEARBORN ST OC	164.41	Northwest	$121,787	$219,216
56	5/542NCD	NBCD DEARBORN ST OC	164.41	Northwest	$153,527	$276,349
53	5/542SCD	SBCD DEARBORN ST OC	164.41	Northwest	$221,529	$398,752
52	5/542W	DEARBORN ST OC	164.41	Northwest	$108,746	$195,743
49	5/543E	KING-JACKSON ST OC	164.41	Northwest	$384,214	$691,584
54	5/543NCD	NBCD KING JACKSON ST OC	164.41	Northwest	$453,195	$815,750
47	5/543SCD	SBCD KING JACKSON ST OC	164.41	Northwest	$512,105	$921,789
50	5/543W	KING-JACKSON ST OC	164.41	Northwest	$372,961	$671,329
82	5/544	I-5 OC, YESLER ST	165.69	Northwest	$678,513	$1,221,323
59	5/545E	NB VIADUCT STA 2195	165.69	Northwest	$4,311,269	$7,760,283
60	5/545SCD	SBCD VIADUCT STA 2195	165.71	Northwest	$559,460	$1,007,028
58	5/545W	SB VIADUCT STA 2195	165.69	Northwest	$398,646	$717,562
83	5/546	I-5 OC, MADISON ST	165.69	Northwest	$485,546	$873,982
84	5/547	I-5 OC, SPRING ST	165.69	Northwest	$612,150	$1,101,870
85	5/548	I-5 OC, SENECA ST	165.69	Northwest	$616,594	$1,109,869
86	5/549	I-5 UC, 8TH AVE	165.69	Northwest	$218,609	$393,495
87	5/550	I-5 OC, PIKE ST	166.06	Northwest	$723,195	$1,301,751
88	5/551	I-5 OC, PINE ST-BOREN	166.06	Northwest	$1,326,650	$2,387,969
62	5/562E	NB LANES VIADUCT	166.98	Northwest	$187,798	$338,036
61	5/566W	DENNY WAY-LAKEVIEW V	166.98	Northwest	$12,064,641	$21,716,353
12	5/570	LAKE WASH SHIP CANAL	169.63	Northwest		$5,000,000
65	5/588E	NORTHGATE WAY OC	172.76	Northwest	$421,702	$759,063
63	5/588SCD	SBCD NORTHGATE WAY OC	172.76	Northwest	$200,767	$361,380
64	5/588W	NORTHGATE WAY OC	172.76	Northwest	$376,272	$677,289
89	5/596	I-5 OC, NE 185TH ST	176.72	Northwest	$372,444	$670,398
90	5/629A	BROADWAY AVE UC	192.59	Northwest	$299,783	$539,609
144	5/642	I-5 OC, 23RD ST	194.44	Northwest	$53,614	$96,505
145	5/645E	SNOHOMISH R BN RR	194.81	Northwest	$1,317,844	$2,372,119
146	5/645W	SNOHOMISH R BN RR	194.81	Northwest	$1,317,844	$2,372,119

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
147	5/701	I-5 OC, STARBIRD RD	218.54	Northwest	$284,086	$511,355
148	5/707	I-5 OC, BLACKBURN ST	225.64	Northwest	$243,254	$437,857
361	5/708	SR 536 OC KINCAID ST	226.39	Northwest	$331,887	$597,396
363	5/710	GN RY OC	226.99	Northwest	$2,847,125	$5,124,824
362	5/711	SR 538 OC	227.73	Northwest	$252,296	$454,133
360	5/712	SKAGIT R	228.25	Northwest	$1,348,391	$2,427,104
375	5/714	SR 20 & BN RY OC	230.14	Northwest	$824,527	$1,484,149
531	5/722	I-5 OC, BOW HILL RD	236.39	Northwest	$164,060	$295,307
398	5/724E	COLONY RD OC	240.02	Northwest	$155,513	$279,923
397	5/724W	COLONY RD OC	240.02	Northwest	$156,514	$281,724
511	5/725	I-5 OC, ALGER RD	240.93	Northwest	$206,756	$372,161
396	5/801E	NULLE RD OC	242.86	Northwest	$204,100	$367,379
395	5/801W	NULLE RD OC	242.86	Northwest	$193,490	$348,282
516	5/803	I-5 OC, LAKE SAMISH RD	246.24	Northwest	$286,770	$516,186
393	5/806E	SR 11 (CONNELLY AVE)	250.73	Northwest	$151,470	$272,646
394	5/806W	SR 11 (CONNELLY AVE)	250.73	Northwest	$152,653	$274,775
390	5/810W	MEADOR AVE OC	253.53	Northwest	$134,739	$242,530
368	5/812	IOWA ST OC	253.79	Northwest	$329,890	$593,802
369	5/813	KENTUCKY ST OC	253.88	Northwest	$411,708	$741,074
401	5/822W	SR 539 OC MERIDIAN ST	256.21	Northwest	$43,863	$78,953
402	5/824E	NORTHWEST AVE OC	256.98	Northwest	$104,638	$188,348
403	5/824W	NORTHWEST AVE OC	256.98	Northwest	$109,010	$196,218
464	5/825.2	I-5 OC, SLATER RD	260.13	Northwest	$194,178	$349,520
490	5/826	I-5 OC, SMITH RD	261.51	Northwest	$211,272	$380,289
518	5/827	I-5 OC, MAIN ST	262.57	Northwest	$110,710	$199,277
412	5/828W	NOOKSACK R	263.05	Northwest		
411	5/829E	N FERNDALE OC	263.46	Northwest	$201,636	$362,944
410	5/829W	N FERNDALE OC	263.46	Northwest	$258,786	$465,815
480	5/830	I-5 OC, PORTAL WAY	265.21	Northwest	$229,389	$412,899
507	5/833	I-5 OC, CUSTER	268.93	Northwest	$219,472	$395,050
461	5/834	I-5 OC, BIRCH BAY	270.24	Northwest	$270,947	$487,704
505	5/835	I-5 OC, LOOMIS	271.60	Northwest	$278,834	$501,900
442	5/836E	DAKOTA CR	273.86	Northwest	$580,261	$1,044,470
441	5/836W	DAKOTA CR	273.86	Northwest	$580,261	$1,044,470
492	5/837N-W	N-W RAMP	274.17	Northwest	$140,756	$253,361
508	5/838	I-5 OC, HUGHES AVE	274.52	Northwest	$248,716	$447,688
485	5/840	I-5 OC, MITCHEL ST	275.54	Northwest	$168,949	$304,108
463	5/841	I-5 OC, H ST	275.81	Northwest	$207,081	$372,745
449	5/842E	SR 548 OC	276.20	Northwest	$76,373	$137,471
450	5/842W	SR 548 OC	276.20	Northwest	$95,502	$171,904

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
320	6/13	WILLAPA R	14.02	Southwest	$170,478	$306,860
510	6/20	BN RR OC (NP)	19.90	Southwest	$261,800	$471,240
462	6/118	CHEHALIS R ADNA	46.59	Southwest	$55,000	$99,000
349	6/124E-S	E-S RAMP DILLENBAUGH CR	51.33	Southwest		$3,926,000
483	7/9	CW RR OC(CMSTPP)LINDBER	2.47	Southwest	$646,140	$1,163,052
309	7/25	NISQUALLY R	16.74	Southwest	$22,000	$39,600
322	7/105	MASHEL R	27.91	Olympic	$36,300	$65,340
286	7/113	S. FORK MUCK CR	36.92	Olympic	$182,441	$328,393
171	7/122	SR 512 OC	52.54	Olympic	$147,274	$265,092
217	7/130	SR 7 OC, 38TH ST	57.45	Olympic	$717,503	$1,291,505
281	8/7N	CLOQUALLAM CR	1.10	Olympic	$97,339	$175,210
282	8/7S	CLOQUALLAM CR	1.10	Olympic	$97,009	$174,616
4	8/104N	SR 101 OC MUD BAY	20.63	Olympic		$626,500
3	8/104S	SR 101 OC MUD BAY	20.63	Olympic		$626,500
221	9/118	SNOHOMISH R	9.17	Northwest	$904,607	$1,628,293
254	9/119	2ND ST OC	9.56	Northwest	$153,901	$277,022
239	9/121	72ND STREET SE OC	10.69	Northwest	$258,687	$465,637
6	9/128	GETCHELL BRIDGE	21.09	Northwest	$82,000	$272,000
266	9/130	BN RR (NP) & SSH 1-E OC	28.88	Northwest	$265,106	$477,190
446	9/215	SKAGIT R	54.38	Northwest	$147,087	$264,756
501	9/315	N FK NOOKSACK R U S	78.87	Northwest	$99,000	$178,200
428	11/1	I-5 OC	0.00	Northwest	$214,148	$385,466
235	12/25	WYNOOCHEE R	8.33	Olympic	$85,800	$154,440
276	12/31N	SYLVIA CR NP RY OC	9.65	Olympic	$629,008	$1,132,214
277	12/31S	SYLVIA CR NP RY OC	9.65	Olympic	$638,066	$1,148,519
289	12/34N	SR 107 OC CMSTPP RR	10.24	Olympic	$1,150,853	$2,071,535
290	12/34S	SR 107 OC CMSTPP RR	10.24	Olympic	$1,164,515	$2,096,127
269	12/59N	BN RR OC (NP)	20.59	Olympic	$167,387	$301,297
270	12/59S	BN RR OC (NP)	20.59	Olympic	$157,229	$283,011
287	12/60N	US 12 OC	21.34	Olympic	$142,824	$257,083
288	12/60S	US 12 OC	21.34	Olympic	$142,780	$257,004
8	12/114	BN RR OC (NP)	44.92	Olympic	$102,000	$443,000
455	12/221	I-5 OC	66.54	Southwest	$166,188	$299,138
475	12/245	LAKE CR	96.88	Southwest	$118,008	$212,414
472	12/265	COWLITZ R CORA	122.76	Southwest	$358,160	$644,688
499	12/280	PURCELL CREEK	137.19	Southwest	$89,964	$161,934
493	12/282	CLEAR FORK CR	138.06	Southwest	$830,610	$1,495,098
500	12/289	GULCH	144.89	Southwest	$294,949	$530,907
496	12/304	N FK CLEAR CR	153.44	Southwest	$202,516	$364,528
339	12/331N	BN RY (ABAND) & RAMP OC	199.95	South Central	$221,766	$399,178

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
340	12/331S	W-W RAMP OC	199.95	South Central	$244,470	$440,045
447	14/12	SR 14 OC, LIESER RD	4.35	Southwest	$48,296	$86,932
473	14/13	SR 14 OC, ELLSWORTH RD	5.57	Southwest	$59,043	$106,277
532	14/23S-E	SR 14 OC, NE 6TH AVE	12.32	Southwest	$128,332	$230,997
374	14/25	WEST CAMAS SL	12.62	Southwest		
427	14/30	27TH ST & BN RY OC	16.73	Southwest	$190,267	$342,481
471	14/35	BN RR OC	18.77	Southwest	$220,864	$397,554
481	14/115	BN OC	40.48	Southwest	$227,172	$408,910
310	16/8	SR 16 OC, S25TH ST	0.40	Olympic		
157	16/12E	CEDAR ST OC	0.62	Olympic		
158	16/12W	CEDAR ST OC	0.62	Olympic		
173	16/15E	UNION AVE OC	1.15	Olympic		
172	16/15W	UNION AVE OC	1.15	Olympic		
170	16/20E	SNAKE LAKE BR	1.57	Olympic	$243,000	$436,550
163	16/20W	SNAKE LAKE BR	1.57	Olympic	$163,000	$292,377
218	16/120	SR 16 OC, OLYMPIC I/C	10.74	Olympic	$75,708	$136,274
198	16/130E	ROSEDALE RD OC	12.76	Olympic	$407,006	$732,610
199	16/130W	ROSEDALE RD OC	12.77	Olympic	$216,409	$389,535
296	18/3	SR 18 OC, 32ND AVE S	0.77	Northwest	$459,289	$826,719
279	18/4	SR 18 OC, MILITARY RD	1.75	Northwest	$437,096	$786,773
149	18/5	PEASLEY CANYON RD OC	1.86	Northwest	$833,162	$1,499,692
150	18/6	W VALLEY HIGHWAY OC	2.30	Northwest	$268,191	$482,744
181	18/8N	UP RR OC (CMSTPP)	3.49	Northwest	$403,524	$726,343
182	18/8S	UP RR OC (CMSTPP)	3.49	Northwest	$299,371	$538,867
151	18/9	NP RY OC	3.82	Northwest	$2,730,904	$4,915,627
203	18/14N	NP RY OC - NORTH	4.95	Northwest	$112,404	$202,326
222	18/16S	BNRR OC-SOUTH	6.41	Northwest	$352,176	$633,917
216	18/17S	GREEN R (NEELEY BRIDGE)	6.62	Northwest	$72,600	$130,680
223	18/20N	KENT-BLACK DIAMOND RD O	10.31	Northwest	$31,647	$56,965
224	18/24N	SOOS CR	10.87	Northwest	$126,187	$227,136
245	18/26	SR 18 OC, SE 231ST ST	15.73	Northwest	$195,085	$351,153
280	18/31N	HOLDER CR HOBART RD OC	20.34	Northwest	$206,525	$371,745
228	18/34	RAGING RIVER	26.30	Northwest	$282,557	$508,603
5	20/15	SNC RR OC (CMSTPP)	9.16	Olympic	$84,000	$386,000
249	20/209N	ABANDONED RR OC	49.86	Northwest	$177,430	$319,374
424	20/209S	ABANDONED RR OC	49.86	Northwest	$165,275	$297,495
348	20/259	BAKER R	89.35	Northwest	$290,114	$635,036
491	20/262	JACKMAN CR	91.03	Northwest	$295,323	$531,581
497	20/268	SWIFT CR	99.67	Northwest	$78,705	$141,669
352	20/280	BACON CR	110.75	Northwest	$93,005	$167,409

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
502	20/338	GORGE LAKE	126.12	Northwest	$333,179	$599,722
354	20/609	EARLY WINTERS CR	175.98	North Central	$110,231	$198,416
338	28/12	DOUGLAS CR	15.78	North Central	$157,058	$282,704
346	82/1N	I-82 OVER I-90	0.00	South Central	$265,034	$477,061
347	82/1S	I-82 OVER I-90	0.00	South Central	$121,006	$217,810
345	82/2S	W-E RAMP, E-E RAMP OC	0.00	South Central	$65,412	$117,741
335	82/117S	N 1ST ST N-W RAMP OC	31.36	South Central	$59,411	$106,940
323	82/120N	OVERFLOW CHANNEL	31.99	South Central	$93,126	$167,627
324	82/120S	OVERFLOW CHANNEL	31.99	South Central	$93,126	$167,627
325	82/121N	NP RY OC MOXEE	32.47	South Central	$151,261	$272,270
326	82/121S	NP RY OC MOXEE	32.47	South Central	$151,261	$272,270
341	82/122N-W	82N RAMP OVR I-82	33.24	South Central	$335,363	$603,653
342	82/123N-W	82N RAMP OVR TERRACE HT	33.24	South Central	$115,874	$208,573
233	90/83N	424TH AVE SE OC	31.94	Northwest	$140,547	$252,985
234	90/83S	424TH AVE SE OC	31.94	Northwest	$138,402	$249,124
246	90/85N	BN RR OC (CMSTPP) TANNER	33.39	Northwest	$72,919	$131,254
247	90/85S	BN RR OC (CMSTPP) TANNER	33.39	Northwest	$73,546	$132,383
256	90/89N	EDGEWICK RD OC	34.63	South Central	$138,039	$248,470
257	90/89S	EDGEWICK RD OC	34.63	South Central	$137,720	$247,896
252	90/90N	S FK SNOQUALMIE R LOWER	36.62	South Central	$112,552	$202,594
253	90/90S	S FK SNOQUALMIE R LOWER	36.62	South Central	$66,435	$119,582
357	90/94	I-90 OC, TINKHAM RD	42.32	South Central	$130,818	$259,019
358	90/95.8	I-90 OC HANSEN CR RD	47.73	South Central	$70,802	$140,187
437	90/96.5N	DENNY CRK RD O-XING	47.96	South Central	$194,453	$350,015
436	90/96S	S FK SNOQUALMIE R	47.95	South Central	$184,283	$331,709
435	90/97.8N	FRANKLIN FALLS BR	51.12	South Central	$38,500	$69,300
438	90/98.6N	UPPER SNOQUALMIE R BR	51.83	South Central	$581,515	$1,046,727
404	90/99	SR 906 W-W RAMP OC	52.24	South Central	$273,059	$491,505
405	90/101	ACCESS RD OC	52.95	South Central	$406,225	$731,204
387	90/104	SR 906 0C	54.69	South Central	$270,699	$487,258
534	90/113	STAMPEDE RD OVER I-90	62.97	South Central	$135,691	$244,243
535	90/114	CABIN CR RD OVER I-90	63.98	South Central	$254,914	$458,845
445	90/118N	KACHESS R	69.49	South Central	$65,302	$117,543
353	90/119	WEST EASTON RD OVER I-90	70.28	South Central	$85,344	$153,618
429	90/120N	YAKIMA R	71.26	South Central	$242,583	$436,649
430	90/120S	YAKIMA R	71.26	South Central	$252,126	$453,826
527	90/121	EAST EASTON UC	71.56	South Central	$275,556	$496,000
440	90/124N	LAKE VALLEY RD OC	74.05	South Central	$197,549	$355,588
439	90/124S	LAKE VALLEY RD OC	74.05	South Central	$198,864	$357,954
444	90/130N	NELSON RD OC	78.06	South Central	$180,395	$324,710

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
443	90/130S	NELSON RD OC	78.06	South Central	$183,970	$331,145
425	90/133	I-90 OC, BULLFROG RD	80.31	South Central	$180,054	$324,096
433	90/134N	CLE ELUM R	80.79	South Central	$63,800	$114,840
434	90/134S	CLE ELUM R	80.79	South Central	$63,800	$114,840
351	90/135E-N	E-N RAMP I-90 OC	83.12	South Central	$99,627	$179,329
334	90/136N	I-90 OVR CLE ELUM RD, BN	83.53	South Central	$238,640	$429,551
333	90/136S	I-90 OVR CLE ELUM RD, BN	83.53	South Central	$245,020	$441,035
479	90/137	I-90 OC, OAKES AVE	84.20	South Central	$182,815	$329,066
332	90/140N	YAKIMA R	86.20	South Central	$135,262	$243,471
331	90/140S	YAKIMA R	86.20	South Central	$134,129	$241,431
431	90/141N	PEOH RD OC	86.63	South Central	$241,736	$435,125
432	90/141S	PEOH RD OC	86.63	South Central	$247,649	$445,767
487	90/144	I-90 OC THORP	89.77	South Central	$203,379	$366,082
526	90/147	I-90 OC, ELK HT	93.62	South Central	$128,002	$230,403
327	90/154N	YAKIMA R	102.49	South Central	$337,090	$606,761
328	90/154S	YAKIMA R	102.49	South Central	$335,258	$603,464
329	90/156N	DRY CR	104.71	South Central	$267,460	$481,427
330	90/156S	DRY CR	104.71	South Central	$266,888	$480,398
355	90/167	I-90 OC, RD #6	111.46	South Central	$34,408	$61,934
356	90/172	I-90 OC, MUNDY RD	117.82	South Central	$34,452	$62,014
343	97/508	METHOW R	253.49	North Central	$445,330	$801,593
202	99/400	I-5 OC	0.00	Olympic	$366,212	$659,182
295	99/507E	SR 599 OC	22.94	Northwest	$92,000	$163,578
312	101/138	W FK HOQUIAM R	96.69	Olympic	$144,639	$260,350
313	101/147	BIG CREEK	102.61	Olympic	$238,524	$429,343
316	101/149	HUMPTULIPS OVERFLOW	108.84	Olympic	$435,639	$784,149
317	101/150	HUMPTULIPS R	109.00	Olympic	$483,681	$870,626
308	101/266	DUCKABUSH R	310.22	Olympic	$63,800	$114,840
300	101/310	SOL DUC R	194.30	Olympic	$63,800	$114,840
301	101/312	LAKE CR	198.49	Olympic	$148,748	$267,746
303	101/314	SOL DUC RIVER #2	203.15	Olympic	$246,554	$443,797
304	101/316	SOL DUC RIVER	203.66	Olympic	$63,800	$114,840
314	101/320	SOL DUC R	211.55	Olympic	$346,935	$624,482
315	101/322	SOL DUC RIVER #5	212.46	Olympic	$263,010	$473,418
215	101/350	MORSE CR	252.16	Olympic	$149,127	$268,429
259	101/425	GOLDSBOROUGH CR & RR O	346.51	Olympic	$475,585	$856,053
260	101/426	MATLOCK RD OC	346.79	Olympic	$140,822	$253,480
11	101/427	US 101 OC, LOST LK RD	348.08	Olympic	$69,000	$286,000
241	101/428	MILL CREEK	348.44	Olympic	$96,899	$174,418
262	101/430E	SKOOKUM CR NP RY OC	353.81	Olympic	$303,815	$546,866

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
263	101/430W	SKOOKUM CR NP RY OC	353.81	Olympic	$303,573	$546,431
306	104/1	S-E RAMP, US 101 OC	0.02	Olympic	$246,367	$443,461
292	105/104	SOUTH BAY - ELK RIVER	32.07	Olympic	$579,744	$1,043,539
291	105/108	JOHNS R	37.23	Olympic	$473,209	$851,776
9	107/4	CHEHALIS R	6.83	Olympic	$134,000	$435,000
319	112/20	CLALLAM R	19.00	Olympic	$120,291	$216,523
318	116/5	PORTAGE CANAL	2.67	Olympic	$770,484	$1,386,871
321	117/1	US 101 OC, SR 117	0.00	Olympic	$144,579	$260,241
271	121/15	I-5 OC, SR 121	7.63	Olympic	$134,431	$241,976
495	122/5	TILTON	3.57	Southwest	$814,000	$1,465,200
454	122/10	MOSSYROCK	6.56	Southwest	$417,027	$750,648
201	161/10	SR 161 OVER SR 512	25.67	Olympic	$159,231	$286,615
386	161/102	I-5 OC	34.21	Northwest	$276,172	$497,109
236	162/2	SR 410 OC	0.01	Olympic	$123,761	$222,770
297	166/24	SR 166 OC	4.04	Olympic	$342,513	$616,523
204	167/30E	W-S RAMP OC	7.05	Olympic	$150,695	$271,250
205	167/32E	VALLEY AVE & UPRR O'XING	7.22	Olympic	$1,374,142	$2,473,456
195	167/34E	WEST VALLEY HWY OC	7.56	Olympic	$313,291	$563,924
237	167/110	SR 167 OC, 15TH ST SW	13.81	Northwest	$208,632	$375,537
7	167/111W-N	W-N RAMP N-E RAMP OC	14.28	Northwest	$88,000	$295,000
183	167/112W	SR 18 OC	14.28	Northwest	$308,022	$554,440
294	167/115	SR 167 OC, W MAIN ST	14.77	Northwest	$278,647	$501,564
206	167/116	SR 167 OC, 15TH ST NW	15.77	Northwest	$91,091	$163,964
299	167/117	SR 167 OC 37TH	17.00	Northwest	$91,223	$164,201
155	167/121E	GREEN R	19.04	Northwest	$329,670	$593,406
156	167/121W	GREEN R	19.04	Northwest	$329,698	$593,456
174	167/122E	SR 516 OC	19.60	Northwest	$33,666	$60,598
175	167/122W	SR 516 OC	19.60	Northwest	$34,348	$61,826
176	167/123E	MEEKER ST OC	19.83	Northwest	$110,831	$199,495
177	167/123W	MEEKER ST OC	19.83	Northwest	$76,467	$137,640
164	167/124E	JAMES ST OC	20.20	Northwest	$87,439	$157,390
165	167/124W	JAMES ST OC	20.20	Northwest	$94,639	$170,349
166	167/125E	UP RR OC (CMSTPP)	20.40	Northwest	$122,540	$220,572
167	167/125W	UP RR OC (CMSTPP)	20.40	Northwest	$122,540	$220,572
161	167/126E	4TH ST OC	20.70	Northwest	$112,860	$203,148
162	167/126W	4TH AVE OC	20.70	Northwest	$112,596	$202,673
168	167/127E	BN RR OC (NP)	20.96	Northwest	$193,996	$349,193
169	167/127W	BN RR OC (NP)	20.96	Northwest	$193,397	$348,114
178	167/128E	84TH AVE SOUTH O'XING	21.31	Northwest	$112,228	$202,010
179	167/128W	84TH AVE SOUTH O'XING	21.31	Northwest	$110,682	$199,228

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
200	167/129	SR 167OC S 212TH	22.38	Northwest	$110,985	$199,772
293	167/130	SR 167 OC, S 208TH ST	22.63	Northwest	$223,328	$401,990
180	167/133	SR 167 OC, S 180TH ST	24.42	Northwest	$264,523	$476,141
267	169/12	BN RR OC (NP)	10.41	Northwest	$352,831	$635,095
284	202/60	SNOQUALMIE R	26.00	Northwest	$105,600	$190,080
272	203/33	CHERRY CR	17.22	Northwest	$374,693	$674,447
258	203/106	SKYKOMISH R	23.20	Northwest	$46,200	$83,160
460	205/10	I-205 OC, NE 9TH ST	28.83	Southwest	$190,025	$342,045
453	205/14	I-205 OC, NE 18TH ST	29.34	Southwest	$103,109	$185,595
373	205/16E	BURTON RD OC	29.79	Southwest	$92,835	$167,102
372	205/16W	BURTON RD OC	29.79	Southwest	$93,396	$168,112
406	205/20	I-205 OC, 4TH PLAIN BLVD	31.11	Southwest	$460,427	$828,769
520	205/24	I-205 OC, NE 63RD ST	31.79	Southwest	$137,390	$247,302
413	205/28	I-205 OC, NE 78TH ST	32.61	Southwest	$384,615	$692,307
459	205/30N	PADDEN PKWY OVER I-205	33.04	Southwest	$174,856	$314,741
458	205/30S	I-205 OC, NE 83RD ST	33.04	Southwest	$119,070	$214,325
452	205/32	I-205 OC, NE ANDRESEN RD	33.52	Southwest	$153,428	$276,170
417	205/34E	LP & N RY OC	34.00	Southwest	$133,359	$240,045
418	205/34W	LP & N RY	34.00	Southwest	$134,156	$241,481
419	205/36E	ST JOHNS RD OC	34.29	Southwest	$94,232	$169,617
421	205/36W	ST JOHNS RD OC	34.29	Southwest	$89,342	$160,816
467	205/38	I-205 OC, NE 50TH AVE	34.82	Southwest	$99,468	$179,042
477	205/40	I-205 OC, NE 119TH ST	35.65	Southwest	$194,970	$350,945
420	205/42E	SALMON CR & AVE OC	36.00	Southwest	$107,470	$193,446
416	205/42W	SALMON CR & AVE OC	36.00	Southwest	$99,825	$179,685
476	205/44	I-205 OC, NE 134TH ST	36.75	Southwest	$284,169	$511,503
478	205/46	I-205 OC, NE 20TH AVE	36.90	Southwest	$279,158	$502,484
194	303/12	PORT WASHINGTON CS1840	0.73	Olympic	$3,257,122	$5,862,820
227	305/10	AGATE PASS	6.82	Olympic	$385,457	$693,822
307	401/10	NASELLE R	11.37	Southwest	$375,293	$675,527
56	405/1	I-5 OC	0.00	Northwest	$319,539	$575,170
115	405/5	I-405 OC, 61ST AVE S	0.34	Northwest	$203,880	$366,983
91	405/11	SR 181 OC	0.96	Northwest	$764,044	$1,375,278
92	405/12	BN RR OC (CMSTPP & NP)	1.14	Northwest	$928,439	$1,671,189
93	405/15	SR 167 OC	2.30	Northwest	$560,313	$1,008,563
94	405/16	SR 515 OC	2.77	Northwest	$318,247	$572,844
95	405/41E	SE 8TH ST OC	12.78	Northwest	$144,216	$259,588
96	405/41W	WILBURTON INTERCHANGE	12.79	Northwest	$144,799	$260,637
116	405/44	I-405 OC, 12TH ST	14.12	Northwest	$263,852	$474,933
97	405/45E	N-W N-E RAMP OC	14.82	Northwest	$106,788	$192,218

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
98	405/45W	N-W & N-E RAMPS OC	14.82	Northwest	$107,569	$193,624
99	405/46E	SR 520 OC	14.83	Northwest	$212,993	$383,387
100	405/46W	SR 520 OC	14.83	Northwest	$208,093	$374,567
101	405/47E	NORTHUP WAY OC	14.83	Northwest	$120,599	$217,077
102	405/47W	NORTHUP WAY OC	14.83	Northwest	$327,124	$588,822
103	405/48E	BNRR & 115th AVE NE OC	15.00	Northwest	$288,915	$520,047
117	405/48S-W	S-W RAMP BNRR OC	14.83	Northwest	$72,710	$130,878
104	405/48W	BNRR & 115 AVE NE OC	15.00	Northwest	$392,293	$706,127
105	405/52E	SR 908 OC	18.11	Northwest	$158,142	$284,655
106	405/52NCD	NBCD, SR 908 OC	17.84	Northwest	$158,296	$284,932
107	405/52SCD	SBCD, SR 908 OC	18.11	Northwest	$236,269	$425,284
108	405/52W	SR 908 OC	18.11	Northwest	$156,866	$282,358
109	405/56E	BN RR OC (NP)	20.05	Northwest	$252,604	$454,687
110	405/56W	BN RR OC (NP)	20.05	Northwest	$73,508	$132,314
111	405/59E	NE 132ND ST OC	20.90	Northwest	$163,059	$293,505
112	405/59W	NE 132ND ST OC	20.90	Northwest	$138,958	$250,124
118	405/64	I-405 OC, NE 160TH ST	22.62	Northwest	$188,381	$339,085
119	405/73	I-405 OC, 195TH ST	24.48	Northwest	$138,342	$249,015
113	405/103E	228TH ST OC	26.31	Northwest	$206,234	$371,220
114	405/103W	228TH ST OC	26.33	Northwest	$191,345	$344,421
503	409/5	BIRNIE SL	1.78	Southwest	$82,500	$148,500
154	410/31	WHITE R (STUCK R)	8.99	Olympic	$712,547	$1,282,585
238	410/32	SR 410 OC, LINDEN DR	9.32	Olympic	$88,391	$159,103
212	410/39N	166TH AVE E OC	11.46	Olympic	$97,114	$174,804
10	410/115	SCATTER CR	31.06	Northwest	$176,000	$810,000
489	410/123	SLIPPERY CR	42.49	Northwest	$77,754	$139,956
456	432/8S	3RD AVE OC	7.62	Southwest	$297,314	$535,164
415	432/10N	HARRY MORGAN BRIDGE	9.58	Southwest	$1,167,172	$2,100,909
414	432/10S	COWLITZ R & NP RY OC	9.58	Southwest	$1,294,502	$2,330,104
422	432/12	SR 432 OC I-5	10.29	Southwest	$246,895	$444,411
376	500/5	SR 500 OC, 4TH PLAIN RD	4.44	Southwest	$387,596	$697,673
371	500/6	I-205 OC	4.77	Southwest	$274,780	$494,604
482	501/24	I-5 OC	19.84	Southwest	$163,273	$293,891
509	503/112	JIM CR	39.55	Southwest	$186,445	$335,600
451	504/1	I-5 OC	0.00	Southwest	$80,498	$144,896
519	505/102	SALMON CR	16.40	Southwest	$251,774	$453,192
486	505/125	I-5 OC	2.94	Southwest	$312,802	$563,043
523	506/2	CAMPBELL CR	0.90	Southwest	$72,188	$129,938
515	506/102	STILLWATER CR	4.69	Southwest	$233,382	$420,087
512	506/108	I-5 OC	11.50	Southwest	$158,059	$284,506

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
311	507/102	SKOOKUMCHUCK RIVER BR	6.10	Olympic	$53,570	$96,426
298	507/116	WEYERHAEUSER RR OC	21.18	Olympic	$80,322	$144,580
522	508/32	TILTON R	32.25	Southwest	$160,094	$288,169
302	509/103	JOES CREEK	9.93	Northwest	$35,200	$63,360
264	510/9	BN RR OC (NP)	6.48	Olympic	$34,056	$61,301
265	510/10	BN RR OC (NP)	6.63	Olympic	$61,276	$110,296
359	512/1	I-5 OC	0.00	Olympic	$219,000	$393,258
255	512/13	SR 512 OC, PORTLAND AVE	3.71	Olympic	$44,715	$80,487
188	512/15N	WALLER RD 0C	4.35	Olympic	$120,918	$217,652
189	512/15S	WALLER RD OC	4.35	Olympic	$120,918	$217,652
197	512/19	SR 512 OC, CANYON RD	5.86	Olympic	$288,365	$519,057
184	512/21N	WOODLAND AVE OC	6.84	Olympic	$216,579	$389,842
185	512/21S	WOODLAND AVE OC	6.84	Olympic	$216,832	$390,298
186	512/23N	FRUITLAND AVE OC	7.22	Olympic	$213,593	$384,467
187	512/23S	FRUITLAND AVE OC	7.22	Olympic	$190,108	$342,194
285	512/25	9TH ST SW OVER SR 512	8.37	Olympic	$158,147	$284,665
196	512/29N	15TH AVE SW OC	9.84	Olympic	$245,355	$441,639
190	512/29S	15TH AVE SW OC	9.84	Olympic	$168,597	$303,475
191	512/31N	MERIDIAN ST OC	10.06	Olympic	$148,676	$267,617
192	512/31S	MERIDIAN ST OC	10.06	Olympic	$163,636	$294,545
305	512/33	SR 512 UC 7TH	10.86	Olympic	$245,636	$442,144
323	512/38	SR 512 OC, BENSTON DR	11.59	Olympic	$117,898	$212,216
225	512/40N	SR 167 OC	11.99	Olympic	$185,620	$334,115
159	518/18N	42ND AVE S OC	2.91	Northwest	$241,434	$434,580
160	518/18S	42ND AVE S OC	2.91	Northwest	$176,567	$317,820
273	522/28N	NORTH CR	10.85	Northwest	$89,722	$161,499
274	522/28S	NORTH CR	10.85	Northwest	$91,586	$164,855
208	522/136	CATHCART RD OC	20.41	Northwest	$163,103	$293,585
2	522/138	SNOHOMISH R	20.50	Northwest	$1,129,000	$2,691,000
209	522/142	W. Main Street OC	23.14	Northwest	$137,346	$247,223
242	522/144	179TH AVE SE OC	24.14	Northwest	$160,490	$288,882
243	522/150	US 2 & BN RR OC	24.65	Northwest	$383,521	$690,337
278	525/10	BN RR OC (GN)	8.36	Northwest	$40,700	$73,260
207	526/10	AIRPORT RD OC	1.43	Northwest	$146,603	$263,885
268	526/12S-E	S-E RAMP, SR 526 0C	1.98	Northwest	$134,453	$242,015
153	526/14	HARDESON ROAD OC	2.90	Northwest	$167,382	$301,287
152	526/20	CASINO RD OC	3.74	Northwest	$203,082	$365,548
248	529/8E	WALNUT ST OC	4.93	Northwest	$83,782	$150,807
250	529/8W	WALNUT ST OC	4.93	Northwest	$82,489	$148,480
426	529/10W	SNOHOMISH R CS3114	3.85	Northwest		$10,000,000

P2 Bridge Preservation - Seismic Retrofit

2011-13 Bien Priority Array

(Sorted by Bridge Number)

11-13 #	Bridge Number	Bridge Name	Mile post	Region	Bridge Item$'s	Total$'s
251	529/15E	UNION SL	5.12	Northwest	$2,288,370	$4,119,065
261	530/115	I-5 OC	16.95	Northwest	$182,903	$329,225
474	530/128	N FK STILLAGUAMISH R OSO	33.86	Northwest	$30,250	$54,450
484	530/132	BOULDER CR	40.13	Northwest	$55,666	$100,198
240	532/6	GN RY COUNTY RD OC	4.98	Northwest	$568,178	$1,022,720
283	534/1	I-5 OC	0.00	Northwest	$131,280	$236,303
407	536/15	SKAGIT R CS2907	4.72	Northwest	$427,972	$770,349
514	542/34	N FK NOOKSACK R	35.32	Northwest	$129,872	$233,769
530	542/46	GALENA CR UPPER X-ING	53.65	Northwest	$249,695	$449,450
457	543/1	I-5 OC, SR 543	0.00	Northwest	$135,256	$243,461
448	548/1	I-5 OC	0.00	Northwest	$284,647	$512,365
193	900/30	I-90 OC	21.58	Northwest	$150,667	$271,201
466	970/1	SR 970 OVER I-90	0.00	South Central	$180,527	$324,948
465	970/5	NP RY OC	0.29	South Central	$160,936	$289,684
Total Number of Bridges = 534				Total$ =	$191,699,595	$369,362,855

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006207B **Bridge Number:** 5/508E	**Bridge Name:** MILITARY RD OC		**Route:** 5	**Milepost:** 146.44	**Region:** Northwest **County:** King
Location: 4.4 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 43.8	**Latitude:** ° ' " 47 21 8.4	**Structure Length:** 243 ft.		**Out to Out Width:** 73 ft.
Feature Intersected: MILITARY RD	**PGA (500 yr):** 31.76 %g	**PGA (1000 yr):** 41.8% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1960 **Year Rebuilt:** 1994 **ADT:** 80000 **Truck Pct:** 15 %	**11-13 Rank:** 26	**Skew Angle:** 41	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2 and 3, each has six columns. Retrofit five east 3'-0" diameter columns. #3 hoops @ 12". #10 bars with 2'-2" splices. Footing without top mat. (E-21g)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.). Large skew (41 degree), deep excavation (12 ft). Install girder stops at Pier 1 thru 4.

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006313D **Bridge Number:** 5/509W	**Bridge Name:** S 272ND ST OC		**Route:** 5	**Milepost:** 146.81	**Region:** Northwest **County:** King
Location: 4.8 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 48	**Latitude:** ° ' " 47 21 27.6	**Structure Length:** 151 ft.		**Out to Out Width:** 91.5 ft.
Feature Intersected: S 272ND ST	**PGA (500 yr):** 31.83 %g	**PGA (1000 yr):** 41.9% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1961 **Year Rebuilt:** 2002 **ADT:** 80000 **Truck Pct:** 15 %	**11-13 Rank:** 27	**Skew Angle:** 4	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has seven columns. Retrofit five east 3'-0" diameter columns. #3 hoops @ 12". #10 bars with 3'-8" splices. Footing without top mat. (E-23h)

Retrofit Program Notes:

Bridge widened (c5981). Add two 3'-0" dia. Columns West side on 4'-6" drilled shafts at Piers 2 and 3 each side of bridge.

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006313C **Bridge Number:** 5/509E	**Bridge Name:** S 272ND ST OC		**Route:** 5	**Milepost:** 146.81	**Region:** Northwest **County:** King
Location: 4.8 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** 122 ° 17 ' 46 "	**Latitude:** 47 ° 21 ' 27.4 "	**Structure Length:** 151 ft.		**Out to Out Width:** 76.5 ft.
Feature Intersected: S 272ND ST	**PGA (500 yr):** 31.83 %g	**PGA (1000 yr):** 41.9% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1961 **Year Rebuilt:** 1994 **ADT:** 80000 **Truck Pct:** 15 %	**11-13 Rank:** 28	**Skew Angle:** 4	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2 and 3, each has six columns. Retrofit five east 3'-0" diameter columns. #3 hoops @ 12". #10 bars with 3'-8" splices. Footing without top mat. (E-23h)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006186A **Bridge Number:** 5/510E	**Bridge Name:** S 260TH ST OC		**Route:** 5	**Milepost:** 147.64	**Region:** Northwest **County:** King
Location: 5.6 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 36	**Latitude:** ° ' " 47 22 12	**Structure Length:** 162 ft.		**Out to Out Width:** 68 ft.
Feature Intersected: S 260TH ST	**PGA (500 yr):** 31.99 %g	**PGA (1000 yr):** 42.2% %g	**Span Type:** CVS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1960 **Year Rebuilt:** 1991 **ADT:** 80000 **Truck Pct:** 15 %	**11-13 Rank:** 29	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has four columns. Retrofit three east 2'-9" diameter columns. #4 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 2'-9" dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006186B **Bridge Number:** 5/510W	**Bridge Name:** S 260TH ST OC		**Route:** 5	**Milepost:** 147.64	**Region:** Northwest **County:** King
Location: 5.6 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 36	**Latitude:** ° ' " 47 22 12	**Structure Length:** 162 ft.		**Out to Out Width:** 92.2 ft.
Feature Intersected: S 260TH ST	**PGA (500 yr):** 31.99 %g	**PGA (1000 yr):** 42.2% %g	**Span Type:** CVS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1960 **Year Rebuilt:** 2002 **ADT:** 80000 **Truck Pct:** 15 %	**11-13 Rank:** 30	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has five columns. Retrofit three center 2'-9" diameter columns. #4 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 2'-9" dia.)

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006820A **Bridge Number:** 5/511E	**Bridge Name:** SR 516 OC		**Route:** 5	**Milepost:** 149.17	**Region:** Northwest **County:** King
Location: 7.2 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** 122 ° 17 ' 24 "	**Latitude:** 47 ° 23 ' 0 "	**Structure Length:** 269 ft.		**Out to Out Width:** 90 ft.
Feature Intersected: SR 516	**PGA (500 yr):** 32.15 %g	**PGA (1000 yr):** 42.6% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1962 **Year Rebuilt:** 1991 **ADT:** 85000 **Truck Pct:** 15 %	**11-13 Rank:** 31	**Skew Angle:** 30	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2, 3 and 4, each has seven 3'-0" diameter columns. Retrofit six east columns only. These columns have #3 hoops @ 12". #10 bars with 3'-8" splices. Footing without top mat. (E-23h)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (6 ea. 18 total, 3' dia.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007090C **Bridge Number:** 5/516W	**Bridge Name:** ORILLA RD OC-SO188TH ST		**Route:** 5	**Milepost:** 152.26	**Region:** Northwest **County:** King
Location: 3.1 N JCT SR 516 **Detour Length:** 0 miles	**Longitude:** 122 16 12	**Latitude:** 47 25 54	**Structure Length:** 230 ft.		**Out to Out Width:** 93.8 ft.
Feature Intersected: ORILLA RD	**PGA (500 yr):** 32.62 %g	**PGA (1000 yr):** 43.8% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1963 **Year Rebuilt:** 1997 **ADT:** 89500 **Truck Pct:** 15 %	**11-13 Rank:** 32	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has seven 3'-0" diameter columns. Retrofit six west columns only. These 3'-0" diameter columns have #3 hoops @ 12" and longitudinal bars with lap splices. Footing without top mat. (E-54m)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (6 ea. 12 total, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007090B **Bridge Number:** 5/516E	**Bridge Name:** ORILLA RD OC		**Route:** 5	**Milepost:** 152.26	**Region:** Northwest **County:** King
Location: 3.1 N JCT SR 516 **Detour Length:** 0 miles	**Longitude:** 122 ° 16 ' 12 "	**Latitude:** 47 ° 25 ' 54 "	**Structure Length:** 195 ft.		**Out to Out Width:** 79 ft.
Feature Intersected: ORILLA RD	**PGA (500 yr):** 32.62 %g	**PGA (1000 yr):** 43.8% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1963 **Year Rebuilt:** 1994 **ADT:** 89500 **Truck Pct:** 15 %	**11-13 Rank:** 33	**Skew Angle:** 1	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has seven 3'-0" diameter columns. Retrofit six east columns only. These 3'-0" diameter columns have #3 hoops @ 12" and longitudinal bars with lap splices. Footing without top mat. (E-54m)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (6 ea. 12 total, 3' dia.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007401D **Bridge Number:** 5/520W	**Bridge Name:** KLICKITAT DR OC		**Route:** 5	**Milepost:** 154.13	**Region:** Northwest **County:** King
Location: 5.0 N JCT SR 516 **Detour Length:** 5 miles	**Longitude:** 122 ° 15 ' 52.1 "	**Latitude:** 47 ° 27 ' 28.9 "	**Structure Length:** 163 ft.		**Out to Out Width:** 81.7 ft.
Feature Intersected: KLICKITAT DR	**PGA (500 yr):** 32.83 %g	**PGA (1000 yr):** 44.6% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1997 **ADT:** 102000 **Truck Pct:** 15 %	**11-13 Rank:** 34	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Retrofit five 3'-0" diameter columns at Piers 2 and 3. These columns have #3 hoops @ 12". Longitudinal bars with lap splices. Footing without top mat. (E-54m)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007401F **Bridge Number:** 5/521W	**Bridge Name:** E-N RAMP OC		**Route:** 5	**Milepost:** 154.52	**Region:** Northwest **County:** King
Location: 5.2 N JCT SR 516 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 15 54	**Latitude:** ° ' " 47 27 42	**Structure Length:** 146 ft.		**Out to Out Width:** 81.6 ft.
Feature Intersected: I-405 E-E RAMP	**PGA (500 yr):** 32.87 %g	**PGA (1000 yr):** 44.7% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 0 **ADT:** 102000 **Truck Pct:** 15 %	**11-13 Rank:** 35	**Skew Angle:** 13	**Pier Type:** Pier with more than two columns		**Footing Type:** Timber pile

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns. #3 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footing without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007401E **Bridge Number:** 5/521E	**Bridge Name:** E-N S-N RAMPS OC		**Route:** 5	**Milepost:** 154.52	**Region:** Northwest **County:** King
Location: 5.2 N JCT SR 516 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 15 48	**Latitude:** ° ' " 47 27 42	**Structure Length:** 217 ft.		**Out to Out Width:** 71.6 ft.
Feature Intersected: I-405 E-E S-E RAMP	**PGA (500 yr):** 32.85 %g	**PGA (1000 yr):** 44.6% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 0 **ADT:** 102000 **Truck Pct:** 15 %	**11-13 Rank:** 36	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Timber pile

Bridge Notes:

Piers 2, 3 and 4, each has four 3'-0" diameter columns. #3 hoops @ 12". longitudinal bars with lap splices. Footing without top mat. (E-54m)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (4 ea. 12 total, 3' dia.)

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007617D **Bridge Number:** 5/531W	**Bridge Name:** MILITARY RD OC		**Route:** 5	**Milepost:** 159.67	**Region:** Northwest **County:** King
Location: 2.2 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 36	**Latitude:** ° ' " 47 31 48	**Structure Length:** 149 ft.		**Out to Out Width:** 81 ft.
Feature Intersected: MILITARY RD ROSE ST	**PGA (500 yr):** 33.42 %g	**PGA (1000 yr):** 46.3% %g	**Span Type:** CS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1995 **ADT:** 106000 **Truck Pct:** 15 %	**11-13 Rank:** 37	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has five 3'-0" diameter columns. Retrofit four east columns only. These columns have #4 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footings without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007617C **Bridge Number:** 5/531E	**Bridge Name:** MILITARY RD OC		**Route:** 5	**Milepost:** 159.67	**Region:** Northwest **County:** King
Location: 2.2 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 37.3	**Latitude:** ° ' " 47 31 49.7	**Structure Length:** 161 ft.		**Out to Out Width:** 83 ft.
Feature Intersected: MILITARY RD ROSE ST	**PGA (500 yr):** 33.42 %g	**PGA (1000 yr):** 46.3% %g	**Span Type:** CS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1991 **ADT:** 106000 **Truck Pct:** 15 %	**11-13 Rank:** 38	**Skew Angle:** 13	**Pier Type:** Pier with more than two columns		**Footing Type:** Steel pile

Bridge Notes:

Piers 2 and 3, each has five 3'-0" diameter columns. Retrofit four west columns only. These columns have #4 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footings without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007734C **Bridge Number:** 5/534W	**Bridge Name:** LUCILE ST OC		**Route:** 5	**Milepost:** 161.27	**Region:** Northwest **County:** King
Location: 4.1 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 6.2	**Latitude:** ° ' " 47 33 11.5	**Structure Length:** 190 ft.		**Out to Out Width:** 79 ft.
Feature Intersected: LUCILE ST	**PGA (500 yr):** 33.61 %g	**PGA (1000 yr):** 46.7% %g	**Span Type:** CS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1995 **ADT:** 106000 **Truck Pct:** 15 %	**11-13 Rank:** 39	**Skew Angle:** 22	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has five 3'-0" diameter columns. Retrofit four east columns per pier only. These columns have #4 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footing without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.). 12' excavation. Install catchers and stops at Piers 1 and 4 (22 degree skew).

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007734B **Bridge Number:** 5/534E	**Bridge Name:** LUCILE ST OC		**Route:** 5	**Milepost:** 161.27	**Region:** Northwest **County:** King
Location: 3.9 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 0	**Latitude:** ° ' " 47 33 12	**Structure Length:** 172 ft.		**Out to Out Width:** 93.6 ft.
Feature Intersected: LUCILE ST	**PGA (500 yr):** 33.61 %g	**PGA (1000 yr):** 46.7% %g	**Span Type:** CS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 0 **ADT:** 106000 **Truck Pct:** 15 %	**11-13 Rank:** 40	**Skew Angle:** 22	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2 and 3, each has five 3'-0" diameter columns. #4 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footing without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.). Install catcher blocks at piers 1 and 4.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007816B **Bridge Number:** 5/535W	**Bridge Name:** SB VIADUCT STA 2032		**Route:** 5	**Milepost:** 162.24	**Region:** Northwest **County:** King
Location: 4.5 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 18.8	**Latitude:** ° ' " 47 33 47	**Structure Length:** 604 ft.		**Out to Out Width:** 73 ft.
Feature Intersected: SB VIADUCT STA 2032	**PGA (500 yr):** 33.55 %g	**PGA (1000 yr):** 46.4% %g	**Span Type:** PCG		**Main Spans:** 6 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1992 **ADT:** 118000 **Truck Pct:** 15 %	**11-13 Rank:** 41	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 thru 5, each has six 4'-0" diameter columns. Pier 6 has six 4-6" diameter columns. Retrofit four center columns per pier at piers 2 thru 5 only. These columns have #4 hoops @ 12". longitudinal bars with lap or/and welded splices. Footing with top mat. Pier 6 has four 4'-6" (O.D.) x 5" wall prestressed concrete piles, filled with cylinder concrete after piles are set in place. No retrofit recommended.

Retrofit Program Notes:

Widened in 1992. Adds one 4'-0" diameter shaft column on each side of the existing 4 columns at piers 2 thru 5 and one 4'-6" diameter shaft column on each side of the existing 4 columns at pier 6.

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3, 4 and 5. (4 ea. 16 total, 4' dia.). Deep excavation (38' max.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741A **Bridge Number:** 5/536E	**Bridge Name:** NB VIADUCT STA 2064		**Route:** 5	**Milepost:** 162.98	**Region:** Northwest **County:** King
Location: 5.2 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 12.5	**Latitude:** ° ' " 47 34 10.5	**Structure Length:** 746 ft.		**Out to Out Width:** 58.8 ft.
Feature Intersected: NB VIADUCT STA 2064	**PGA (500 yr):** 33.42 %g	**PGA (1000 yr):** 46.1% %g	**Span Type:** CS		**Main Spans:** 18 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1992 **ADT:** 98500 **Truck Pct:** 15 %	**11-13 Rank:** 42	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

No Photo Available

Bridge Notes:

Piers 2 thru 8, each has four 3'-0" dia. columns on 3'-6" dia. drilled shafts. Pier 9 thru 18, each has four columns. Retrofit three west columns only. These columns are 3'-0" dia. columns on 3'-6" dia. drilled shafts. Hoops are #4 @ 12". Longitudinal bars insert 5'-0" into drilled shafts. Max. span length = 42'.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 51 columns built in 1966 (on drilled shaft, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741B **Bridge Number:** 5/536W	**Bridge Name:** SB VIADUCT STA 2064		**Route:** 5	**Milepost:** 162.98	**Region:** Northwest **County:** King
Location: 5.2 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 6	**Latitude:** ° ' " 47 34 18	**Structure Length:** 746 ft.		**Out to Out Width:** 53.7 ft.
Feature Intersected: SB VIADUCT STA 2064	**PGA (500 yr):** 33.42 %g	**PGA (1000 yr):** 46.0% %g	**Span Type:** CS		**Main Spans:** 18 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 1992 **ADT:** 98500 **Truck Pct:** 15 %	**11-13 Rank:** 43	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

No Photo Available

Bridge Notes:

Piers 2 thru 5, each has four 3'-0" dia. columns on 3'-6" dia. drilled shafts. Pier 6 thru 18, each has three 3'-0" dia. columns on 3'-6" dia. drilled shafts. Hoops are #4 @ 12". Longitudinal bars insert 5'-0" into drilled shafts. Max. span length = 42'.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 55 columns built in 1967 (on drilled shaft, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741C **Bridge Number:** 5/538E	**Bridge Name:** NB VIADUCT STA 2075		**Route:** 5	**Milepost:** 162.98	**Region:** Northwest **County:** King
Location: 5.6 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 6	**Latitude:** ° ' " 47 34 30	**Structure Length:** 872 ft.		**Out to Out Width:** 60.7 ft.
Feature Intersected: NB VIADUCT STA 2075	**PGA (500 yr):** 33.39 %g	**PGA (1000 yr):** 45.9% %g	**Span Type:** CS		**Main Spans:** 21 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1992 **ADT:** 98500 **Truck Pct:** 15 %	**11-13 Rank:** 44	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

Bridge Notes:

Max. span length = 45'. 4 columns per pier. Retrofit columns built in 1966 only (three west columns per pier). Piers 11 thru 15, each has three 4' dia. columns on 5' dis. drilled shafts. Piers 2 thru 9 and 16 thru 21, each has three 3' dia. columns on 3'-6" dia. drilled shafts. #4 hoops @ 12". Piers 10 thru 17 have horizontal struts.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 thru 21. (3 ea. 60 total, 3' dia. except P11-P15 3-4' dia. ea.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741D **Bridge Number:** 5/539W	**Bridge Name:** SB VIADUCT STA 2075		**Route:** 5	**Milepost:** 162.98	**Region:** Northwest **County:** King
Location: 5.8 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 6	**Latitude:** ° ' " 47 34 30	**Structure Length:** 6622 ft.		**Out to Out Width:** 71 ft.
Feature Intersected: SB VIADUCT STA 2075	**PGA (500 yr):** 33.39 %g	**PGA (1000 yr):** 45.9% %g	**Span Type:** CS		**Main Spans:** 157 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 1992 **ADT:** 98500 **Truck Pct:** 15 %	**11-13 Rank:** 45	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

Bridge Notes:

Columns on drilled shafts. Contract 7741: Piers 2 thru 10, 16 thru 30, retrofit four columns each pier (3' dia. column on 3'-6" dia. drilled shaft), pier 11 thru 15, (four 4' dia. column on 5'-0" dia. drilled shaft). Piers 9 thru 18 haves horizontal struts. Contract 7686: piers 25 thru 152, 3' dia. Columns except East columns at Piers 146 thru 152 are 4' diameter. Max. span =42'.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at piers 2 thru 152 (628 total, 3' dia. except P11-P15, 2-4' dia. ea.).

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741E **Bridge Number:** 5/539E	**Bridge Name:** NB VIADUCT STA 2085		**Route:** 5	**Milepost:** 163.24	**Region:** Northwest **County:** King
Location: 5.8 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 10.9	**Latitude:** ° ' " 47 34 34	**Structure Length:** 5825 ft.		**Out to Out Width:** 73 ft.
Feature Intersected: NB VIADUCT STA 2085	**PGA (500 yr):** 33.39 %g	**PGA (1000 yr):** 45.9% %g	**Span Type:** CS		**Main Spans:** 138 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1992 **ADT:** 98500 **Truck Pct:** 15 %	**11-13 Rank:** 46	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

No Photo Available

No Photo Available

Bridge Notes:

Retrofit columns built in 1966 only. Piers 2 thru 10, each has five 3' columns on 4' shafts. Piers 11, 12, 95 thru 103 and 114 thru 127, each has five 3' columns on 3'-6" shafts. Piers 13 thru 94, each has four 3' columns on 3'-6" shafts. Piers 104 thru 114, each has six 3' columns on 3'-6" shafts. Piers 115 thru 120 and 128 thru 138, each has three 3' columns on 3'-6" shafts. #4 hoops @12". Horizontal struts at piers 15 thru 19 and 56 thru 78. Lap splices at top of drilled shafts and top of horizontal struts.

Retrofit Program Notes:

Columns of bridge 5/539NCD are to be included with this bridge.

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 577 columns. (includes bridge 5/539NCD, 3' dia.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007504D **Bridge Number:** 5/543SCD	**Bridge Name:** SBCD KING JACKSON ST OC		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 0.3 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 19 11.7	**Latitude:** ° ' " 47 35 53.5	**Structure Length:** 709 ft.		**Out to Out Width:** 64.6 ft.
Feature Intersected: KING JACKSON ST	**PGA (500 yr):** 33.14 %g	**PGA (1000 yr):** 45.1% %g	**Span Type:** CBox		**Main Spans:** 9 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 0 **ADT:** 73582 **Truck Pct:** 10 %	**11-13 Rank:** 47	**Skew Angle:** 30	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

Bridge Notes:

Piers 2 thru 9, each has three 4'-0" diameter columns on 5'-0" diameter drilled shafts. End pier, pier 1, has three 24"x36" columns on 4' shafts. Columns have double hinges. End pier, pier 10, has three 4' diameter column shafts. These columns have #4 hoops @ 12". Vertical #11 bars have 6'-0" min, lap splices at top of drilled. In span hinges at span 4 near pier 4 and span 7 near pier 8.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 thru 9. (3 ea. 24 total, 4' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0005455A **Bridge Number:** 5/332	**Bridge Name:** PACIFIC AVE OC		**Route:** 5	**Milepost:** 107.45	**Region:** Olympic **County:** Thurston
Location: 3.2 N JCT US 101 **Detour Length:** 0 miles	**Longitude:** ° ' " 122 51 6.7	**Latitude:** ° ' " 47 2 28.1	**Structure Length:** 351 ft.		**Out to Out Width:** 138 ft.
Feature Intersected: PACIFIC AVE	**PGA (500 yr):** 29.75 %g	**PGA (1000 yr):** 39.1% %g	**Span Type:** CBox PTCBox		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1957 **Year Rebuilt:** 1987 **ADT:** 121768 **Truck Pct:** 10 %	**11-13 Rank:** 48	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Concrete Pile

Bridge Notes:

Piers 2 and 3, each has four 6'-0" diameter columns. Retrofit two center columns per pier (built in 1957) only. These columns have #4 hoops @12", longitudinal #14 bars have splices at top of pedestal. Splice lengths are 2'-10". Footings have no top mat. Longitudinal expansion joints between bridges built in 1957 and widening portion built in 1987.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007504A **Bridge Number:** 5/543E	**Bridge Name:** KING-JACKSON ST OC		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 0.3 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 11.7	**Latitude:** ° ' " 47 35 53.5	**Structure Length:** 706 ft.		**Out to Out Width:** 62 ft.
Feature Intersected: KING-JACKSON ST	**PGA (500 yr):** 33.14 %g	**PGA (1000 yr):** 45.1% %g	**Span Type:** CBox		**Main Spans:** 9 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1992 **ADT:** 79500 **Truck Pct:** 15 %	**11-13 Rank:** 49	**Skew Angle:** 30	**Pier Type:** Double Column Pier		**Footing Type:** Drilled shaft

Bridge Notes:

Contract 7504: Piers 2 and 3, three 4' columns on 5' shafts. Piers 4 thru 9, two 4' columns on 5' shafts. #4 hoops @ 12". Lap splices at top of shafts.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrfoit columns built in 1965 at Piers 2 thru 9 (18 total, 4' dia.).

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007504B **Bridge Number:** 5/543W	**Bridge Name:** KING-JACKSON ST OC		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 0.3 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 11.7	**Latitude:** ° ' " 47 35 53.5	**Structure Length:** 712 ft.		**Out to Out Width:** 58.8 ft.
Feature Intersected: KING-JACKSON ST	**PGA (500 yr):** 33.14 %g	**PGA (1000 yr):** 45.1% %g	**Span Type:** CBox		**Main Spans:** 9 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1992 **ADT:** 79500 **Truck Pct:** 15 %	**11-13 Rank:** 50	**Skew Angle:** 30	**Pier Type:** Double Column Pier		**Footing Type:** Drilled shaft

Bridge Notes:

Piers 2 thru 9, each has three 4'-0" diameter columns on 5'-0" diameter drilled shafts. End pier, pier 1, has three 24"x36" columns on 4' shafts. Columns have double hinges. End pier, pier 10, has three 4' diameter column shafts. Retrofit two east columns at piers 2 thru 9 only. These columns have #4 hoops @ 12". Vertical #11 bars have 6'-0" min, lap splices at top of drilled. In span hinges at span 4 near pier 4 and span 7 near pier 8.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrfoit columns built in 1965 at Piers 2 thru 9 (16 total, 4' dia.).

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006207B **Bridge Number:** 5/508E	**Bridge Name:** MILITARY RD OC		**Route:** 5	**Milepost:** 146.44	**Region:** Northwest **County:** King
Location: 4.4 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 43.8	**Latitude:** ° ' " 47 21 8.4	**Structure Length:** 243 ft.		**Out to Out Width:** 73 ft.
Feature Intersected: MILITARY RD	**PGA (500 yr):** 31.76 %g	**PGA (1000 yr):** 41.8% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1960 **Year Rebuilt:** 1994 **ADT:** 80000 **Truck Pct:** 15 %	**11-13 Rank:** 26	**Skew Angle:** 41	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2 and 3, each has six columns. Retrofit five east 3'-0" diameter columns. #3 hoops @ 12". #10 bars with 2'-2" splices. Footing without top mat. (E-21g)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.). Large skew (41 degree), deep excavation (12 ft). Install girder stops at Pier 1 thru 4.

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006313D **Bridge Number:** 5/509W	**Bridge Name:** S 272ND ST OC		**Route:** 5	**Milepost:** 146.81	**Region:** Northwest **County:** King
Location: 4.8 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 48	**Latitude:** ° ' " 47 21 27.6	**Structure Length:** 151 ft.		**Out to Out Width:** 91.5 ft.
Feature Intersected: S 272ND ST	**PGA (500 yr):** 31.83 %g	**PGA (1000 yr):** 41.9% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1961 **Year Rebuilt:** 2002 **ADT:** 80000 **Truck Pct:** 15 %	**11-13 Rank:** 27	**Skew Angle:** 4	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has seven columns. Retrofit five east 3'-0" diameter columns. #3 hoops @ 12". #10 bars with 3'-8" splices. Footing without top mat. (E-23h)

Retrofit Program Notes:

Bridge widened (c5981). Add two 3'-0" dia. Columns West side on 4'-6" drilled shafts at Piers 2 and 3 each side of bridge.

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006313C **Bridge Number:** 5/509E	**Bridge Name:** S 272ND ST OC		**Route:** 5	**Milepost:** 146.81	**Region:** Northwest **County:** King
Location: 4.8 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** 122 ° 17 ' 46 "	**Latitude:** 47 ° 21 ' 27.4 "	**Structure Length:** 151 ft.		**Out to Out Width:** 76.5 ft.
Feature Intersected: S 272ND ST	**PGA (500 yr):** 31.83 %g	**PGA (1000 yr):** 41.9% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1961 **Year Rebuilt:** 1994 **ADT:** 80000 **Truck Pct:** 15 %	**11-13 Rank:** 28	**Skew Angle:** 4	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2 and 3, each has six columns. Retrofit five east 3'-0" diameter columns. #3 hoops @ 12". #10 bars with 3'-8" splices. Footing without top mat. (E-23h)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006186A **Bridge Number:** 5/510E	**Bridge Name:** S 260TH ST OC		**Route:** 5	**Milepost:** 147.64	**Region:** Northwest **County:** King
Location: 5.6 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 36	**Latitude:** ° ' " 47 22 12	**Structure Length:** 162 ft.		**Out to Out Width:** 68 ft.
Feature Intersected: S 260TH ST	**PGA (500 yr):** 31.99 %g	**PGA (1000 yr):** 42.2% %g	**Span Type:** CVS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1960 **Year Rebuilt:** 1991 **ADT:** 80000 **Truck Pct:** 15 %	**11-13 Rank:** 29	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has four columns. Retrofit three east 2'-9" diameter columns. #4 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 2'-9" dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006186B **Bridge Number:** 5/510W	**Bridge Name:** S 260TH ST OC		**Route:** 5	**Milepost:** 147.64	**Region:** Northwest **County:** King
Location: 5.6 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 36	**Latitude:** ° ' " 47 22 12	**Structure Length:** 162 ft.		**Out to Out Width:** 92.2 ft.
Feature Intersected: S 260TH ST	**PGA (500 yr):** 31.99 %g	**PGA (1000 yr):** 42.2% %g	**Span Type:** CVS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1960 **Year Rebuilt:** 2002 **ADT:** 80000 **Truck Pct:** 15 %	**11-13 Rank:** 30	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has five columns. Retrofit three center 2'-9" diameter columns. #4 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 2'-9" dia.)

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006820A **Bridge Number:** 5/511E	**Bridge Name:** SR 516 OC		**Route:** 5	**Milepost:** 149.17	**Region:** Northwest **County:** King
Location: 7.2 N JCT SR 18 **Detour Length:** 1 miles	**Longitude:** 122 ° 17 ' 24 "	**Latitude:** 47 ° 23 ' 0 "	**Structure Length:** 269 ft.		**Out to Out Width:** 90 ft.
Feature Intersected: SR 516	**PGA (500 yr):** 32.15 %g	**PGA (1000 yr):** 42.6% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1962 **Year Rebuilt:** 1991 **ADT:** 85000 **Truck Pct:** 15 %	**11-13 Rank:** 31	**Skew Angle:** 30	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2, 3 and 4, each has seven 3'-0" diameter columns. Retrofit six east columns only. These columns have #3 hoops @ 12". #10 bars with 3'-8" splices. Footing without top mat. (E-23h)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (6 ea. 18 total, 3' dia.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007090C **Bridge Number:** 5/516W	**Bridge Name:** ORILLA RD OC-SO188TH ST		**Route:** 5	**Milepost:** 152.26	**Region:** Northwest **County:** King
Location: 3.1 N JCT SR 516 **Detour Length:** 0 miles	**Longitude:** 122 16 12	**Latitude:** 47 25 54	**Structure Length:** 230 ft.		**Out to Out Width:** 93.8 ft.
Feature Intersected: ORILLA RD	**PGA (500 yr):** 32.62 %g	**PGA (1000 yr):** 43.8% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1963 **Year Rebuilt:** 1997 **ADT:** 89500 **Truck Pct:** 15 %	**11-13 Rank:** 32	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has seven 3'-0" diameter columns. Retrofit six west columns only. These 3'-0" diameter columns have #3 hoops @ 12" and longitudinal bars with lap splices. Footing without top mat. (E-54m)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (6 ea. 12 total, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007090B **Bridge Number:** 5/516E	**Bridge Name:** ORILLA RD OC		**Route:** 5	**Milepost:** 152.26	**Region:** Northwest **County:** King
Location: 3.1 N JCT SR 516 **Detour Length:** 0 miles	**Longitude:** 122 ° 16 ' 12 "	**Latitude:** 47 ° 25 ' 54 "	**Structure Length:** 195 ft.		**Out to Out Width:** 79 ft.
Feature Intersected: ORILLA RD	**PGA (500 yr):** 32.62 %g	**PGA (1000 yr):** 43.8% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1963 **Year Rebuilt:** 1994 **ADT:** 89500 **Truck Pct:** 15 %	**11-13 Rank:** 33	**Skew Angle:** 1	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has seven 3'-0" diameter columns. Retrofit six east columns only. These 3'-0" diameter columns have #3 hoops @ 12" and longitudinal bars with lap splices. Footing without top mat. (E-54m)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (6 ea. 12 total, 3' dia.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007401D **Bridge Number:** 5/520W	**Bridge Name:** KLICKITAT DR OC		**Route:** 5	**Milepost:** 154.13	**Region:** Northwest **County:** King
Location: 5.0 N JCT SR 516 **Detour Length:** 5 miles	**Longitude:** 122 ° 15 ' 52.1 "	**Latitude:** 47 ° 27 ' 28.9 "	**Structure Length:** 163 ft.		**Out to Out Width:** 81.7 ft.
Feature Intersected: KLICKITAT DR	**PGA (500 yr):** 32.83 %g	**PGA (1000 yr):** 44.6% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1997 **ADT:** 102000 **Truck Pct:** 15 %	**11-13 Rank:** 34	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Retrofit five 3'-0" diameter columns at Piers 2 and 3. These columns have #3 hoops @ 12". Longitudinal bars with lap splices. Footing without top mat. (E-54m)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007401F **Bridge Number:** 5/521W	**Bridge Name:** E-N RAMP OC		**Route:** 5	**Milepost:** 154.52	**Region:** Northwest **County:** King
Location: 5.2 N JCT SR 516 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 15 54	**Latitude:** ° ' " 47 27 42	**Structure Length:** 146 ft.		**Out to Out Width:** 81.6 ft.
Feature Intersected: I-405 E-E RAMP	**PGA (500 yr):** 32.87 %g	**PGA (1000 yr):** 44.7% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 0 **ADT:** 102000 **Truck Pct:** 15 %	**11-13 Rank:** 35	**Skew Angle:** 13	**Pier Type:** Pier with more than two columns		**Footing Type:** Timber pile

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns. #3 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footing without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007401E **Bridge Number:** 5/521E	**Bridge Name:** E-N S-N RAMPS OC		**Route:** 5	**Milepost:** 154.52	**Region:** Northwest **County:** King
Location: 5.2 N JCT SR 516 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 15 48	**Latitude:** ° ' " 47 27 42	**Structure Length:** 217 ft.		**Out to Out Width:** 71.6 ft.
Feature Intersected: I-405 E-E S-E RAMP	**PGA (500 yr):** 32.85 %g	**PGA (1000 yr):** 44.6% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 0 **ADT:** 102000 **Truck Pct:** 15 %	**11-13 Rank:** 36	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Timber pile

Bridge Notes:

Piers 2, 3 and 4, each has four 3'-0" diameter columns. #3 hoops @ 12". longitudinal bars with lap splices. Footing without top mat. (E-54m)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (4 ea. 12 total, 3' dia.)

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007617D **Bridge Number:** 5/531W	**Bridge Name:** MILITARY RD OC		**Route:** 5	**Milepost:** 159.67	**Region:** Northwest **County:** King
Location: 2.2 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 36	**Latitude:** ° ' " 47 31 48	**Structure Length:** 149 ft.		**Out to Out Width:** 81 ft.
Feature Intersected: MILITARY RD ROSE ST	**PGA (500 yr):** 33.42 %g	**PGA (1000 yr):** 46.3% %g	**Span Type:** CS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1995 **ADT:** 106000 **Truck Pct:** 15 %	**11-13 Rank:** 37	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has five 3'-0" diameter columns. Retrofit four east columns only. These columns have #4 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footings without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007617C **Bridge Number:** 5/531E	**Bridge Name:** MILITARY RD OC		**Route:** 5	**Milepost:** 159.67	**Region:** Northwest **County:** King
Location: 2.2 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 17 37.3	**Latitude:** ° ' " 47 31 49.7	**Structure Length:** 161 ft.		**Out to Out Width:** 83 ft.
Feature Intersected: MILITARY RD ROSE ST	**PGA (500 yr):** 33.42 %g	**PGA (1000 yr):** 46.3% %g	**Span Type:** CS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1991 **ADT:** 106000 **Truck Pct:** 15 %	**11-13 Rank:** 38	**Skew Angle:** 13	**Pier Type:** Pier with more than two columns		**Footing Type:** Steel pile

Bridge Notes:

Piers 2 and 3, each has five 3'-0" diameter columns. Retrofit four west columns only. These columns have #4 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footings without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007734C **Bridge Number:** 5/534W	**Bridge Name:** LUCILE ST OC		**Route:** 5	**Milepost:** 161.27	**Region:** Northwest **County:** King
Location: 4.1 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 6.2	**Latitude:** ° ' " 47 33 11.5	**Structure Length:** 190 ft.		**Out to Out Width:** 79 ft.
Feature Intersected: LUCILE ST	**PGA (500 yr):** 33.61 %g	**PGA (1000 yr):** 46.7% %g	**Span Type:** CS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1995 **ADT:** 106000 **Truck Pct:** 15 %	**11-13 Rank:** 39	**Skew Angle:** 22	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has five 3'-0" diameter columns. Retrofit four east columns per pier only. These columns have #4 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footing without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.). 12' excavation. Install catchers and stops at Piers 1 and 4 (22 degree skew).

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007734B **Bridge Number:** 5/534E	**Bridge Name:** LUCILE ST OC		**Route:** 5	**Milepost:** 161.27	**Region:** Northwest **County:** King
Location: 3.9 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 0	**Latitude:** ° ' " 47 33 12	**Structure Length:** 172 ft.		**Out to Out Width:** 93.6 ft.
Feature Intersected: LUCILE ST	**PGA (500 yr):** 33.61 %g	**PGA (1000 yr):** 46.7% %g	**Span Type:** CS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 0 **ADT:** 106000 **Truck Pct:** 15 %	**11-13 Rank:** 40	**Skew Angle:** 22	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2 and 3, each has five 3'-0" diameter columns. #4 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footing without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.). Install catcher blocks at piers 1 and 4.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007816B **Bridge Number:** 5/535W	**Bridge Name:** SB VIADUCT STA 2032		**Route:** 5	**Milepost:** 162.24	**Region:** Northwest **County:** King
Location: 4.5 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 18.8	**Latitude:** ° ' " 47 33 47	**Structure Length:** 604 ft.		**Out to Out Width:** 73 ft.
Feature Intersected: SB VIADUCT STA 2032	**PGA (500 yr):** 33.55 %g	**PGA (1000 yr):** 46.4% %g	**Span Type:** PCG		**Main Spans:** 6 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1992 **ADT:** 118000 **Truck Pct:** 15 %	**11-13 Rank:** 41	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 thru 5, each has six 4'-0" diameter columns. Pier 6 has six 4-6" diameter columns. Retrofit four center columns per pier at piers 2 thru 5 only. These columns have #4 hoops @ 12". longitudinal bars with lap or/and welded splices. Footing with top mat. Pier 6 has four 4'-6" (O.D.) x 5" wall prestressed concrete piles, filled with cylinder concrete after piles are set in place. No retrofit recommended.

Retrofit Program Notes:

Widened in 1992. Adds one 4'-0" diameter shaft column on each side of the existing 4 columns at piers 2 thru 5 and one 4'-6" diameter shaft column on each side of the existing 4 columns at pier 6.

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3, 4 and 5. (4 ea. 16 total, 4' dia.). Deep excavation (38' max.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741A **Bridge Number:** 5/536E	**Bridge Name:** NB VIADUCT STA 2064		**Route:** 5	**Milepost:** 162.98	**Region:** Northwest **County:** King
Location: 5.2 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 12.5	**Latitude:** ° ' " 47 34 10.5	**Structure Length:** 746 ft.		**Out to Out Width:** 58.8 ft.
Feature Intersected: NB VIADUCT STA 2064	**PGA (500 yr):** 33.42 %g	**PGA (1000 yr):** 46.1% %g	**Span Type:** CS		**Main Spans:** 18 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1992 **ADT:** 98500 **Truck Pct:** 15 %	**11-13 Rank:** 42	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

No Photo Available

Bridge Notes:

Piers 2 thru 8, each has four 3'-0" dia. columns on 3'-6" dia. drilled shafts. Pier 9 thru 18, each has four columns. Retrofit three west columns only. These columns are 3'-0" dia. columns on 3'-6" dia. drilled shafts. Hoops are #4 @ 12". Longitudinal bars insert 5'-0" into drilled shafts. Max. span length = 42'.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 51 columns built in 1966 (on drilled shaft, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741B **Bridge Number:** 5/536W	**Bridge Name:** SB VIADUCT STA 2064		**Route:** 5	**Milepost:** 162.98	**Region:** Northwest **County:** King
Location: 5.2 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 6	**Latitude:** ° ' " 47 34 18	**Structure Length:** 746 ft.		**Out to Out Width:** 53.7 ft.
Feature Intersected: SB VIADUCT STA 2064	**PGA (500 yr):** 33.42 %g	**PGA (1000 yr):** 46.0% %g	**Span Type:** CS		**Main Spans:** 18 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 1992 **ADT:** 98500 **Truck Pct:** 15 %	**11-13 Rank:** 43	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

No Photo Available

Bridge Notes:

Piers 2 thru 5, each has four 3'-0" dia. columns on 3'-6" dia. drilled shafts. Pier 6 thru 18, each has three 3'-0" dia. columns on 3'-6" dia. drilled shafts. Hoops are #4 @ 12". Longitudinal bars insert 5'-0" into drilled shafts. Max. span length = 42'.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 55 columns built in 1967 (on drilled shaft, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741C **Bridge Number:** 5/538E	**Bridge Name:** NB VIADUCT STA 2075		**Route:** 5	**Milepost:** 162.98	**Region:** Northwest **County:** King
Location: 5.6 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 6	**Latitude:** ° ' " 47 34 30	**Structure Length:** 872 ft.		**Out to Out Width:** 60.7 ft.
Feature Intersected: NB VIADUCT STA 2075	**PGA (500 yr):** 33.39 %g	**PGA (1000 yr):** 45.9% %g	**Span Type:** CS		**Main Spans:** 21 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1992 **ADT:** 98500 **Truck Pct:** 15 %	**11-13 Rank:** 44	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

Bridge Notes:

Max. span length = 45'. 4 columns per pier. Retrofit columns built in 1966 only (three west columns per pier). Piers 11 thru 15, each has three 4' dia. columns on 5' dis. drilled shafts. Piers 2 thru 9 and 16 thru 21, each has three 3' dia. columns on 3'-6" dia. drilled shafts. #4 hoops @ 12". Piers 10 thru 17 have horizontal struts.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 thru 21. (3 ea. 60 total, 3' dia. except P11-P15 3-4' dia. ea.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741D **Bridge Number:** 5/539W	**Bridge Name:** SB VIADUCT STA 2075		**Route:** 5	**Milepost:** 162.98	**Region:** Northwest **County:** King
Location: 5.8 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 6	**Latitude:** ° ' " 47 34 30	**Structure Length:** 6622 ft.		**Out to Out Width:** 71 ft.
Feature Intersected: SB VIADUCT STA 2075	**PGA (500 yr):** 33.39 %g	**PGA (1000 yr):** 45.9% %g	**Span Type:** CS		**Main Spans:** 157 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 1992 **ADT:** 98500 **Truck Pct:** 15 %	**11-13 Rank:** 45	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

Bridge Notes:

Columns on drilled shafts. Contract 7741: Piers 2 thru 10, 16 thru 30, retrofit four columns each pier (3' dia. column on 3'-6" dia. drilled shaft), pier 11 thru 15, (four 4' dia. column on 5'-0" dia. drilled shaft). Piers 9 thru 18 haves horizontal struts. Contract 7686: piers 25 thru 152, 3' dia. Columns except East columns at Piers 146 thru 152 are 4' diameter. Max. span =42'.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at piers 2 thru 152 (628 total, 3' dia. except P11-P15, 2-4' dia. ea.).

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741E **Bridge Number:** 5/539E	**Bridge Name:** NB VIADUCT STA 2085		**Route:** 5	**Milepost:** 163.24	**Region:** Northwest **County:** King
Location: 5.8 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 10.9	**Latitude:** ° ' " 47 34 34	**Structure Length:** 5825 ft.		**Out to Out Width:** 73 ft.
Feature Intersected: NB VIADUCT STA 2085	**PGA (500 yr):** 33.39 %g	**PGA (1000 yr):** 45.9% %g	**Span Type:** CS		**Main Spans:** 138 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1992 **ADT:** 98500 **Truck Pct:** 15 %	**11-13 Rank:** 46	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

No Photo Available

No Photo Available

Bridge Notes:

Retrofit columns built in 1966 only. Piers 2 thru 10, each has five 3' columns on 4' shafts. Piers 11, 12, 95 thru 103 and 114 thru 127, each has five 3' columns on 3'-6" shafts. Piers 13 thru 94, each has four 3' columns on 3'-6" shafts. Piers 104 thru 114, each has six 3' columns on 3'-6" shafts. Piers 115 thru 120 and 128 thru 138, each has three 3' columns on 3'-6" shafts. #4 hoops @12". Horizontal struts at piers 15 thru 19 and 56 thru 78. Lap splices at top of drilled shafts and top of horizontal struts.

Retrofit Program Notes:

Columns of bridge 5/539NCD are to be included with this bridge.

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 577 columns. (includes bridge 5/539NCD, 3' dia.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007504D **Bridge Number:** 5/543SCD	**Bridge Name:** SBCD KING JACKSON ST OC		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 0.3 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 19 11.7	**Latitude:** ° ' " 47 35 53.5	**Structure Length:** 709 ft.		**Out to Out Width:** 64.6 ft.
Feature Intersected: KING JACKSON ST	**PGA (500 yr):** 33.14 %g	**PGA (1000 yr):** 45.1% %g	**Span Type:** CBox		**Main Spans:** 9 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 0 **ADT:** 73582 **Truck Pct:** 10 %	**11-13 Rank:** 47	**Skew Angle:** 30	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

Bridge Notes:

Piers 2 thru 9, each has three 4'-0" diameter columns on 5'-0" diameter drilled shafts. End pier, pier 1, has three 24"x36" columns on 4' shafts. Columns have double hinges. End pier, pier 10, has three 4' diameter column shafts. These columns have #4 hoops @ 12". Vertical #11 bars have 6'-0" min, lap splices at top of drilled. In span hinges at span 4 near pier 4 and span 7 near pier 8.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 thru 9. (3 ea. 24 total, 4' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0005455A **Bridge Number:** 5/332	**Bridge Name:** PACIFIC AVE OC		**Route:** 5	**Milepost:** 107.45	**Region:** Olympic **County:** Thurston
Location: 3.2 N JCT US 101 **Detour Length:** 0 miles	**Longitude:** ° ' " 122 51 6.7	**Latitude:** ° ' " 47 2 28.1	**Structure Length:** 351 ft.		**Out to Out Width:** 138 ft.
Feature Intersected: PACIFIC AVE	**PGA (500 yr):** 29.75 %g	**PGA (1000 yr):** 39.1% %g	**Span Type:** CBox PTCBox		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1957 **Year Rebuilt:** 1987 **ADT:** 121768 **Truck Pct:** 10 %	**11-13 Rank:** 48	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Concrete Pile

Bridge Notes:

Piers 2 and 3, each has four 6'-0" diameter columns. Retrofit two center columns per pier (built in 1957) only. These columns have #4 hoops @12", longitudinal #14 bars have splices at top of pedestal. Splice lengths are 2'-10". Footings have no top mat. Longitudinal expansion joints between bridges built in 1957 and widening portion built in 1987.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007504A **Bridge Number:** 5/543E	**Bridge Name:** KING-JACKSON ST OC		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 0.3 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 11.7	**Latitude:** ° ' " 47 35 53.5	**Structure Length:** 706 ft.		**Out to Out Width:** 62 ft.
Feature Intersected: KING-JACKSON ST	**PGA (500 yr):** 33.14 %g	**PGA (1000 yr):** 45.1% %g	**Span Type:** CBox		**Main Spans:** 9 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1992 **ADT:** 79500 **Truck Pct:** 15 %	**11-13 Rank:** 49	**Skew Angle:** 30	**Pier Type:** Double Column Pier		**Footing Type:** Drilled shaft

Bridge Notes:

Contract 7504: Piers 2 and 3, three 4' columns on 5' shafts. Piers 4 thru 9, two 4' columns on 5' shafts. #4 hoops @ 12". Lap splices at top of shafts.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrfoit columns built in 1965 at Piers 2 thru 9 (18 total, 4' dia.).

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007504B **Bridge Number:** 5/543W	**Bridge Name:** KING-JACKSON ST OC		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 0.3 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 11.7	**Latitude:** ° ' " 47 35 53.5	**Structure Length:** 712 ft.		**Out to Out Width:** 58.8 ft.
Feature Intersected: KING-JACKSON ST	**PGA (500 yr):** 33.14 %g	**PGA (1000 yr):** 45.1% %g	**Span Type:** CBox		**Main Spans:** 9 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1992 **ADT:** 79500 **Truck Pct:** 15 %	**11-13 Rank:** 50	**Skew Angle:** 30	**Pier Type:** Double Column Pier		**Footing Type:** Drilled shaft

Bridge Notes:

Piers 2 thru 9, each has three 4'-0" diameter columns on 5'-0" diameter drilled shafts. End pier, pier 1, has three 24"x36" columns on 4' shafts. Columns have double hinges. End pier, pier 10, has three 4' diameter column shafts. Retrofit two east columns at piers 2 thru 9 only. These columns have #4 hoops @ 12". Vertical #11 bars have 6'-0" min, lap splices at top of drilled. In span hinges at span 4 near pier 4 and span 7 near pier 8.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrfoit columns built in 1965 at Piers 2 thru 9 (16 total, 4' dia.).

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007565F **Bridge Number:** 5/542E	**Bridge Name:** DEARBORN ST OC		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 0.1 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** 122 ° 19 ' 0 "	**Latitude:** 47 ° 35 ' 42 "	**Structure Length:** 219 ft.		**Out to Out Width:** 64 ft.
Feature Intersected: DEARBORN ST	**PGA (500 yr):** 33.15 %g	**PGA (1000 yr):** 45.2% %g	**Span Type:** CBox		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1992 **ADT:** 82000 **Truck Pct:** 15 %	**11-13 Rank:** 51	**Skew Angle:** 0	**Pier Type:** Multiple Column Pier		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has three 4'-0" diameter columns. Retrofit two west columns only (built in 1965). These columns are on spread footings. Ties are #4 hoops @ 12". Vertical #11 bars have 3'-8" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are spill through abutments. Each has three columns. Columns have hinge near top of column.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3 (2 ea. 4 total, 4' dia.).

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007565G **Bridge Number:** 5/542W	**Bridge Name:** DEARBORN ST OC		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 0.1 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 0	**Latitude:** ° ' " 47 35 42	**Structure Length:** 219 ft.		**Out to Out Width:** 58.5 ft.
Feature Intersected: DEARBORN ST	**PGA (500 yr):** 33.15 %g	**PGA (1000 yr):** 45.2% %g	**Span Type:** CBox		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1992 **ADT:** 82000 **Truck Pct:** 15 %	**11-13 Rank:** 52	**Skew Angle:** 0	**Pier Type:** Multiple Column Pier		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has three columns. Retrofit 2 east columns per pier only. These columns are 4' diameter columns on spread footings. #4 hoops @12". Longitudinal bars have lap splices at top of footings. Footings do not have top mat.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3 (2 ea. 4 total, 4' dia.).

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007565J **Bridge Number:** 5/542SCD	**Bridge Name:** SBCD DEARBORN ST OC		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 0.1 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** 122 ° 19 ' 6 "	**Latitude:** 47 ° 35 ' 42 "	**Structure Length:** 216 ft.		**Out to Out Width:** 64.6 ft.
Feature Intersected: SBCD DEARBORN ST	**PGA (500 yr):** 33.16 %g	**PGA (1000 yr):** 45.2% %g	**Span Type:** CBox		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 0 **ADT:** 73582 **Truck Pct:** 5 %	**11-13 Rank:** 53	**Skew Angle:** 2	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has three 4'-0" diameter columns on spread footings. These columns have #4 hoops @ 12". Vertical #11 bars have 3'-9" min. lap splices at top of footing. Footing without top mat. End pier 1 has three 30" square columns with hinges at top of columns and top of footings. End pier 4 has three 30" square columns with hinges at top of columns.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 4' dia.)

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007504C **Bridge Number:** 5/543NCD	**Bridge Name:** NBCD KING JACKSON ST OC		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 0.3 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 19 11.7	**Latitude:** ° ' " 47 35 53.5	**Structure Length:** 709 ft.		**Out to Out Width:** 52.6 ft.
Feature Intersected: NBCD KING JACKSON ST	**PGA (500 yr):** 33.14 %g	**PGA (1000 yr):** 45.1% %g	**Span Type:** CBox		**Main Spans:** 9 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 0 **ADT:** 61357 **Truck Pct:** 10 %	**11-13 Rank:** 54	**Skew Angle:** 30	**Pier Type:** Double Column Pier		**Footing Type:** Drilled shaft

Bridge Notes:

Piers 2 thru 5, each has three 4'-0" diameter columns on 5'-0" diameter drilled shafts. Piers 6 thru 9, each has two 4'-0" diameter columns on 5'-0" diameter drilled shafts. These columns have #4 hoops @ 12". Vertical #11 bars have 6'-0" min, lap splices at top of drilled. In span hinges at span 4 near pier 4 and span 7 near pier 8. End pier, pier 1, has three 24"x36" columns on 4' shafts. Columns have double hinges. End pier, pier 10, has three 4' diameter column shafts.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 thru 9. (20 total, 4' dia.)

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007686C **Bridge Number:** 5/539NCD	**Bridge Name:** NBCD RAMP BR		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 6.7 N JCT SR 900 **Detour Length:** 2 miles	**Longitude:** 122 ° 19 ' 12.6 "	**Latitude:** 47 ° 35 ' 19.6 "	**Structure Length:** 151 ft.		**Out to Out Width:** 37.6 ft.
Feature Intersected: NBCD RAMP BR	**PGA (500 yr):** 33.2 %g	**PGA (1000 yr):** 45.5% %g	**Span Type:** CS		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 0 **ADT:** 20459 **Truck Pct:** 10 %	**11-13 Rank:** 55	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

Bridge Notes:

NBCD piers 111B thru 114B. Piers 111B thru 113B, each pier has three 3'-0" diameter columns on 3'-6" diameter drilled shafts. Ties are #4 hoops @ 12".

Retrofit Program Notes:

Columns of bridge 5/539NCD are included in Bridge 5/539E retrofit.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Columns of bridge 5/539NCD are included in Bridge 5/539E retrofit.

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007565I **Bridge Number:** 5/542NCD	**Bridge Name:** NBCD DEARBORN ST OC		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 0.1 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 19 8	**Latitude:** ° ' " 47 35 45.4	**Structure Length:** 216 ft.		**Out to Out Width:** 40.8 ft.
Feature Intersected: DEARBORN ST	**PGA (500 yr):** 33.16 %g	**PGA (1000 yr):** 45.2% %g	**Span Type:** CBox		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 0 **ADT:** 20459 **Truck Pct:** 5 %	**11-13 Rank:** 56	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has two 4'-0" diameter columns on spread footings. These columns have #4 hoops @ 12". Vertical #11 bars have 4'-0" min. lap splices at top of footing. Footing without top mat. End piers, 1 and 4, each has two 30" square columns with hinges at top of columns.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 4' dia.). 7' excavation.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007401J **Bridge Number:** 405/1	**Bridge Name:** I-405 OVER I-5		**Route:** 405	**Milepost:** 0	**Region:** Northwest **County:** King
Location: JCT I-5 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 15 58.4	**Latitude:** ° ' " 47 27 45.3	**Structure Length:** 560 ft.		**Out to Out Width:** 52 ft.
Feature Intersected: I-5	**PGA (500 yr):** 32.86 %g	**PGA (1000 yr):** 44.7% %g	**Span Type:** CBox		**Main Spans:** 6 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 0 **ADT:** 31740 **Truck Pct:** 8 %	**11-13 Rank:** 56	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:** Concrete Pile

No Photo Available

Bridge Notes:

Piers 2, 3, 4. 5 and 6, each has two 5'-0" diameter columns on pile footings. Columns have #4 hoops @ 12". Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no top mat. Piers 1 is a "L" abutment with six roller bearings. In span hinge at span 3 near pier 4. Pier 6 has a 23' overhang.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3, 4 and 5. (2 ea. 8 total, 5' dia.) Install catcher blocks.

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007686D **Bridge Number:** 5/539SCD	**Bridge Name:** SBCD VIADUCT STA 2133		**Route:** 5	**Milepost:** 164.41	**Region:** Northwest **County:** King
Location: 6.7 N JCT SR 900 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 18.3	**Latitude:** ° ' " 47 35 27.7	**Structure Length:** 729 ft.		**Out to Out Width:** 52.6 ft.
Feature Intersected: SBCD VIADUCT STA 2133	**PGA (500 yr):** 33.2 %g	**PGA (1000 yr):** 45.4% %g	**Span Type:** CS		**Main Spans:** 17 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 0 **ADT:** 17104 **Truck Pct:** 10 %	**11-13 Rank:** 57	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Drilled shaft

No Photo Available

Bridge Notes:

South end connects to Bridge 5/539W. North end connects to Bridge 90/10W-S. Piers 140 thru 145, each has three 3' columns on 3'-6" shafts. Piers 146 thru 149, each has three 3' columns on 6' shafts. Piers 150, 151 and 152, each has four 3' columns on 6' shafts. Piers 153 and 154, each has five 3' columns on 6' shafts. Pier 155 has six 3' columns on 6' shafts. Pier 156SCD has three 3' columns on 5' shafts. Pier156W-S has three 3' columns on 6' shafts. Horizontal struts at piers 146 thru 155. #4 hoops @12". Lap splices at top of shafts.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 140 Thru 155 to top of drilled shafts. (58 total, 3' dia.). Piers 146 thru 155 are structed piers.

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007110B **Bridge Number:** 5/545W	**Bridge Name:** SB VIADUCT STA 2195		**Route:** 5	**Milepost:** 165.69	**Region:** Northwest **County:** King
Location: 0.8 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 36	**Latitude:** ° ' " 47 36 18	**Structure Length:** 807 ft.		**Out to Out Width:** 42 ft.
Feature Intersected: SB VIADUCT STA 2195	**PGA (500 yr):** 33.08 %g	**PGA (1000 yr):** 44.9% %g	**Span Type:** CBox		**Main Spans:** 11 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 1991 **ADT:** 116500 **Truck Pct:** 15 %	**11-13 Rank:** 58	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:** Concrete Pile

No Photo Available

Bridge Notes:

Piers 2 thru 11, each has two 4' dia. columns. Retrofit east columns for each pier only. These columns are on pile footings. #4 hoops @12". Lap splices at top of footings. Footings have no top mat. Piers 1 and 12 (abutments), each has 5 roller bearings.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns built in 1964 at Piers 2-11 (1 ea. 10 total, 4' dia.). Install catcher blocks.

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007110A **Bridge Number:** 5/545E	**Bridge Name:** NB VIADUCT STA 2195		**Route:** 5	**Milepost:** 165.69	**Region:** Northwest **County:** King
Location: 0.8 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 38.1	**Latitude:** ° ' " 47 36 15.1	**Structure Length:** 4714 ft.		**Out to Out Width:** 51.7 ft.
Feature Intersected: JAMES, CHERRY, REVERS	**PGA (500 yr):** 33.06 %g	**PGA (1000 yr):** 45.0% %g	**Span Type:** CBox		**Main Spans:** 26 **Appr. Spans:** 34
Year Built: 1964 **Year Rebuilt:** 0 **ADT:** 116500 **Truck Pct:** 15 %	**11-13 Rank:** 59	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:** Concrete Pile

No Photo Available

Bridge Notes:

Piers 2 thru 8, each has two 4' cols. on pile footings. Piers 9 and 10, each has two 4' cols. on spread footings. East columns of Piers 11 thru 57 are embedded in retaining walls. The retrofit schemes and extents should be study before programming of this bridge.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2-57. (74 total, Column size vary.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007110G **Bridge Number:** 5/545SCD	**Bridge Name:** SBCD VIADUCT STA 2195		**Route:** 5	**Milepost:** 165.71	**Region:** Northwest **County:** King
Location: 0.8 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 19 36	**Latitude:** ° ' " 47 36 18	**Structure Length:** 806 ft.		**Out to Out Width:** 47.9 ft.
Feature Intersected: SBCD VIADUCT STA 2195	**PGA (500 yr):** 33.08 %g	**PGA (1000 yr):** 44.9% %g	**Span Type:** CBox		**Main Spans:** 11 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 1991 **ADT:** 73582 **Truck Pct:** 10 %	**11-13 Rank:** 60	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:** Concrete Pile

Bridge Notes:

Pier 1 has three 2'-6" square columns with two hinges each column (acts as roller). Piers 2 and 3, each has two columns, retrofit east column only. These columns are 4' dia. column on pile footing. Pier 4 has three columns. Retrofit two 4' dia. east columns only. Piers 5 thru 9 and 11, each has two 4' dia. columns on pile footings. Pier 10 has two 4' dia. columns on tunnel. Pier 12 has 6 roller bearings. #4 hoops @12". Longitudinal bars with lap splices. Footings w/o top mat.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns built in 1964 at Piers 2 thru 11. (18 total, 4' dia.)

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006800A **Bridge Number:** 5/566W	**Bridge Name:** DENNY WAY-LAKEVIEW V		**Route:** 5	**Milepost:** 166.98	**Region:** Northwest **County:** King
Location: 2.9 N JCT I-90 **Detour Length:** 3 miles	**Longitude:** ° ' " 122 19 36	**Latitude:** ° ' " 47 37 18	**Structure Length:** 7077 ft.		**Out to Out Width:** 64.6 ft.
Feature Intersected: DENNY WAY-LAKEVIEW V	**PGA (500 yr):** 32.73 %g	**PGA (1000 yr):** 44.1% %g	**Span Type:** CBox PCG		**Main Spans:** 53 **Appr. Spans:** 32
Year Built: 1962 **Year Rebuilt:** 0 **ADT:** 108000 **Truck Pct:** 15 %	**11-13 Rank:** 61	**Skew Angle:** 45	**Pier Type:** Double Column Pier		**Footing Type:**

No Photo Available

No Photo Available

Bridge Notes:

Contract 6635: Piers 2, 4, has three 3'x4' columns. Pier 3, 7, 9, 10,11, has two 4'x4' columns. Pier 5 has two split columns (4'x2'-8 1/2" & 2"gap). Pier 6 has two 4'x5' columns. Pier 8 has two split columns (4'x2" & 2"gap). Pier 12 has two split columns (4'x2'6" & 2"gap). Pier 13, 14, 15, has two 4'x4'6" columns. Pier 16 has three split columns (4'x3' & 2"gap, three S 1/2, two N-1/2). Pier 17, 18, has two 4'x5'6" columns. Pier 19 has two split columns (4' x 3' & 2"gap) and a (2'-6"x 3' & 2"gap) split column.. Contract 6800: Piers 20, 21, 22, 24, 25, 26, each has two 4'x5'6" columns. Piers 23, 27, 31 each has two split columns (4' x 3' & 2"gap) . Pier 28 has a 4'x6'

Retrofit Program Notes:

Analysis of similar hollow core piles have shown a very low capacity / Demand ratio for a 475 year design level earthquake. There is no known way to retrofit these columns. Replacement of the bridge is likely to be the only way to improve the seismic risk.
This bridge has been excluded from the P2 funded Bridge Seismic Retrofit program.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Double deck bridge. Retrofit columns at Piers 1-53 (118 total, column size vary) and outriggers at Piers 4,16,17,18,30, 40,41, 42, 43, 44, 45, 46, 47, 48 (14 total). Not include 180 4'-0" dia. Hollow P/S conc. Piles. Install catcher blocks.

Overall Retrofit Status: H

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006800B **Bridge Number:** 5/562E	**Bridge Name:** NB LANES VIADUCT		**Route:** 5	**Milepost:** 166.98	**Region:** Northwest **County:** King
Location: 2.4 N JCT I-90 **Detour Length:** 3 miles	**Longitude:** 122 ° 19 ' 36 "	**Latitude:** 47 ° 37 ' 36 "	**Structure Length:** 381 ft.		**Out to Out Width:** 68 ft.
Feature Intersected: NB LANES VIADUCT	**PGA (500 yr):** 32.63 %g	**PGA (1000 yr):** 43.9% %g	**Span Type:** CTB		**Main Spans:** 11 **Appr. Spans:** 0
Year Built: 1963 **Year Rebuilt:** 0 **ADT:** 108000 **Truck Pct:** 15 %	**11-13 Rank:** 62	**Skew Angle:** 0	**Pier Type:** Crossbeam on Piles		**Footing Type:** Concrete Pile

Bridge Notes:

Piers 2 thru 11, each has a 2' diameter column on pile footing. East ends of X-beams are supported on cylinder wall. Columns have #4 hoops @ 12". #8 bars with 2'-11" splices at top of footings. Footings have no top mat.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 thru 11. (2' diameter, 10 total).

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007156I **Bridge Number:** 5/588SCD	**Bridge Name:** SBCD NORTHGATE WAY OC		**Route:** 5	**Milepost:** 172.76	**Region:** Northwest **County:** King
Location: 2.0 N JCT SR 522 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 19 42	**Latitude:** ° ' " 47 42 30	**Structure Length:** 166 ft.		**Out to Out Width:** 25.5 ft.
Feature Intersected: SBCD NE110TH ST	**PGA (500 yr):** 31.1 %g	**PGA (1000 yr):** 40.7% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 0 **ADT:** 6740 **Truck Pct:** 5 %	**11-13 Rank:** 63	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has three 3' dia. columns on spread footings. These columns have #3 hoops @12", longitudinal bars have lap splices at top of footings. Footings have no top mat. End piers are "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0012197B **Bridge Number:** 5/588W	**Bridge Name:** NORTHGATE WAY OC		**Route:** 5	**Milepost:** 172.76	**Region:** Northwest **County:** King
Location: 2.0 N JCT SR 522 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 42	**Latitude:** ° ' " 47 42 30	**Structure Length:** 166 ft.		**Out to Out Width:** 75 ft.
Feature Intersected: NE NORTHGATE WAY	**PGA (500 yr):** 31.1 %g	**PGA (1000 yr):** 40.7% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 1983 **ADT:** 97000 **Truck Pct:** 15 %	**11-13 Rank:** 64	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2 and 3, each has seven 3' dia. columns on spread footings. Retrofit six W. columns built in 1964 per pier only. These columns have #3 hoops @12", longitudinal bars have lap splices at top of footings. Footings have no top mat. End piers are "L" abutments. Bridge 5/588W is parallel to bridge 5/588SCD. Profile Photo shown is bridge 5/588SCD.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (6 ea. 12 total, 3' dia.)

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0012197A **Bridge Number:** 5/588E	**Bridge Name:** NORTHGATE WAY OC		**Route:** 5	**Milepost:** 172.76	**Region:** Northwest **County:** King
Location: 2.0 N JCT SR 522 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 19 42	**Latitude:** ° ' " 47 42 30	**Structure Length:** 166 ft.		**Out to Out Width:** 75 ft.
Feature Intersected: NE NORTHGATE WAY	**PGA (500 yr):** 31.1 %g	**PGA (1000 yr):** 40.7% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 1983 **ADT:** 97000 **Truck Pct:** 15 %	**11-13 Rank:** 65	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has seven 3' dia. columns on spread footings. Retrofit six E. columns built in 1964 per pier only. These columns have #3 hoops @12", longitudinal bars have lap splices at top of footings. Footings have no top mat. End piers are "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (6 ea. 12 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006443A **Bridge Number:** 5/463	**Bridge Name:** I-5 OC, PORTER WAY		**Route:** 5	**Milepost:** 139.06	**Region:** Olympic **County:** Pierce
Location: 1.6 N JCT SR 99 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 20 0	**Latitude:** ° ' " 47 15 4.4	**Structure Length:** 615 ft.		**Out to Out Width:** 34 ft.
Feature Intersected: I-5 - HYLEBOS CR	**PGA (500 yr):** 30.73 %g	**PGA (1000 yr):** 40.2% %g	**Span Type:** PCG		**Main Spans:** 13 **Appr. Spans:** 0
Year Built: 1960 **Year Rebuilt:** 0 **ADT:** 890 **Truck Pct:** 1 %	**11-13 Rank:** 66	**Skew Angle:** 12	**Pier Type:** Pier with more than two columns		**Footing Type:** Concrete Pile

Bridge Notes:

Piers 2, 3 and 4, each has three 3'-0" diameter columns. #3 hoops @ 12". #10 bars with 3'-8" splices. Footing without top mat. Piers 5 thru 13 are 13" diameter concrete pile bents (5 spaces @ 5'-6 1/4" normal). Max. span length= 39'-9". No retrofit recommended for pile bents. Pier 9 has double bents. Expansion joints at piers 4 and 9.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006094A **Bridge Number:** 5/501	**Bridge Name:** I-5 OC, S 375TH		**Route:** 5	**Milepost:** 140.15	**Region:** Northwest **County:** King
Location: 0.7 N PIERCE CO **Detour Length:** 5 miles	**Longitude:** ° ' " 122 19 21.7	**Latitude:** ° ' " 47 15 55.4	**Structure Length:** 301 ft.		**Out to Out Width:** 34 ft.
Feature Intersected: I-5	**PGA (500 yr):** 30.83 %g	**PGA (1000 yr):** 40.4% %g	**Span Type:** PCG		**Main Spans:** 5 **Appr. Spans:** 0
Year Built: 1959 **Year Rebuilt:** 0 **ADT:** 400 **Truck Pct:** 1 %	**11-13 Rank:** 67	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2, 3, 4 and 5, each has three 3'-0" diameter columns. #3 hoops @ 12". #10 bars with 2'-2" splices. Footing without top mat. (E-21g)

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3, 4 and 5. (3 ea. 12 total, 3' dia.)

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006262A **Bridge Number:** 5/505	**Bridge Name:** I-5 OC, S320TH		**Route:** 5	**Milepost:** 143.83	**Region:** Northwest **County:** King
Location: 1.8 N JCT SR 18 **Detour Length:** 4 miles	**Longitude:** ° ' " 122 17 48	**Latitude:** ° ' " 47 18 54	**Structure Length:** 332 ft.		**Out to Out Width:** 76 ft.
Feature Intersected: I-5	**PGA (500 yr):** 31.29 %g	**PGA (1000 yr):** 41.0% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1960 **Year Rebuilt:** 0 **ADT:** 55100 **Truck Pct:** 1 %	**11-13 Rank:** 68	**Skew Angle:** 15	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2, 3 and 4, each has six 3'-0" diameter columns. #3 hoops @ 12". #10 bars with 3'-8" splices. Footing without top mat. (E-23h)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (6 ea. 18 total)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007090A **Bridge Number:** 5/513	**Bridge Name:** I-5 OC, S 216TH		**Route:** 5	**Milepost:** 150.33	**Region:** Northwest **County:** King
Location: 1.1 N JCT SR 516 **Detour Length:** 4 miles	**Longitude:** ° ' " 122 17 30	**Latitude:** ° ' " 47 24 30	**Structure Length:** 290 ft.		**Out to Out Width:** 36 ft.
Feature Intersected: I-5	**PGA (500 yr):** 32.51 %g	**PGA (1000 yr):** 43.3% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1963 **Year Rebuilt:** 0 **ADT:** 12540 **Truck Pct:** 1 %	**11-13 Rank:** 69	**Skew Angle:** 8	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2, 3 and 4, each has three 3'-0" diameter columns. #3 hoops @ 12". Longitudinal bars with lap splices. Footing without top mat. (E-54m)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.)

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007459A **Bridge Number:** 5/517A	**Bridge Name:** S-W RAMP OC		**Route:** 5	**Milepost:** 152.48	**Region:** Northwest **County:** King
Location: 3.3 N JCT SR 516 **Detour Length:** 4 miles	**Longitude:** 122 ° 16 ' 12 "	**Latitude:** 47 ° 26 ' 6 "	**Structure Length:** 227 ft.		**Out to Out Width:** 37 ft.
Feature Intersected: S-W RAMP TO S 188TH ST	**PGA (500 yr):** 32.66 %g	**PGA (1000 yr):** 43.9% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 0 **ADT:** 26700 **Truck Pct:** 14 %	**11-13 Rank:** 70	**Skew Angle:** 30	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2, 3 and 4, each has three 3'-0" diameter columns. #3 hoops @ 12". longitudinal bars with lap splices. Footing without top mat. (E-54m)

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.)

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007401A **Bridge Number:** 5/518	**Bridge Name:** I-5 OC, S 178TH ST		**Route:** 5	**Milepost:** 153.15	**Region:** Northwest **County:** King
Location: 4.0 N JCT SR 516 **Detour Length:** 4 miles	**Longitude:** 122 ° 16 ' 0 "	**Latitude:** 47 ° 26 ' 36 "	**Structure Length:** 322 ft.		**Out to Out Width:** 33.6 ft.
Feature Intersected: I-5	**PGA (500 yr):** 32.73 %g	**PGA (1000 yr):** 44.2% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 0 **ADT:** 15000 **Truck Pct:** 1 %	**11-13 Rank:** 71	**Skew Angle:** 99	**Pier Type:** Pier with three columns		**Footing Type:** Spread

Bridge Notes:

Piers 2, 3 and 4, each has three 3'-0" diameter columns. #3 hoops @ 12". longitudinal bars with lap splices. Footing without top mat. (E-54m).

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.)

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007618E **Bridge Number:** 5/528	**Bridge Name:** I-5 OC, S 107TH ST		**Route:** 5	**Milepost:** 158.01	**Region:** Northwest **County:** King
Location: 0.5 N JCT SR 900 **Detour Length:** 4 miles	**Longitude:** ° ' " 122 17 12	**Latitude:** ° ' " 47 30 27	**Structure Length:** 337 ft.		**Out to Out Width:** 89.8 ft.
Feature Intersected: I-5	**PGA (500 yr):** 33.27 %g	**PGA (1000 yr):** 46.0% %g	**Span Type:** PCG		**Main Spans:** 5 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 0 **ADT:** 31000 **Truck Pct:** 1 %	**11-13 Rank:** 72	**Skew Angle:** 22	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2, 3, 4 and 5, each has five 3'-0" diameter columns. #3 hoops @ 12". longitudinal #8 bars spliced at top of footing. Footing without top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3, 4 and 5. (5 ea. 20 total, 3' dia.)

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008568A **Bridge Number:** 5/532.1	**Bridge Name:** N-SWIFT RAMP		**Route:** 5	**Milepost:** 161.27	**Region:** Northwest **County:** King
Location: 3.2 N JCT SR 900 **Detour Length:** 5 miles	**Longitude:** ° ' " 122 18 18	**Latitude:** ° ' " 47 32 42	**Structure Length:** 391 ft.		**Out to Out Width:** 35 ft.
Feature Intersected: N-SWIFT RAMP	**PGA (500 yr):** 33.54 %g	**PGA (1000 yr):** 46.6% %g	**Span Type:** CBox		**Main Spans:** 8 **Appr. Spans:** 0
Year Built: 1969 **Year Rebuilt:** 0 **ADT:** 3121 **Truck Pct:** 5 %	**11-13 Rank:** 73	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2 thru 8, each has four 3'-0" diameter columns. #4 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footings have top mats.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 thru 8. (2 ea. 14 total, 3' dia.)

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007930B **Bridge Number:** 5/534A	**Bridge Name:** N-W RAMP AIRPORT W. OC		**Route:** 5	**Milepost:** 161.27	**Region:** Northwest **County:** King
Location: 4.1 N JCT SR 900 **Detour Length:** 4 miles	**Longitude:** ° ' " 122 19 13.5	**Latitude:** ° ' " 47 33 3.6	**Structure Length:** 636 ft.		**Out to Out Width:** 47.6 ft.
Feature Intersected: AIRPORT WAY	**PGA (500 yr):** 33.61 %g	**PGA (1000 yr):** 46.8% %g	**Span Type:** CBox		**Main Spans:** 8 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 0 **ADT:** 20202 **Truck Pct:** 5 %	**11-13 Rank:** 74	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:** Steel pile

Bridge Notes:

Piers 2, 4, 6, 7, 8, each has two 4'-0" diameter columns. Piers 3, each has a 4'-6"x9'-0" elliptical column. Pier 5 has two 4'-0"x 5'-3" elliptical split columns. Pier 9 has two 5'-0"x 6'-3" elliptical split columns. #4 ties @12", longitudinal bars have lap splices. Footings have top mats. (See Bridges 5/534S-W and 5/534N-W)

Retrofit Program Notes:

Superstructure retrofit by contract no.17367

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 4, 5, 6, 7, 8 and 9. (2 ea. 14 total)

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007734A **Bridge Number:** 5/533.5W	**Bridge Name:** N-W RAMP OC		**Route:** 5	**Milepost:** 161.27	**Region:** Northwest **County:** King
Location: 4.0 N JCT SR 900 **Detour Length:** 4 miles	**Longitude:** 122 ° 19 ' 0 "	**Latitude:** 47 ° 33 ' 6 "	**Structure Length:** 469 ft.		**Out to Out Width:** 84.8 ft.
Feature Intersected: N-W RAMP	**PGA (500 yr):** 33.63 %g	**PGA (1000 yr):** 46.7% %g	**Span Type:** CBox		**Main Spans:** 6 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1995 **ADT:** 212000 **Truck Pct:** 15 %	**11-13 Rank:** 75	**Skew Angle:** 35	**Pier Type:** Multiple Column Pier		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2 thru 6, each has three columns. Retrofit two east columns per pier. 5'-0" diameter columns at piers 2, 3, 5 and 5. Pier 4 has 5'-0"x 6'-3" elliptical split columns. #4 ties @12". Lap splices at top of footings. Footings have top mats.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 thru 6. (2 ea. 10 total, 3' dia.). Max. 40 feet deep excavation.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741G **Bridge Number:** 5/536N-W	**Bridge Name:** NB I5 to WB W SEA FRWY		**Route:** 5	**Milepost:** 162.98	**Region:** Northwest **County:** King
Location: 5.4 N JCT SR 900 **Detour Length:** 4 miles	**Longitude:** ° ' " 122 19 12	**Latitude:** ° ' " 47 34 30	**Structure Length:** 1722 ft.		**Out to Out Width:** 25.6 ft.
Feature Intersected: W-S, I5, EB W SEA FRWY	**PGA (500 yr):** 33.4 %g	**PGA (1000 yr):** 46.0% %g	**Span Type:** CBox		**Main Spans:** 17 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 0 **ADT:** 16485 **Truck Pct:** 5 %	**11-13 Rank:** 76	**Skew Angle:** 0	**Pier Type:** Single Column Pier		**Footing Type:** Drilled shaft

Bridge Notes:

Pier 2 has a 5'-0" dia. column on 6'-0" dia. drilled shaft. Piers 3, 4, 5 each has a 5'-0"x 8'-0" elliptical column on 8' dia. Drilled shaft. Pier 6 and 7, each has two 5' dia. columns on 6' dia. drilled shafts. Pier 8 has a 5'-0" dia. column on 7'-0" dia. drilled shaft. Piers 9 and 10, each has a 5' dia. column on pile supported footing. Pier 11 and 17, each has a 4' dia. column. Pier 12 thru 16, each has a 4'x5'-6" elliptical column.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns built in 1967 at Piers 6 and 7 on drilled shaft. (2 ea. 4 total, 5'dia., 68-72 ft. tall columns)

Overall Retrofit Status:	P
Single Column Pier Status:	C
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741P **Bridge Number:** 5/538S-E	**Bridge Name:** S-E RAMP I-5 OC		**Route:** 5	**Milepost:** 162.99	**Region:** Northwest **County:** King
Location: 5.6 N JCT SR 900 **Detour Length:** 4 miles	**Longitude:** ° ' " 122 19 6	**Latitude:** ° ' " 47 34 24	**Structure Length:** 1422 ft.		**Out to Out Width:** 25.6 ft.
Feature Intersected: S-E RAMP I-5	**PGA (500 yr):** 33.41 %g	**PGA (1000 yr):** 46.0% %g	**Span Type:** CBox CS		**Main Spans:** 7 **Appr. Spans:** 18
Year Built: 1967 **Year Rebuilt:** 0 **ADT:** 23672 **Truck Pct:** 5 %	**11-13 Rank:** 77	**Skew Angle:** 0	**Pier Type:** Single Column Pier		**Footing Type:** Drilled shaft

No Photo Available

Bridge Notes:

Piers 2 and 3, each has a 5' diameter column on 6' diameter drilled shaft. Pier 4 has a 5' column on 7' shaft. Piers 5 thru 8, each has a 6' column on 7' shaft. Piers 9 thru 13, each has two 5' column on 6' shaft with two horizontal struts. Pier 14 has two 4' columns on 5' shafts with two horizontal struts. Piers 15 thru 26, each has two 3' columns on 3'-6" shafts. #4 Hoops @12".

Retrofit Program Notes:

Pier 4 retrofitted under WIN A00518K/PIN 100518K. Piers 2, 3, 5, 6, 7, and 8 retrofitted by PIN 100518L.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Multi column retrofit of piers 9 to 26 still remain.

Overall Retrofit Status:	P
Single Column Pier Status:	C
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741R **Bridge Number:** 5/537N	**Bridge Name:** S-E RAMP WB LANES		**Route:** 5	**Milepost:** 162.99	**Region:** Northwest **County:** King
Location: 5.5 N JCT SR 900 **Detour Length:** 99 miles	**Longitude:** ° ' " 122 19 6	**Latitude:** ° ' " 47 34 24	**Structure Length:** 2885 ft.		**Out to Out Width:** 32.6 ft.
Feature Intersected: I-5	**PGA (500 yr):** 33.41 %g	**PGA (1000 yr):** 46.0% %g	**Span Type:** CBox		**Main Spans:** 34 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 0 **ADT:** 43328 **Truck Pct:** 5 %	**11-13 Rank:** 78	**Skew Angle:** 0	**Pier Type:** Single Column Pier		**Footing Type:** Concrete Pile

No Photo Available

No Photo Available

Bridge Notes:

Piers 2 thru 9, each has a 5' diameter column on 6' diameter drilled shaft. Piers 10 and 11, each has two 4' diameter column on 5' diameter drilled shaft. Piers 12 thru 17, each has a 5' diameter column on 6' diameter drilled shaft. Pier 18 has two 5'-0" dia. columns on pile foundation. Pier 19 has three 5' dia. columns on pile foundations. Piers 20 and 21, each has three 4' dia. columns on pile foundations. Piers 22, 23,24, 25, each has two 4' dia. columns on pile foundations. Piers 24 and 26 has a 4' dia. columns on pile foundations. #4 Hoops @12". Splices at top of shafts or footings.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns built in 1967 at Piers 10, 11, 18-25, and 27-34. (42 total, 4' dia. except 2-5' dia. columns at Pier 18.)

Overall Retrofit Status: P

Single Column Pier Status: C

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741N **Bridge Number:** 5/537E-S	**Bridge Name:** E-S RAMP BR		**Route:** 5	**Milepost:** 162.99	**Region:** Northwest **County:** King
Location: 5.5 N JCT SR 900 **Detour Length:** 4 miles	**Longitude:** 122 ° 19 ' 6 "	**Latitude:** 47 ° 34 ' 18 "	**Structure Length:** 1206 ft.		**Out to Out Width:** 25.6 ft.
Feature Intersected: E-S RAMP BR	**PGA (500 yr):** 33.42 %g	**PGA (1000 yr):** 46.0% %g	**Span Type:** CBox		**Main Spans:** 15 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 0 **ADT:** 7505 **Truck Pct:** 5 %	**11-13 Rank:** 79	**Skew Angle:** 0	**Pier Type:** Single Column Pier		**Footing Type:** Concrete Pile

Bridge Notes:

Pier 1 has a 5' column on 6' shaft. Piers 2 thru 4, each has a 6' column on 7' shaft. Piers 5 and 6, each has two 4' column on 5' shafts. Piers 7 and 8, each has two 4' column on pile foundations. Piers 9 thru 14, each has a 4' column on pile foundation. #4 hoops @ 12". Lap splices at piers 1, 2, and 5 thru 13. Pile foundations have no top mat.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 5, 6, 7 and 8. (2 ea. 8 total, 4' dia.)

Overall Retrofit Status: P
Single Column Pier Status: C
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741S **Bridge Number:** 5/537W-W	**Bridge Name:** W-6TH RAMP BR		**Route:** 5	**Milepost:** 163	**Region:** Northwest **County:** King
Location: 5.5 N JCT SR 900 **Detour Length:** 4 miles	**Longitude:** 122 ° 19 ' 28 "	**Latitude:** 47 ° 34 ' 16 "	**Structure Length:** 398 ft.		**Out to Out Width:** 25.7 ft.
Feature Intersected: PARKING LOT	**PGA (500 yr):** 33.46 %g	**PGA (1000 yr):** 46.2% %g	**Span Type:** CBox CS		**Main Spans:** 2 **Appr. Spans:** 10
Year Built: 1967 **Year Rebuilt:** 0 **ADT:** 18723 **Truck Pct:** 5 %	**11-13 Rank:** 80	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:** Concrete Pile

Bridge Notes:

Cellular abutment. Expansion joints at Bents 3 (West-6th ramp), 4(north-6th ramp), 7. Seat width = 6". Unit 1 is supported by eight 2' diameter columns. Unit 3 is supported by four 2' diameter columns. Units 2, 4 and 5 are supported by 13" diameter concrete pile bents. 2' diameter columns have #4 hoops @12" and lap splices at top of pile footings. No top mat.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Cellular Abutment. Retrofit columns at Bents 1- 4 (12 total, 2' dia.).

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007741T **Bridge Number:** 5/537S	**Bridge Name:** EB LANES I-5 OC		**Route:** 5	**Milepost:** 163	**Region:** Northwest **County:** King
Location: 5.5 N JCT SR 900 **Detour Length:** 4 miles	**Longitude:** 122 ° 19 ' 6 "	**Latitude:** 47 ° 34 ' 18 "	**Structure Length:** 1793 ft.		**Out to Out Width:** 32.6 ft.
Feature Intersected: I-5	**PGA (500 yr):** 33.42 %g	**PGA (1000 yr):** 46.0% %g	**Span Type:** CBox		**Main Spans:** 20 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 0 **ADT:** 31525 **Truck Pct:** 5 %	**11-13 Rank:** 81	**Skew Angle:** 0	**Pier Type:** Single Column Pier		**Footing Type:** Concrete Pile

No Photo Available

No Photo Available

Bridge Notes:

Piers 2 thru 4, each has a 5' column on 6' shaft. Pier 5 has three 4' columns on 5' shafts. Piers 6 thru 9, each has two 4' columns on 5' shafts. Piers 10 thru 13, 17, 19 and 20, each has two 4' columns on pile footings. Piers 14 and 18, each has three 4' columns on pile footings. Piers 15, 16 and 21, each has a 5' column on pile footing. #4 hoops @ 12". Lap splices on either top of shafts or pile footings. No top mat.

Retrofit Program Notes:

Engineering analysis is needed to determine which elements of the bridge require retrofit. Cost estimate is based on retrofitting the existing columns with steel jackets.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 5-14 and 17-20. (31 total, 4' dia.)

Overall Retrofit Status: P

Single Column Pier Status: C

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007504E **Bridge Number:** 5/544	**Bridge Name:** I-5 OC, YESLER ST		**Route:** 5	**Milepost:** 165.69	**Region:** Northwest **County:** King
Location: 0.6 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** 122 ° 19 ' 24 "	**Latitude:** 47 ° 36 ' 6 "	**Structure Length:** 391 ft.		**Out to Out Width:** 63.6 ft.
Feature Intersected: I-5	**PGA (500 yr):** 33.12 %g	**PGA (1000 yr):** 45.0% %g	**Span Type:** CBox		**Main Spans:** 5 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 0 **ADT:** 8100 **Truck Pct:** 5 %	**11-13 Rank:** 82	**Skew Angle:** 41	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

Bridge Notes:

Piers 2 thru 5, each has three 2'-6"x8'-0" columns on spread footings. hoops and ties @ 12". Footings have no top mat. Longitudinal bars have lap splices at top of footings. Pier 1 has three 2'-6" square columns with hinges at top and bottom of columns. Pier 6 has 8 roller bearings.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3, 4 and 5. (3 ea. 12 total, 8'x2'-6")

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007110C **Bridge Number:** 5/546	**Bridge Name:** I-5 OC, MADISON ST		**Route:** 5	**Milepost:** 165.69	**Region:** Northwest **County:** King
Location: 1.1 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 19 48	**Latitude:** ° ' " 47 36 30	**Structure Length:** 280 ft.		**Out to Out Width:** 75.7 ft.
Feature Intersected: I-5	**PGA (500 yr):** 33.04 %g	**PGA (1000 yr):** 44.8% %g	**Span Type:** CBox		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 0 **ADT:** 16000 **Truck Pct:** 5 %	**11-13 Rank:** 83	**Skew Angle:** 99	**Pier Type:** Single Column Pier		**Footing Type:** Spread footing

Bridge Notes:

Piers 2 and 3, each has three 2'-6"x8'-0" columns on spread footings. hoops and ties @ 12". Footings have no top mat. Longitudinal bars have lap splices at top of footings. Piers 1 and 4 are rigid frame abutments. (may not need retrofit).

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 3 columns at pier 2 to top of retaining wall and 3 columns at pier 3 to top of footing.(6 total, 8'-0" x 2'-6")

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007110D **Bridge Number:** 5/547	**Bridge Name:** I-5 OC, SPRING ST		**Route:** 5	**Milepost:** 165.69	**Region:** Northwest **County:** King
Location: 1.1 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 19 48	**Latitude:** ° ' " 47 36 30	**Structure Length:** 279 ft.		**Out to Out Width:** 57.6 ft.
Feature Intersected: I-5	**PGA (500 yr):** 33.04 %g	**PGA (1000 yr):** 44.8% %g	**Span Type:** CBox		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 0 **ADT:** 3000 **Truck Pct:** 5 %	**11-13 Rank:** 84	**Skew Angle:** 99	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

No Photo Available

Bridge Notes:

Piers 2 and 3, each has three 2'-6"x8'-0" columns on spread footings. hoops and ties @ 12". Footings have no top mat. Longitudinal bars have lap splices at top of footings. Piers 1 and 4 are rigid frame abutments. (may not need retrofit).

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 8'x2'-6") May not require retrofit.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007110E **Bridge Number:** 5/548	**Bridge Name:** I-5 OC, SENECA ST		**Route:** 5	**Milepost:** 165.69	**Region:** Northwest **County:** King
Location: 1.2 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** 122 ° 19 ' 48 "	**Latitude:** 47 ° 36 ' 36 "	**Structure Length:** 250 ft.		**Out to Out Width:** 61.6 ft.
Feature Intersected: I-5	**PGA (500 yr):** 33.01 %g	**PGA (1000 yr):** 44.7% %g	**Span Type:** CBox		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 0 **ADT:** 6350 **Truck Pct:** 5 %	**11-13 Rank:** 85	**Skew Angle:** 99	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

No Photo Available

No Photo Available

Bridge Notes:

Piers 2 and 3, each has three 2'-6"x8'-0" columns on spread footings. hoops and ties @ 12". Footings have no top mat. Longitudinal bars have lap splices at top of footings. Piers 1 and 4 are rigid frame abutments. (may not need retrofit).

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 8'x2'-6")

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

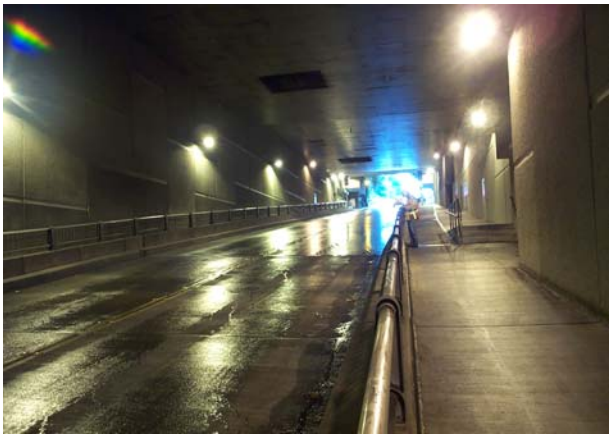
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007409A **Bridge Number:** 5/549	**Bridge Name:** I-5 UC, 8TH AVE		**Route:** 5	**Milepost:** 165.69	**Region:** Northwest **County:** King
Location: 1.3 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 19 48	**Latitude:** ° ' " 47 36 42	**Structure Length:** 859 ft.		**Out to Out Width:** 39 ft.
Feature Intersected: I-5 OVER, CITY ST UNDER	**PGA (500 yr):** 32.97 %g	**PGA (1000 yr):** 44.7% %g	**Span Type:** CBox CS		**Main Spans:** 8 **Appr. Spans:** 3
Year Built: 1964 **Year Rebuilt:** 1987 **ADT:** 5000 **Truck Pct:** 5 %	**11-13 Rank:** 86	**Skew Angle:** 0	**Pier Type:** Single Column Pier		**Footing Type:** Concrete Pile



No Photo Available

Bridge Notes:

Piers 2 and 3, each has two 3' dia. columns. Piers 4 and 5, each has a 4'-6" dia. Columns. Pier 7 has two columns. West column and upper portion of east column are 4'-6" dia. columns and lower portion of east column is a 5'-0"x8'-0" column. Pier 9 has a 4' dia. Columns. All columns are on pile footings. #4 hoops @12". Longitudinal rebars have field weld splices. Pile footings have no top mat. Piers 1 and 10 have roller bearings.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 7. (2 ea. 6 total, 3' dia. except P7 2-4'-6" Dia.)

Overall Retrofit Status: P
Single Column Pier Status: C
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007409C **Bridge Number:** 5/550	**Bridge Name:** I-5 OC, PIKE ST		**Route:** 5	**Milepost:** 166.06	**Region:** Northwest **County:** King
Location: 1.5 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** 122 ° 19 ' 48 "	**Latitude:** 47 ° 36 ' 48 "	**Structure Length:** 282 ft.		**Out to Out Width:** 75.6 ft.
Feature Intersected: I-5	**PGA (500 yr):** 32.94 %g	**PGA (1000 yr):** 44.6% %g	**Span Type:** CBox		**Main Spans:** 2 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 0 **ADT:** 13000 **Truck Pct:** 5 %	**11-13 Rank:** 87	**Skew Angle:** 48	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

No Photo Available

Bridge Notes:

Pier 2 has four 3'-1"x14'-4" columns on combined spread footing. #4 hoops and ties @ 12". Footing has top mat. #11 Longitudinal bars have 4'-2" lap splices at top of footings. Piers 1 and 3 are rigid frame abutments. No retrofit recommended.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 4 columns at Pier 2. (14'-4"x3'-1"). May not require retrofit.

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007409D **Bridge Number:** 5/551	**Bridge Name:** I-5 OC, PINE ST-BOREN		**Route:** 5	**Milepost:** 166.06	**Region:** Northwest **County:** King
Location: 1.6 N JCT I-90 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 19 42	**Latitude:** ° ' " 47 36 54	**Structure Length:** 825 ft.		**Out to Out Width:** 61 ft.
Feature Intersected: I-5	**PGA (500 yr):** 32.89 %g	**PGA (1000 yr):** 44.5% %g	**Span Type:** CBox		**Main Spans:** 8 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 0 **ADT:** 25000 **Truck Pct:** 5 %	**11-13 Rank:** 88	**Skew Angle:** 99	**Pier Type:** Pier with more than two columns		**Footing Type:** Concrete Pile

Bridge Notes:

This bridges carries Pine st. and Boren st. Traffics over I-5. Piers 2 and 4 Pine st. and Piers 2 and 4 Boren st., each has three 3'-0"x8'-0" columns on combined pile footing. Retaining walls between columns. Pier 3 has four 3'-0"x8'-0" columns on pile footings. #4 ties @12". Footings w/o top mat except combined footings.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 6 columns at pier 2 (Pine and Borren St.) , 3 columns at pier 4 Pine st. to top of retaining wall, and 4 columns at pier 3 and 3 columns at pier 4 Borren st. to top of footing. (8'x3' columns.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007299C **Bridge Number:** 5/596	**Bridge Name:** I-5 OC, NE 185TH ST		**Route:** 5	**Milepost:** 176.72	**Region:** Northwest **County:** King
Location: 2.1 N JCT SR 523 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 19 25	**Latitude:** ° ' " 47 45 47.2	**Structure Length:** 249 ft.		**Out to Out Width:** 60 ft.
Feature Intersected: I-5	**PGA (500 yr):** 30.49 %g	**PGA (1000 yr):** 39.8% %g	**Span Type:** CBox		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 0 **ADT:** 8286 **Truck Pct:** 2 %	**11-13 Rank:** 89	**Skew Angle:** 16	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2, 3 and 4, each has four 2'-6" square columns on spread footings. Retrofit four W. columns only. #3 hoops @ 12". Longitudinal #10 bars have lap splices at top of footing. Footings have no top mat. Piers 1 and 4 (end piers), each has four 2'-6"x1'-6" columns. Each column has a hinge at top of column. Pier 1 (abutment) has four 2'-6"x1'-6" columns with hinges at top and bottom. Pier 5 (abutment) has four 2'-6"x1'-6" columns with hinge at top.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (4 ea. 12 total, 30"x30" at P2&P4, 30"x24" at P3)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0003842B **Bridge Number:** 5/629A	**Bridge Name:** BROADWAY AVE UC		**Route:** 5	**Milepost:** 192.59	**Region:** Northwest **County:** Snohomish
Location: 0.1 N JCT I-5 **Detour Length:** 2 miles	**Longitude:** 122 ° 12 ' 3 "	**Latitude:** 47 ° 57 ' 40 "	**Structure Length:** 161 ft.		**Out to Out Width:** 23.6 ft.
Feature Intersected: I-5 RAMP	**PGA (500 yr):** 28.66 %g	**PGA (1000 yr):** 38.0% %g	**Span Type:** CTB		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1950 **Year Rebuilt:** 0 **ADT:** 25028 **Truck Pct:** 5 %	**11-13 Rank:** 90	**Skew Angle:** 30	**Pier Type:**		**Footing Type:**

Bridge Notes:

Piers 2 thru 4, each has three 20"x30" columns on combined spread footing. #3 hoops @ 12", Longitudinal bars are 1 1/4 sq. bars with 4'-2" splices at top of footing. Pier 1 has five rocker bearings. Pier 5 has three rocker bearings.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3, and 4 (3 ea. 9 total, 20"x30"). Install catchers and restrainers at Piers 1 and 5.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007249D **Bridge Number:** 405/11	**Bridge Name:** SR 181 OC		**Route:** 405	**Milepost:** 0.96	**Region:** Northwest **County:** King
Location: 1.0 N JCT I-5 **Detour Length:** 5 miles	**Longitude:** ° ' " 122 14 42	**Latitude:** ° ' " 47 27 54	**Structure Length:** 173 ft.		**Out to Out Width:** 169.4 ft.
Feature Intersected: SR 181	**PGA (500 yr):** 32.68 %g	**PGA (1000 yr):** 44.4% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 1987 **ADT:** 114823 **Truck Pct:** 8 %	**11-13 Rank:** 91	**Skew Angle:** 3	**Pier Type:** Pier with more than two columns		**Footing Type:** Concrete Pile

No Photo Available

Bridge Notes:

Piers 2 and 3, each has 17- 3'-0" diameter columns. Pier 4 has 16-3'-0" diameter columns. Retrofit columns built in 1964 only. (total 32 columns). These columns have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. (E-54m). End piers, 1 and 5, are "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers2, 3 and 4. (32 total, 3' dia.)

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007606A **Bridge Number:** 405/12	**Bridge Name:** BN RR OC (CMSTPP & NP)		**Route:** 405	**Milepost:** 1.14	**Region:** Northwest **County:** King
Location: 0.4 N JCT SR 181 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 14 24	**Latitude:** ° ' " 47 27 54	**Structure Length:** 765 ft.		**Out to Out Width:** 117.2 ft.
Feature Intersected: CMSTPP RR NP RY	**PGA (500 yr):** 32.63 %g	**PGA (1000 yr):** 44.3% %g	**Span Type:** PCG		**Main Spans:** 8 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1989 **ADT:** 114823 **Truck Pct:** 8 %	**11-13 Rank:** 92	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Concrete Pile

No Photo Available

No Photo Available

Bridge Notes:

Piers 2 thru 8, each has six columns. Retrofit four 3'-0" diameter columns built in 1965 only. Four columns per X-beam with gap near centerline of bridge. #3 hoops @ 12". Vertical #11 bars at piers 2, 3 and 8 have 4'-2" lap splices at top of footing. Vertical #14 bars at piers 4 thru 7 have staggered field weld splices. . Footing without top mat. (E-54m) End piers, 1 and 9 are stub "L" abutments. Pier 9 is a cantilever "L" abutment. Girders are on bearing pads.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns built in 1965 at piers 2 thru 8. (28 Total, 3' dia.)

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007376A **Bridge Number:** 405/15	**Bridge Name:** SR 167 OC		**Route:** 405	**Milepost:** 2.3	**Region:** Northwest **County:** King
Location: 1.3 N JCT SR 181 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 13 0	**Latitude:** ° ' " 47 28 6	**Structure Length:** 188 ft.		**Out to Out Width:** 189 ft.
Feature Intersected: SR 167	**PGA (500 yr):** 32.42 %g	**PGA (1000 yr):** 44.0% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 1989 **ADT:** 107403 **Truck Pct:** 8 %	**11-13 Rank:** 93	**Skew Angle:** 5	**Pier Type:** Pier with more than two columns		**Footing Type:** Timber pile

No Photo Available

Bridge Notes:

Piers 2, 3 and 4, each has twelve 3'-0" diameter columns. Retrofit eight center columns per pier only. These columns have #3 hoops @ 12". Vertical bars have lap splices at top of footing. Footing without top mat. (E-54m)

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (8 ea. 24 total, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007376C **Bridge Number:** 405/16	**Bridge Name:** SR 515 OC		**Route:** 405	**Milepost:** 2.77	**Region:** Northwest **County:** King
Location: 0.5 N JCT SR 167 **Detour Length:** 1 miles	**Longitude:** 122 ° 12 ' 29 "	**Latitude:** 47 ° 28 ' 8 "	**Structure Length:** 215 ft.		**Out to Out Width:** 109.5 ft.
Feature Intersected: BURNETT ST TALBOT RD	**PGA (500 yr):** 32.33 %g	**PGA (1000 yr):** 44.0% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1964 **Year Rebuilt:** 1988 **ADT:** 104327 **Truck Pct:** 8 %	**11-13 Rank:** 94	**Skew Angle:** 15	**Pier Type:** Pier with more than two columns		**Footing Type:** Steel pile

Bridge Notes:

Piers 2 and 3, each has nine 3'-0" diameter columns. Retrofit six columns built in 1964 only (columns 2 thru 7 from north). These columns have #3 hoops @ 12". Vertical bars have lap splices at top of footing. Footing without top mat. (E-54m). End piers, 1 and 4, are "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (6 ea. 12 total, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008812B **Bridge Number:** 405/41E	**Bridge Name:** SE 8TH ST OC		**Route:** 405	**Milepost:** 12.78	**Region:** Northwest **County:** King
Location: 1.7 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** 122 ° 11 ' 0 "	**Latitude:** 47 ° 36 ' 12 "	**Structure Length:** 189 ft.		**Out to Out Width:** 67 ft.
Feature Intersected: SE 8TH ST	**PGA (500 yr):** 31.74 %g	**PGA (1000 yr):** 43.0% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1971 **Year Rebuilt:** 1995 **ADT:** 67559 **Truck Pct:** 6 %	**11-13 Rank:** 95	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns. Retrofit three west columns, built in 1971, only. These columns have #4 hoops @ 12". Vertical #11 bars have 4'-2" lap splices at top of footing. Footing without top mat. Piers 1 and 4 are stub abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0009267A **Bridge Number:** 405/41W	**Bridge Name:** WILBURTON INTERCHANGE OC		**Route:** 405	**Milepost:** 12.79	**Region:** Northwest **County:** King
Location: 1.7 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 11 3.31	**Latitude:** ° ' " 47 36 10.51	**Structure Length:** 183 ft.		**Out to Out Width:** 64 ft.
Feature Intersected: SE 8TH ST OC	**PGA (500 yr):** 31.76 %g	**PGA (1000 yr):** 43.1% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1972 **Year Rebuilt:** 1995 **ADT:** 67559 **Truck Pct:** 6 %	**11-13 Rank:** 96	**Skew Angle:** 3	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns. Retrofit three east columns, built in 1972, only. These columns have #4 hoops @ 12". Vertical #11 bars have 4'-2" lap splices at top of footing. Footing without top mat. Piers 1 and 4 are stub abutments.

Retrofit Program Notes:

Bridge is being widened and retrofitted with column jackets under UCO design build project - PIN 840509A - Contract No. 17283.
A future analysis will be needed to determine if the pier cap should be retrofitted in a future project.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Jacket all columns

Overall Retrofit Status: C
Single Column Pier Status: N
Multi Column Pier Status: I

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007596A **Bridge Number:** 405/45E	**Bridge Name:** N-W N-E RAMP OC		**Route:** 405	**Milepost:** 14.82	**Region:** Northwest **County:** King
Location: 3.6 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 11 17.9	**Latitude:** ° ' " 47 37 47.9	**Structure Length:** 245 ft.		**Out to Out Width:** 71 ft.
Feature Intersected: N-W N-E RAMP	**PGA (500 yr):** 31.31 %g	**PGA (1000 yr):** 41.9% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1993 **ADT:** 79098 **Truck Pct:** 5 %	**11-13 Rank:** 97	**Skew Angle:** 41	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns on spread footings. Retrofit three East columns built in 1965 only. These columns have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. (E-54m). End piers, 1 and 4, are stub abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007596B **Bridge Number:** 405/45W	**Bridge Name:** N-W & N-E RAMPS OC		**Route:** 405	**Milepost:** 14.82	**Region:** Northwest **County:** King
Location: 3.6 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 11 19.3	**Latitude:** ° ' " 47 37 49.1	**Structure Length:** 207 ft.		**Out to Out Width:** 71 ft.
Feature Intersected: N-W & N-E RAMPS	**PGA (500 yr):** 31.3 %g	**PGA (1000 yr):** 41.9% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1993 **ADT:** 79098 **Truck Pct:** 5 %	**11-13 Rank:** 98	**Skew Angle:** 34	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns on spread footings. Retrofit three West columns built in 1966 only. These columns have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. (E-54m). End piers, 1 and 4, are stub abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007596C **Bridge Number:** 405/46E	**Bridge Name:** SR 520 OC		**Route:** 405	**Milepost:** 14.83	**Region:** Northwest **County:** King
Location: 3.7 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 11 17.04	**Latitude:** ° ' " 47 37 55.44	**Structure Length:** 247 ft.		**Out to Out Width:** 78 ft.
Feature Intersected: SR 520	**PGA (500 yr):** 31.28 %g	**PGA (1000 yr):** 41.8% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1993 **ADT:** 79098 **Truck Pct:** 5 %	**11-13 Rank:** 99	**Skew Angle:** 10	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

No Photo Available

Bridge Notes:

Piers 2, 3 and 4, each has four 3'-0" diameter columns on spread footings. Retrofit three East columns per pier only. These columns have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. (E-54m). End piers, 1 and 5, are stub "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007596D **Bridge Number:** 405/46W	**Bridge Name:** SR 520 OC		**Route:** 405	**Milepost:** 14.83	**Region:** Northwest **County:** King
Location: 3.7 N JCT I-90 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 11 18.3	**Latitude:** ° ' " 47 37 55.9	**Structure Length:** 241 ft.		**Out to Out Width:** 89 ft.
Feature Intersected: SR 520	**PGA (500 yr):** 31.28 %g	**PGA (1000 yr):** 41.8% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1993 **ADT:** 79098 **Truck Pct:** 5 %	**11-13 Rank:** 100	**Skew Angle:** 16	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

Bridge Notes:

Piers 2, 3 and 4, each has four 3'-0" diameter columns on spread footings. Retrofit three West columns per pier only. These columns have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. (E-54m). End piers, 1 and 5, are stub "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.)

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007596E **Bridge Number:** 405/47E	**Bridge Name:** NORTHUP WAY OC		**Route:** 405	**Milepost:** 14.83	**Region:** Northwest **County:** King
Location: 0.1 N JCT SR 520 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 11 13.1	**Latitude:** ° ' " 47 38 2.1	**Structure Length:** 160 ft.		**Out to Out Width:** 78 ft.
Feature Intersected: NORTHUP WAY	**PGA (500 yr):** 31.25 %g	**PGA (1000 yr):** 41.7% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1993 **ADT:** 79098 **Truck Pct:** 5 %	**11-13 Rank:** 101	**Skew Angle:** 12	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns on spread footings. Retrofit three West columns per pier only. These columns have #3 hoops @ 12". Vertical #11 bars have 4'-2" lap splices at top of footing. Footing without top mat. (E-54m). End piers, 1 and 4, are stub "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 2' dia.). 7' excavation.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0004609A **Bridge Number:** 405/47W	**Bridge Name:** NORTHUP WAY OC		**Route:** 405	**Milepost:** 14.83	**Region:** Northwest **County:** King
Location: 0.1 N JCT SR 520 **Detour Length:** 1 miles	**Longitude:** 122 ° 11 ' 12 "	**Latitude:** 47 ° 38 ' 0 "	**Structure Length:** 149 ft.		**Out to Out Width:** 71 ft.
Feature Intersected: NORTHUP WAY	**PGA (500 yr):** 31.25 %g	**PGA (1000 yr):** 41.8% %g	**Span Type:** CTB		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1954 **Year Rebuilt:** 1993 **ADT:** 79098 **Truck Pct:** 5 %	**11-13 Rank:** 102	**Skew Angle:** 15	**Pier Type:** Pier with more than two columns		**Footing Type:** Concrete Pile

Bridge Notes:

Piers 2 and 3, each has four 38" square columns. Columns 2 and 3 are on spread footings. Columns 1 are on piles. Columns 4 are on 6' dia. drilled shafts. Retrofit three West columns only. These columns have #3 hoops @ 12". Vertical #11 bars have lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are concrete pile bents.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 38"x 38")

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007742A **Bridge Number:** 405/48E	**Bridge Name:** BNRR & 115th AVE NE OC		**Route:** 405	**Milepost:** 15	**Region:** Northwest **County:** King
Location: 0.2 N JCT SR 520 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 11 12.8	**Latitude:** ° ' " 47 38 6	**Structure Length:** 296 ft.		**Out to Out Width:** 78 ft.
Feature Intersected: BNRR & 115th AVE NE	**PGA (500 yr):** 31.23 %g	**PGA (1000 yr):** 41.7% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1965 **Year Rebuilt:** 1993 **ADT:** 79098 **Truck Pct:** 5 %	**11-13 Rank:** 103	**Skew Angle:** 39	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2, 3 and 4, each has five 3'-0" diameter columns. Four east column are on spread footings. West column is on 6' diameter drilled shaft. Retrofit four east columns only. These columns have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. End piers, 1 and 5, are stub abutments. Piers 2 and 3 have collision walls.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (4 ea. 12 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0004609B **Bridge Number:** 405/48W	**Bridge Name:** BNRR & 115 AVE NE OC		**Route:** 405	**Milepost:** 15	**Region:** Northwest **County:** King
Location: 0.2 N JCT SR 520 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 11 14.41	**Latitude:** ° ' " 47 38 6.36	**Structure Length:** 204 ft.		**Out to Out Width:** 71 ft.
Feature Intersected: BNRR & 115 AVE NE	**PGA (500 yr):** 31.23 %g	**PGA (1000 yr):** 41.7% %g	**Span Type:** CTB		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1954 **Year Rebuilt:** 1993 **ADT:** 79098 **Truck Pct:** 5 %	**11-13 Rank:** 104	**Skew Angle:** 42	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2 and 3, each has four 42" square columns. Columns 2 and 3 from West are on spread footings. Pier 2 column 1 from west is on piles. Pier 3 on spread footing. Columns 4 are on 6' dia. drilled shafts. Retrofit three West columns only. These columns have #3 hoops @ 12". Vertical #11 bars have lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are spill through abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 42"x42"). 10' excavation.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008674E **Bridge Number:** 405/52E	**Bridge Name:** SR 908 OC		**Route:** 405	**Milepost:** 18.11	**Region:** Northwest **County:** King
Location: 3.3 N JCT SR 520 **Detour Length:** 1 miles	**Longitude:** 122 ° 11 ' 3.9 "	**Latitude:** 47 ° 40 ' 45 "	**Structure Length:** 223 ft.		**Out to Out Width:** 66.5 ft.
Feature Intersected: SR 908	**PGA (500 yr):** 30.49 %g	**PGA (1000 yr):** 40.3% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1971 **Year Rebuilt:** 1994 **ADT:** 58995 **Truck Pct:** 5 %	**11-13 Rank:** 105	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns on spread footings. Retrofit three east columns only. These columns have #4 hoops @ 12". Vertical #10 bars have 2'-10" min. lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.). 7' excavation.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008674D **Bridge Number:** 405/52NCD	**Bridge Name:** NBCD, SR 908 OC		**Route:** 405	**Milepost:** 17.84	**Region:** Northwest **County:** King
Location: 3.3 N JCT SR 520 **Detour Length:** 0 miles	**Longitude:** 122 ° 11 ' 0 "	**Latitude:** 47 ° 40 ' 48 "	**Structure Length:** 211 ft.		**Out to Out Width:** 38.5 ft.
Feature Intersected: SR 908	**PGA (500 yr):** 30.49 %g	**PGA (1000 yr):** 40.2% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1970 **Year Rebuilt:** 0 **ADT:** 9986 **Truck Pct:** 5 %	**11-13 Rank:** 106	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has three 3'-0" diameter columns on spread footings. #4 hoops @ 12". Vertical #9 bars have lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008674G **Bridge Number:** 405/52SCD	**Bridge Name:** SBCD, SR 908 OC		**Route:** 405	**Milepost:** 18.11	**Region:** Northwest **County:** King
Location: 3.3 N JCT SR 520 **Detour Length:** 0 miles	**Longitude:** 122 ° 11 ' 0 "	**Latitude:** 47 ° 40 ' 48 "	**Structure Length:** 223 ft.		**Out to Out Width:** 39 ft.
Feature Intersected: SBCD, SR 908	**PGA (500 yr):** 30.49 %g	**PGA (1000 yr):** 40.2% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1971 **Year Rebuilt:** 0 **ADT:** 12046 **Truck Pct:** 5 %	**11-13 Rank:** 107	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has three 3'-0" diameter columns on spread footings. #4 hoops @ 12". Vertical #9 bars have lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008674F **Bridge Number:** 405/52W	**Bridge Name:** SR 908 OC		**Route:** 405	**Milepost:** 18.11	**Region:** Northwest **County:** King
Location: 3.3 N JCT SR 520 **Detour Length:** 1 miles	**Longitude:** 122 ° 11 ' 0 "	**Latitude:** 47 ° 40 ' 48 "	**Structure Length:** 219 ft.		**Out to Out Width:** 66 ft.
Feature Intersected: SR 908	**PGA (500 yr):** 30.49 %g	**PGA (1000 yr):** 40.2% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1971 **Year Rebuilt:** 1994 **ADT:** 58995 **Truck Pct:** 5 %	**11-13 Rank:** 108	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns on spread footings. Retrofit three west columns only. These columns have #4 hoops @ 12". Vertical #10 bars have 3'-3" min. lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.). 7' excavation.

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0004978A **Bridge Number:** 405/56E	**Bridge Name:** BN RR OC (NP)		**Route:** 405	**Milepost:** 20	**Region:** Northwest **County:** King
Location: 1.9 N JCT SR 908 **Detour Length:** 1 miles	**Longitude:** 122 ° 10 ' 48.2 "	**Latitude:** 47 ° 42 ' 22.1 "	**Structure Length:** 199 ft.		**Out to Out Width:** 107 ft.
Feature Intersected: NP RY	**PGA (500 yr):** 30.07 %g	**PGA (1000 yr):** 39.5% %g	**Span Type:** CTB		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1956 **Year Rebuilt:** 1994 **ADT:** 57543 **Truck Pct:** 5 %	**11-13 Rank:** 109	**Skew Angle:** 99	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has six 39" square columns and one 18" square column on spread footings. Retrofit five west columns only. These columns have #3 or #4 hoops @ 12". Vertical #11 bars have 2'-4" min. lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are spill through abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 8-39"x39", 2-18"x18"). Retrofit Columns to Top of Collision Wall.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008615C **Bridge Number:** 405/56W	**Bridge Name:** BN RR OC (NP)		**Route:** 405	**Milepost:** 19.98	**Region:** Northwest **County:** King
Location: 1.9 N JCT SR 908 **Detour Length:** 1 miles	**Longitude:** 122 ° 10 ' 42 "	**Latitude:** 47 ° 42 ' 24 "	**Structure Length:** 243 ft.		**Out to Out Width:** 81 ft.
Feature Intersected: NP RY	**PGA (500 yr):** 30.07 %g	**PGA (1000 yr):** 39.5% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1970 **Year Rebuilt:** 1994 **ADT:** 57543 **Truck Pct:** 5 %	**11-13 Rank:** 110	**Skew Angle:** 33	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has five 3'-0" diameter columns on spread footings. Retrofit four west columns only. These columns have #4 hoops @ 12". Vertical #8 bars have 5'-0" min. lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are cantilever abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.). Retrofit Columns to Top of Collision Wall.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008615E **Bridge Number:** 405/59E	**Bridge Name:** NE 132ND ST OC		**Route:** 405	**Milepost:** 20.9	**Region:** Northwest **County:** King
Location: 2.8 N JCT SR 908 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 11 14.7	**Latitude:** ° ' " 47 43 5.9	**Structure Length:** 180 ft.		**Out to Out Width:** 71 ft.
Feature Intersected: NE 132ND ST	**PGA (500 yr):** 30 %g	**PGA (1000 yr):** 39.4% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1970 **Year Rebuilt:** 1994 **ADT:** 53951 **Truck Pct:** 5 %	**11-13 Rank:** 111	**Skew Angle:** 21	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns. Retrofit three east columns only. These columns are on spread footings and have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008615F **Bridge Number:** 405/59W	**Bridge Name:** NE 132ND ST OC		**Route:** 405	**Milepost:** 20.9	**Region:** Northwest **County:** King
Location: 2.8 N JCT SR 908 **Detour Length:** 1 miles	**Longitude:** 122 ° 11 ' 12 "	**Latitude:** 47 ° 43 ' 5.9 "	**Structure Length:** 168 ft.		**Out to Out Width:** 68 ft.
Feature Intersected: NE 132ND ST	**PGA (500 yr):** 30 %g	**PGA (1000 yr):** 39.3% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1970 **Year Rebuilt:** 1994 **ADT:** 53951 **Truck Pct:** 5 %	**11-13 Rank:** 112	**Skew Angle:** 21	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns on spread footings. Retrofit three west columns only. These columns have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008375C **Bridge Number:** 405/103E	**Bridge Name:** 228TH ST OC		**Route:** 405	**Milepost:** 26.31	**Region:** Northwest **County:** Snohomish
Location: 1.3 N KING CO **Detour Length:** 1 miles	**Longitude:** 122 ° 12 ' 28.5 "	**Latitude:** 47 ° 47 ' 28 "	**Structure Length:** 287 ft.		**Out to Out Width:** 57.6 ft.
Feature Intersected: 228TH ST	**PGA (500 yr):** 29.56 %g	**PGA (1000 yr):** 38.6% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1968 **Year Rebuilt:** 1998 **ADT:** 48000 **Truck Pct:** 5 %	**11-13 Rank:** 113	**Skew Angle:** 54	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Intermediate Piers, Piers 2 and 3, each has four 3'-0" diameter columns. Retrofit three east columns only. These columns have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footings. Footings have no top mat. End Piers 1 and 4 are "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008375D **Bridge Number:** 405/103W	**Bridge Name:** 228TH ST OC		**Route:** 405	**Milepost:** 26.33	**Region:** Northwest **County:** Snohomish
Location: 1.3 N KING CO **Detour Length:** 1 miles	**Longitude:** 122 ° 12 ' 24 "	**Latitude:** 47 ° 47 ' 30 "	**Structure Length:** 273 ft.		**Out to Out Width:** 67.5 ft.
Feature Intersected: 228TH ST	**PGA (500 yr):** 29.56 %g	**PGA (1000 yr):** 38.6% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1968 **Year Rebuilt:** 1998 **ADT:** 48000 **Truck Pct:** 5 %	**11-13 Rank:** 114	**Skew Angle:** 53	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Intermediate Piers, Piers 2 and 3, each has four 3'-0" diameter columns. Retrofit three west columns only. These columns have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footings. Footings have no top mat. End Piers 1 and 4 are "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0006968A **Bridge Number:** 405/5	**Bridge Name:** I-405 OC, 61ST AVE S		**Route:** 405	**Milepost:** 0.34	**Region:** Northwest **County:** King
Location: 0.3 N JCT I-5 **Detour Length:** 0 miles	**Longitude:** 122 ° 15 ' 24 "	**Latitude:** 47 ° 27 ' 48 "	**Structure Length:** 205 ft.		**Out to Out Width:** 65.5 ft.
Feature Intersected: I-405	**PGA (500 yr):** 32.79 %g	**PGA (1000 yr):** 44.5% %g	**Span Type:** PCG		**Main Spans:** 2 **Appr. Spans:** 0
Year Built: 1962 **Year Rebuilt:** 0 **ADT:** 10550 **Truck Pct:** 3 %	**11-13 Rank:** 115	**Skew Angle:** 10	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

Bridge Notes:

Pier 2 has six 3'-0" diameter columns on pile footings. Three columns per x-beam with 1"gap. Three columns built in 1962 are on combined spread footing. Columns have #3 hoops @ 12". Vertical #11 bars have 4'-2" lap splices at top of footings. Three columns in widened portion are on combined spread footing. 2'-0" gap between footings. Columns have #4 hoops @ 12". Vertical # 9 bars have 3'-4" lap splices at top of footings. Both footings have top mats. End piers 1 and 3 are "L" abutments. Girders are on bearing pads.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 6 columns at Pier 2. (3' dia.)

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 000000OU **Bridge Number:** 405/44	**Bridge Name:** 12TH ST NE OVER I-405		**Route:** 405	**Milepost:** 14.12	**Region:** Northwest **County:** King
Location: 3.0 N JCT I-90 **Detour Length:** 0 miles	**Longitude:** 122 ° 11 ' 18 "	**Latitude:** 47 ° 37 ' 18 "	**Structure Length:** 298 ft.		**Out to Out Width:** 59 ft.
Feature Intersected: I-405	**PGA (500 yr):** 31.47 %g	**PGA (1000 yr):** 42.3% %g	**Span Type:** PTCBox		**Main Spans:** 2 **Appr. Spans:** 0
Year Built: 1970 **Year Rebuilt:** 0 **ADT:** 21900 **Truck Pct:** 6 %	**11-13 Rank:** 116	**Skew Angle:** 37	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Pier 2 has three columns on spread footings. Column section various, 5'-6"x 4'-6" at top of pedestal. #4 ties @ 9" at hinge zone top of pedestal. Others #4 ties @ 12". Vertical #11 bars have 4'-0" lap splices at top of pedestal. Footings have no top mat. End piers, 1 and 3, are cantilever abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 3 columns at pier 2. (Section vary, 66"x44" at bottom)

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0007839A **Bridge Number:** 405/48S-W	**Bridge Name:** S-W RAMP BNRR OC		**Route:** 405	**Milepost:** 14.83	**Region:** Northwest **County:** King
Location: 0.2 N JCT SR 520 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 10 54	**Latitude:** ° ' " 47 38 6	**Structure Length:** 232 ft.		**Out to Out Width:** 44 ft.
Feature Intersected: S-W RAMP NP RY	**PGA (500 yr):** 31.17 %g	**PGA (1000 yr):** 41.6% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1966 **Year Rebuilt:** 1994 **ADT:** 11657 **Truck Pct:** 5 %	**11-13 Rank:** 117	**Skew Angle:** 41	**Pier Type:** Multiple Column Pier		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns. Retrofit two east columns only. These columns are on spread footings and have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are stub abutments. Piers 2 and 3 have collision walls.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008569A **Bridge Number:** 405/64	**Bridge Name:** I-405 OC, NE 160TH ST		**Route:** 405	**Milepost:** 22.62	**Region:** Northwest **County:** King
Location: 4.5 N JCT SR 908 **Detour Length:** 4 miles	**Longitude:** ° ' " 122 11 12	**Latitude:** ° ' " 47 44 36	**Structure Length:** 292 ft.		**Out to Out Width:** 78.5 ft.
Feature Intersected: I-405	**PGA (500 yr):** 29.71 %g	**PGA (1000 yr):** 38.8% %g	**Span Type:** PTCBox		**Main Spans:** 2 **Appr. Spans:** 0
Year Built: 1969 **Year Rebuilt:** 1996 **ADT:** 12586 **Truck Pct:** 5 %	**11-13 Rank:** 118	**Skew Angle:** 45	**Pier Type:** Multiple Column Pier		**Footing Type:**

No Photo Available

Bridge Notes:

Pier 2 has four 6'-0" wide columns. Retrofit two south columns only. Column section various. 6'-0"x 3'-4" at top of pedestal. 12:5/8 tapers. Vertical #11 bars have 4'-2" lap splices at top of footing. #4 hoops & ties @ 12". Footing has no top mat. End piers, 1 and 3, are cantilever abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit two columns at Pier 2. Column section vary, 6'x3'-4" at bottom.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008286A **Bridge Number:** 405/73	**Bridge Name:** I-405 OC, 195TH ST		**Route:** 405	**Milepost:** 24.48	**Region:** Northwest **County:** King
Location: 0.8 N JCT SR 522 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 11 18	**Latitude:** ° ' " 47 46 6	**Structure Length:** 252 ft.		**Out to Out Width:** 77.7 ft.
Feature Intersected: I-405	**PGA (500 yr):** 29.54 %g	**PGA (1000 yr):** 38.5% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1968 **Year Rebuilt:** 1998 **ADT:** 4592 **Truck Pct:** 6 %	**11-13 Rank:** 119	**Skew Angle:** 7	**Pier Type:** Multiple Column Pier		**Footing Type:** Concrete Pile

No Photo Available

Bridge Notes:

Intermediate Piers, Piers 2, 3 and 4, each has six 3'-0" diameter columns. Retrofit two center columns only. These columns have #3 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footings. Footings have no top mat. End Piers 1 and 5 are "L" abutments.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (2 ea. 6 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0005582A **Bridge Number:** 5/418	**Bridge Name:** I-5 OC, BRIDGEPORT WAY		**Route:** 5	**Milepost:** 125.86	**Region:** Olympic **County:** Pierce
Location: 11.1 N THURSTON **Detour Length:** 2 miles	**Longitude:** 122 ° 30 ' 12 "	**Latitude:** 47 ° 8 ' 48 "	**Structure Length:** 294 ft.		**Out to Out Width:** 63 ft.
Feature Intersected: I-5	**PGA (500 yr):** 30.51 %g	**PGA (1000 yr):** 40.0% %g	**Span Type:** CBox		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1958 **Year Rebuilt:** 0 **ADT:** 26890 **Truck Pct:** 2 %	**11-13 Rank:** 120	**Skew Angle:** 39	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

Bridge Notes:

Piers 2, 3 and 4, each has four 3'-0" diameter columns. #4 hoops @ 12". #11 bars with 2'-4" splices. Footing without top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0004495A **Bridge Number:** 5/411W	**Bridge Name:** FT LEWIS RD OC		**Route:** 5	**Milepost:** 120.87	**Region:** Olympic **County:** Pierce
Location: 6.1 N THURSTON **Detour Length:** 1 miles	**Longitude:** 122 ° 35 ' 19.5 "	**Latitude:** 47 ° 6 ' 15.7 "	**Structure Length:** 157 ft.		**Out to Out Width:** 54 ft.
Feature Intersected: FT LEWIS RD	**PGA (500 yr):** 30.27 %g	**PGA (1000 yr):** 39.8% %g	**Span Type:** CTB		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1954 **Year Rebuilt:** 1969 **ADT:** 45830 **Truck Pct:** 15 %	**11-13 Rank:** 121	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has six 25"x30" columns. 4 columns each pier near centerline of roadway (built in 1954) have #3 hoops @ 12", #9 bars with 2'-0" splices. Footings have #6 top mat. 2 columns built in 1969 have #4 ties @12", #9 bars with 3'-4" splices.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0004495B **Bridge Number:** 5/411SCD	**Bridge Name:** SBCD FT LEWIS RD OC		**Route:** 5	**Milepost:** 120.87	**Region:** Olympic **County:** Pierce
Location: 6.1 N THURSTON **Detour Length:** 0 miles	**Longitude:** ° ' " 122 35 19.6	**Latitude:** ° ' " 47 6 15.6	**Structure Length:** 157 ft.		**Out to Out Width:** 36.6 ft.
Feature Intersected: SBCD FT LEWIS RD	**PGA (500 yr):** 30.27 %g	**PGA (1000 yr):** 39.8% %g	**Span Type:** CTB		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1954 **Year Rebuilt:** 0 **ADT:** 12417 **Truck Pct:** 2 %	**11-13 Rank:** 122	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has four 25"x30" columns. #3 hoops @ 12", #9 bars with 2'-0" splices. Footings have #6 top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008580B **Bridge Number:** 5/411NCD	**Bridge Name:** NBCD FT LEWIS RD OC		**Route:** 5	**Milepost:** 120.87	**Region:** Olympic **County:** Pierce
Location: 6.1 N THURSTON **Detour Length:** 0 miles	**Longitude:** 122 ° 35 ' 18 "	**Latitude:** 47 ° 6 ' 16 "	**Structure Length:** 172 ft.		**Out to Out Width:** 40.6 ft.
Feature Intersected: NBCD FT LEWIS RD	**PGA (500 yr):** 30.26 %g	**PGA (1000 yr):** 39.8% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1969 **Year Rebuilt:** 0 **ADT:** 12417 **Truck Pct:** 2 %	**11-13 Rank:** 123	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has three 30"x30" square columns, #4 hoops @ 12", #9 bars with 3'-4" splices. Footings have no top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008580A **Bridge Number:** 5/411E	**Bridge Name:** FT LEWIS RD OC		**Route:** 5	**Milepost:** 120.87	**Region:** Olympic **County:** Pierce
Location: 6.1 N THURSTON **Detour Length:** 1 miles	**Longitude:** ° ' " 122 35 18	**Latitude:** ° ' " 47 6 17	**Structure Length:** 165 ft.		**Out to Out Width:** 54.6 ft.
Feature Intersected: FT LEWIS RD	**PGA (500 yr):** 30.27 %g	**PGA (1000 yr):** 39.8% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1969 **Year Rebuilt:** 0 **ADT:** 45830 **Truck Pct:** 15 %	**11-13 Rank:** 124	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

Bridge Notes:

Piers 2 and 3, each has four 30"x30" square columns. #4 hoops @ 12", #9 bars with 3'-4" splices. Footings have no top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008134D **Bridge Number:** 5/406	**Bridge Name:** I-5 OC, OLD NISQUALLY RD		**Route:** 5	**Milepost:** 116.7	**Region:** Olympic **County:** Pierce
Location: 2.0 N THURSTON **Detour Length:** 6 miles	**Longitude:** ° ' " 122 40 12.5	**Latitude:** ° ' " 47 4 58.1	**Structure Length:** 138 ft.		**Out to Out Width:** 40 ft.
Feature Intersected: I-5	**PGA (500 yr):** 30.17 %g	**PGA (1000 yr):** 39.6% %g	**Span Type:** PCG		**Main Spans:** 2 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 0 **ADT:** 1870 **Truck Pct:** 2 %	**11-13 Rank:** 125	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:** Timber pile

Bridge Notes:

Pier 2 has two 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008116A **Bridge Number:** 5/345W	**Bridge Name:** NISQUALLY R		**Route:** 5	**Milepost:** 114.86	**Region:** Olympic **County:** Thurston
Location: 0.1 N THURSTON **Detour Length:** 1 miles	**Longitude:** ° ' " 122 42 12	**Latitude:** ° ' " 47 4 18	**Structure Length:** 430 ft.		**Out to Out Width:** 51.4 ft.
Feature Intersected: NISQUALLY R	**PGA (500 yr):** 30.1 %g	**PGA (1000 yr):** 39.5% %g	**Span Type:** STrus PCG		**Main Spans:** 1 **Appr. Spans:** 2
Year Built: 1967 **Year Rebuilt:** 0 **ADT:** 45830 **Truck Pct:** 15 %	**11-13 Rank:** 126	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:** Timber pile

Bridge Notes:

Piers 2, and 3, each has two 6'-0" diameter columns. #4 hoops @ 12". Weld splices for longitudinal bars (#11 at pier 2, #14 at pier 3). Footing without top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008100F **Bridge Number:** 5/342W	**Bridge Name:** MCALLISTER CR		**Route:** 5	**Milepost:** 114.09	**Region:** Olympic **County:** Thurston
Location: 2.2 N JCT SR 510 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 43 12	**Latitude:** ° ' " 47 4 6.4	**Structure Length:** 272 ft.		**Out to Out Width:** 51.4 ft.
Feature Intersected: MCALLISTER CR	**PGA (500 yr):** 28.89 %g	**PGA (1000 yr):** 39.5% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1968 **Year Rebuilt:** 0 **ADT:** 60884 **Truck Pct:** 10 %	**11-13 Rank:** 127	**Skew Angle:** 12	**Pier Type:** Pier with more than two columns		**Footing Type:** Timber pile

Bridge Notes:

Piers 2 and 3, each has three 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008100E **Bridge Number:** 5/342E	**Bridge Name:** MCALLISTER CR		**Route:** 5	**Milepost:** 114.09	**Region:** Olympic **County:** Thurston
Location: 2.2 N JCT SR 510 **Detour Length:** 1 miles	**Longitude:** 122 ° 43 ' 12.3 "	**Latitude:** 47 ° 4 ' 4.5 "	**Structure Length:** 272 ft.		**Out to Out Width:** 51.4 ft.
Feature Intersected: MCALLISTER CR	**PGA (500 yr):** 30.06 %g	**PGA (1000 yr):** 39.5% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1968 **Year Rebuilt:** 0 **ADT:** 60884 **Truck Pct:** 10 %	**11-13 Rank:** 128	**Skew Angle:** 12	**Pier Type:** Pier with more than two columns		**Footing Type:** Timber pile

Bridge Notes:

Piers 2 and 3, each has three 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008100D **Bridge Number:** 5/341	**Bridge Name:** I-5 OC, MERIDIAN RD		**Route:** 5	**Milepost:** 113.08	**Region:** Olympic **County:** Thurston
Location: 1.2 N JCT SR 510 **Detour Length:** 5 miles	**Longitude:** 122 ° 44 ' 24 "	**Latitude:** 47 ° 4 ' 0 "	**Structure Length:** 280 ft.		**Out to Out Width:** 30.6 ft.
Feature Intersected: I-5	**PGA (500 yr):** 30.05 %g	**PGA (1000 yr):** 39.5% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1968 **Year Rebuilt:** 0 **ADT:** 2714 **Truck Pct:** 1 %	**11-13 Rank:** 129	**Skew Angle:** 12	**Pier Type:** Double Column Pier		**Footing Type:**

Bridge Notes:

Piers 2, 3 and 4, each has two 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008100C **Bridge Number:** 5/339	**Bridge Name:** I-5 OC, CARPENTER RD		**Route:** 5	**Milepost:** 110.4	**Region:** Olympic **County:** Thurston
Location: 6.2 N JCT US 101 **Detour Length:** 3 miles	**Longitude:** 122 47 48	**Latitude:** 47 3 30	**Structure Length:** 356 ft.		**Out to Out Width:** 34 ft.
Feature Intersected: I-5	**PGA (500 yr):** 29.97 %g	**PGA (1000 yr):** 39.4% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 0 **ADT:** 6450 **Truck Pct:** 2 %	**11-13 Rank:** 130	**Skew Angle:** 4	**Pier Type:** Double Column Pier		**Footing Type:**

No Photo Available

Bridge Notes:

Piers 2, 3 and 4, each has two 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008100A **Bridge Number:** 5/337W	**Bridge Name:** MARTIN WAY OC		**Route:** 5	**Milepost:** 109.14	**Region:** Olympic **County:** Thurston
Location: 5.0 N JCT US 101 **Detour Length:** 0 miles	**Longitude:** 122 ° 49 ' 6 "	**Latitude:** 47 ° 3 ' 0 "	**Structure Length:** 276 ft.		**Out to Out Width:** 55 ft.
Feature Intersected: MARTIN WAY	**PGA (500 yr):** 29.88 %g	**PGA (1000 yr):** 39.2% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 1988 **ADT:** 60884 **Truck Pct:** 10 %	**11-13 Rank:** 131	**Skew Angle:** 50	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has five 3'-0" diameter columns. Retrofit four south columns per pier (built in 1967) only. These columns have #4 hoops @12", longitudinal #11 bars have splices at top of footings. Splice lengths are 4'-2". Footings have no top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008100B **Bridge Number:** 5/337E	**Bridge Name:** MARTIN WAY OC		**Route:** 5	**Milepost:** 109.14	**Region:** Olympic **County:** Thurston
Location: 5.0 N JCT US 101 **Detour Length:** 0 miles	**Longitude:** 122 ° 49 ' 6 "	**Latitude:** 47 ° 3 ' 0 "	**Structure Length:** 282 ft.		**Out to Out Width:** 55 ft.
Feature Intersected: MARTIN WAY	**PGA (500 yr):** 29.88 %g	**PGA (1000 yr):** 39.2% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 1988 **ADT:** 60884 **Truck Pct:** 10 %	**11-13 Rank:** 132	**Skew Angle:** 50	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Piers 2 and 3, each has five 3'-0" diameter columns. Retrofit three center columns per pier (built in 1967) only. These columns have #4 hoops @12", longitudinal #11 bars have splices at top of footings. Splice lengths are 4'-2". Footings have no top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status:	P
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0005295D **Bridge Number:** 5/325S-W	**Bridge Name:** HENDERSON BLVD,UPRR OC		**Route:** 5	**Milepost:** 105.46	**Region:** Olympic **County:** Thurston
Location: 1.4 N JCT US 101 **Detour Length:** 2 miles	**Longitude:** 122 ° 53 ' 30 "	**Latitude:** 47 ° 2 ' 6 "	**Structure Length:** 228 ft.		**Out to Out Width:** 43 ft.
Feature Intersected: HENDERSON BLVD,UPRR OC	**PGA (500 yr):** 29.65 %g	**PGA (1000 yr):** 38.9% %g	**Span Type:** CTB		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1957 **Year Rebuilt:** 1990 **ADT:** 3234 **Truck Pct:** 5 %	**11-13 Rank:** 134	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:** Concrete Pile

Bridge Notes:

Piers 2, 3 and 4, each has two 5'-0" diameter columns. Retrofit south columns (built in 1957) only. These columns have #3 hoops @12", longitudinal #10 bars have splices at top of footing and mid-height. Splice lengths are 2'-2". Footings have no top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0005295C **Bridge Number:** 5/325A	**Bridge Name:** N-14TH RAMP,OWR&N RR OC		**Route:** 5	**Milepost:** 105.45	**Region:** Olympic **County:** Thurston
Location: 1.4 N JCT US 101 **Detour Length:** 2 miles	**Longitude:** 122 ° 53 ' 30 "	**Latitude:** 47 ° 2 ' 6 "	**Structure Length:** 275 ft.		**Out to Out Width:** 49.2 ft.
Feature Intersected: PLUM ST, UPRR	**PGA (500 yr):** 29.65 %g	**PGA (1000 yr):** 38.9% %g	**Span Type:** CBox		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1957 **Year Rebuilt:** 1986 **ADT:** 8590 **Truck Pct:** 2 %	**11-13 Rank:** 135	**Skew Angle:** 24	**Pier Type:** Pier with more than two columns		**Footing Type:** Concrete Pile

Bridge Notes:

Piers 2, 3 and 4, each has four 24"x24" square columns, #3 hoops @ 12", #11 longitudinal bars spliced at top of footing and mid-height with 2'-4" splices. Footings have no top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0005090A **Bridge Number:** 5/321	**Bridge Name:** CAPITOL LAKE		**Route:** 5	**Milepost:** 104.52	**Region:** Olympic **County:** Thurston
Location: 0.5 N JCT US 101 **Detour Length:** 8 miles	**Longitude:** 122 ° 54 ' 6 "	**Latitude:** 47 ° 1 ' 24 "	**Structure Length:** 392 ft.		**Out to Out Width:** 210 ft.
Feature Intersected: CAPITOL LAKE	**PGA (500 yr):** 29.51 %g	**PGA (1000 yr):** 38.7% %g	**Span Type:** CBox		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1956 **Year Rebuilt:** 1986 **ADT:** 45733 **Truck Pct:** 12 %	**11-13 Rank:** 136	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Concrete Pile

Bridge Notes:

Retrofit 4 center columns at piers 2, 3 and 4 (built in1956). These columns are 4'-0"x4'-0" square columns with #3 hoops @12". Longitudinal bars are #11 bars spliced at more than 2 locations, splice length is 2'-4". Footings are combined footings with top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status: R

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008271C **Bridge Number:** 5/309	**Bridge Name:** I-5 OC, 113TH AVE SW		**Route:** 5	**Milepost:** 97.22	**Region:** Olympic **County:** Thurston
Location: 2.0 N JCT SR 121 **Detour Length:** 9 miles	**Longitude:** 122 56 42	**Latitude:** 46 55 24	**Structure Length:** 204 ft.		**Out to Out Width:** 31.9 ft.
Feature Intersected: I-5	**PGA (500 yr):** 28.26 %g	**PGA (1000 yr):** 37.0% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1968 **Year Rebuilt:** 0 **ADT:** 673 **Truck Pct:** 1 %	**11-13 Rank:** 137	**Skew Angle:** 11	**Pier Type:** Double Column Pier		**Footing Type:** Spread footing

Bridge Notes:

Piers 2, 3 and 4, each has two 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3 and 4. (2 ea. 6 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008271B **Bridge Number:** 5/304	**Bridge Name:** I-5 OC, 183RD AVE SW		**Route:** 5	**Milepost:** 89.84	**Region:** Olympic **County:** Thurston
Location: 1.5 N JCT US 12 **Detour Length:** 5 miles	**Longitude:** 122 ° 59 ' 36 "	**Latitude:** 46 ° 49 ' 24 "	**Structure Length:** 402 ft.		**Out to Out Width:** 31.9 ft.
Feature Intersected: I-5	**PGA (500 yr):** 26.71 %g	**PGA (1000 yr):** 35.1% %g	**Span Type:** PCG		**Main Spans:** 7 **Appr. Spans:** 0
Year Built: 1968 **Year Rebuilt:** 0 **ADT:** 1786 **Truck Pct:** 1 %	**11-13 Rank:** 138	**Skew Angle:** 21	**Pier Type:** Double Column Pier		**Footing Type:** Spread footing

Bridge Notes:

Piers 2, 3, 4, 5, 6 and 7, each has two 3'-0" diameter columns. #3 hoops @ 12". #9 bars with 3'-4" splices. Footing without top mat. Railroad track between piers 2 and 3.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3, 4, 5, 6 and 7. (2 ea. 12 total, 3' dia.)

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0004693A **Bridge Number:** 5/234	**Bridge Name:** BLAKESLEE JCT RR OC		**Route:** 5	**Milepost:** 83.28	**Region:** Southwest **County:** Lewis
Location: 1.8 N JCT SR 507 **Detour Length:** 1 miles	**Longitude:** 122 ° 58 ' 24 "	**Latitude:** 46 ° 44 ' 6 "	**Structure Length:** 363 ft.		**Out to Out Width:** 78.3 ft.
Feature Intersected: BLAKESLEE JCT RR	**PGA (500 yr):** 25.41 %g	**PGA (1000 yr):** 33.6% %g	**Span Type:** CBox CTB		**Main Spans:** 4 **Appr. Spans:** 1
Year Built: 1954 **Year Rebuilt:** 1975 **ADT:** 54298 **Truck Pct:** 20 %	**11-13 Rank:** 139	**Skew Angle:** 99	**Pier Type:** Single Column Pier		**Footing Type:**

Bridge Notes:

N.B. and S.B. bridges, each has a 9'-0"X4'-0" rectangular column at piers 3, 4 and 5. #3 hoops and ties @ 12", #11 bars with 2'-4" splices. No top mat. 4 roller bearings at expansion joint at pier 2 of both N.B. and S.B. bridges.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Includes both East and West bridges. Retrofit single columns at piers 3, 4, and 5 and two columns at pier 2. (total 10, P2 2-3'x3', P3, P4 &P5 1-9'x4' ea. bridge) Install catcher blocks for rocker bearings at pier 2 and restrainers.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0009251A **Bridge Number:** 5/233	**Bridge Name:** HARRISON AVE OC		**Route:** 5	**Milepost:** 82.74	**Region:** Southwest **County:** Lewis
Location: 1.7 N JCT SR 507 **Detour Length:** 0 miles	**Longitude:** ° ' " 122 58 36	**Latitude:** ° ' " 46 43 42	**Structure Length:** 208 ft.		**Out to Out Width:** 86.5 ft.
Feature Intersected: HARRISON AVE	**PGA (500 yr):** 25.3 %g	**PGA (1000 yr):** 33.5% %g	**Span Type:** PCG		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1972 **Year Rebuilt:** 0 **ADT:** 54298 **Truck Pct:** 20 %	**11-13 Rank:** 140	**Skew Angle:** 28	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

Bridge Notes:

Piers 2 and 3, each has four 3'-0" diameter columns. #4 hoops @ 12". #9 bars with 3'-6" splices. Footing without top mat.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0011757B **Bridge Number:** 5/232W	**Bridge Name:** SKOOKUMCHUCK R		**Route:** 5	**Milepost:** 82.28	**Region:** Southwest **County:** Lewis
Location: 0.7 N JCT SR 507 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 58 30	**Latitude:** ° ' " 46 43 18	**Structure Length:** 252 ft.		**Out to Out Width:** 34 ft.
Feature Intersected: SKOOKUMCHUCK R	**PGA (500 yr):** 25.2 %g	**PGA (1000 yr):** 33.4% %g	**Span Type:** STrus CTB		**Main Spans:** 1 **Appr. Spans:** 2
Year Built: 1951 **Year Rebuilt:** 0 **ADT:** 27895 **Truck Pct:** 20 %	**11-13 Rank:** 141	**Skew Angle:** 0	**Pier Type:** Pier Wall		**Footing Type:**

Bridge Notes:

Steel trusses supported on pier walls at piers 2 and 3.Two expansion rocker bearings at pier 3 and two fixed bearings at pier 2. Approach span has four rocker bearings, each at piers 2 and 3.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Install catcher blocks for steel trusse rocker bearings at piers 2 and 3.

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0011757A **Bridge Number:** 5/232E	**Bridge Name:** SKOOKUMCHUCK R		**Route:** 5	**Milepost:** 82.28	**Region:** Southwest **County:** Lewis
Location: 0.7 N JCT SR 507 **Detour Length:** 1 miles	**Longitude:** 122 ° 58 ' 30 "	**Latitude:** 46 ° 43 ' 18 "	**Structure Length:** 252 ft.		**Out to Out Width:** 34 ft.
Feature Intersected: SKOOKUMCHUCK R	**PGA (500 yr):** 25.2 %g	**PGA (1000 yr):** 33.4% %g	**Span Type:** STrus CTB		**Main Spans:** 1 **Appr. Spans:** 2
Year Built: 1951 **Year Rebuilt:** 0 **ADT:** 27895 **Truck Pct:** 20 %	**11-13 Rank:** 142	**Skew Angle:** 0	**Pier Type:** Pier Wall		**Footing Type:**

Bridge Notes:

Steel trusses supported on pier walls at piers 2 and 3.Two expansion rocker bearings at pier 3 and two fixed bearings at pier 2. Approach span has four rocker bearings, each at piers 2 and 3.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Install catcher blocks for steel trusse rocker bearings at piers 2 and 3.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0003922A **Bridge Number:** 5/230	**Bridge Name:** SR 507 MELLEN ST OC		**Route:** 5	**Milepost:** 81.67	**Region:** Southwest **County:** Lewis
Location: 3.7 N JCT SR 6 **Detour Length:** 0 miles	**Longitude:** ° ' " 122 58 30	**Latitude:** ° ' " 46 42 42	**Structure Length:** 94 ft.		**Out to Out Width:** 83.5 ft.
Feature Intersected: SR 507 MELLEN ST	**PGA (500 yr):** 25.05 %g	**PGA (1000 yr):** 33.2% %g	**Span Type:** CTB		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1951 **Year Rebuilt:** 1972 **ADT:** 55791 **Truck Pct:** 25 %	**11-13 Rank:** 143	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:** Spread footing

Bridge Notes:

Piers 2, and 3, each has16-15"x15" square columns @ 5'-0", #3 hoops @ 12", #7 bars with 4'-2" splices. Footings have #6 @11" longitudinal and #6 @ 3'-0" transverse top mat. Each pier has a 15"x24" rectangular column at centerline of roadway with #4 @12" hoop and ties.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (17 ea. 34 total, 15-15"x15" & 1-24"x15" ea.)

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008085F **Bridge Number:** 5/642	**Bridge Name:** I-5 OC, 23RD ST		**Route:** 5	**Milepost:** 194.44	**Region:** Northwest **County:** Snohomish
Location: 0.6 N JCT US 2 **Detour Length:** 2 miles	**Longitude:** ° ' " 122 10 57	**Latitude:** ° ' " 47 59 12	**Structure Length:** 170 ft.		**Out to Out Width:** 51.9 ft.
Feature Intersected: I-5	**PGA (500 yr):** 28.39 %g	**PGA (1000 yr):** 37.0% %g	**Span Type:** PCG		**Main Spans:** 2 **Appr. Spans:** 0
Year Built: 1967 **Year Rebuilt:** 0 **ADT:** 4716 **Truck Pct:** 5 %	**11-13 Rank:** 144	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Pier 2 has three 3'-0" diameter columns. #3 hoops @ 12". #9 vertical bars have 3'-4" lap splices at top of footings. Footing without top mat.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit 3 columns at pier 2. (3' dia.)

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008256A **Bridge Number:** 5/645E	**Bridge Name:** SNOHOMISH R BN RR		**Route:** 5	**Milepost:** 194.81	**Region:** Northwest **County:** Snohomish
Location: 1.0 N JCT US 2 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 10 55.08	**Latitude:** ° ' " 47 59 22.26	**Structure Length:** 1622 ft.		**Out to Out Width:** 51.4 ft.
Feature Intersected: SNOHOMISH R GN RY	**PGA (500 yr):** 28.11 %g	**PGA (1000 yr):** 37.0% %g	**Span Type:** SG		**Main Spans:** 8 **Appr. Spans:** 0
Year Built: 1968 **Year Rebuilt:** 0 **ADT:** 63000 **Truck Pct:** 15 %	**11-13 Rank:** 145	**Skew Angle:** 30	**Pier Type:** Double Column Pier		**Footing Type:** Timber pile

Bridge Notes:

Piers 2 thru 8, each has two 6'-0" diameter columns. #4 hoops @ 12". #11 vertical bars have 4'-2" lap splices at top of pedestals or walls. Piers 3 and 4 have 3'-0" infill walls. Footing without top mat.

Retrofit Program Notes:

Good candidate to use isolation bearings.

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2-8 (2 ea. 14 total, 6' dia.).

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0008256B **Bridge Number:** 5/645W	**Bridge Name:** SNOHOMISH R BN RR		**Route:** 5	**Milepost:** 194.81	**Region:** Northwest **County:** Snohomish
Location: 1.0 N JCT US 2 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 10 55.08	**Latitude:** ° ' " 47 59 22.26	**Structure Length:** 1588 ft.		**Out to Out Width:** 51.4 ft.
Feature Intersected: SNOHOMISH R GN RY	**PGA (500 yr):** 28.11 %g	**PGA (1000 yr):** 37.0% %g	**Span Type:** SG		**Main Spans:** 8 **Appr. Spans:** 0
Year Built: 1968 **Year Rebuilt:** 0 **ADT:** 63000 **Truck Pct:** 15 %	**11-13 Rank:** 146	**Skew Angle:** 30	**Pier Type:** Double Column Pier		**Footing Type:** Timber pile

Bridge Notes:

Piers 2 thru 8, each has two 6'-0" diameter columns. #4 hoops @ 12". #11 vertical bars have 4'-2" lap splices at top of pedestals or walls. Piers 3 and 4 have 3'-0" infill walls. Footing without top mat.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2-8 (2 ea. 14 total, 6' dia.).

Overall Retrofit Status: P
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0009260A **Bridge Number:** 5/701	**Bridge Name:** STARBIRD RD OVER I-5		**Route:** 5	**Milepost:** 218.54	**Region:** Northwest **County:** Skagit
Location: 0.8 N SNOHOMIS **Detour Length:** 6 miles	**Longitude:** 122 ° 18 ' 54 "	**Latitude:** 48 ° 18 ' 30 "	**Structure Length:** 363 ft.		**Out to Out Width:** 41 ft.
Feature Intersected: I-5	**PGA (500 yr):** 26.12 %g	**PGA (1000 yr):** 34.7% %g	**Span Type:** PCG		**Main Spans:** 4 **Appr. Spans:** 0
Year Built: 1972 **Year Rebuilt:** 0 **ADT:** 1270 **Truck Pct:** 1 %	**11-13 Rank:** 147	**Skew Angle:** 20	**Pier Type:** Pier with more than two columns		**Footing Type:** Concrete Pile

Bridge Notes:

Piers 2, 3 and 4, each has three 3'-0" x 4'-0" columns, #4 hoops @ 12", Vertical #11 bars with 4'-2" lap splices at top of footings. Footings have no top mat.

Retrofit Program Notes:

The 2005 Transportation Partnership Account (TPA) included funding to perform seismic retrofit work on this bridge. A project that includes this bridge is likely to be scheduled in the 2011-13 biennium.

Completed Retrofit Notes:

Remaining Retrofit Notes:

A seismic analysis will be done to determine what work is required. Typical retrofit measures and costs are: Cross-Beam Bolsters = $1,500/LF of Cross Beam, Girder Stops = $1,500/Each, Column Jackets (Dry) = $50,000/Col. (Wet) = $125,000/Col.

Overall Retrofit Status: P

Single Column Pier Status: N

Multi Column Pier Status: R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0004535A **Bridge Number:** 5/707	**Bridge Name:** I-5 OC, BLACKBURN ST		**Route:** 5	**Milepost:** 225.64	**Region:** Northwest **County:** Skagit
Location: 4.7 N JCT SR 534 **Detour Length:** 6 miles	**Longitude:** ° ' " 22 19 51.1	**Latitude:** ° ' " 48 24 23.6	**Structure Length:** 194 ft.		**Out to Out Width:** 33.8 ft.
Feature Intersected: I-5	**PGA (500 yr):** 25.17 %g	**PGA (1000 yr):** 33.7% %g	**Span Type:** CTB		**Main Spans:** 5 **Appr. Spans:** 0
Year Built: 1954 **Year Rebuilt:** 0 **ADT:** 1150 **Truck Pct:** 1 %	**11-13 Rank:** 148	**Skew Angle:** 0	**Pier Type:** Double Column Pier		**Footing Type:** Concrete Pile

Bridge Notes:

Piers 2 thru 5, each has two 32"x32" square columns. #3 hoops @ 12", vertical #11 bars with 2'-4" splices. Footings have no top mat.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2, 3, 4 and 5. (2 ea. 8 total, 32"x32")

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0005433A **Bridge Number:** 18/5	**Bridge Name:** SR 18 OVR PEASLEY CANYON		**Route:** 18	**Milepost:** 1.86	**Region:** Northwest **County:** King
Location: 1.9 E JCT I-5 **Detour Length:** 4 miles	**Longitude:** 122 ° 16 ' 25.9 "	**Latitude:** 47 ° 18 ' 12.9 "	**Structure Length:** 360 ft.		**Out to Out Width:** 81.5 ft.
Feature Intersected: PEASLEY CANYON RD	**PGA (500 yr):** 31 %g	**PGA (1000 yr):** 40.6% %g	**Span Type:** CBox		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1958 **Year Rebuilt:** 2004 **ADT:** 44000 **Truck Pct:** 15 %	**11-13 Rank:** 149	**Skew Angle:** 0	**Pier Type:** Pier with more than two columns		**Footing Type:**

Bridge Notes:

Intermediate Piers, Piers 2 and 3, each has three 5'-0" diameter columns on combined spread footings. #3 hoops spaced at 12" spacing. Vertical #11 bars have 2'-4" lap splices at top of pedestal. End Piers 1 and 4 are cantilever "L" abutments. Pier 4 has seven tall rocker bearings.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 5' dia.) 85 ft. tall. Catcher blocks for rocker bearings at pier 4 (seven bearings). Install transverse restrainers.

Overall Retrofit Status:	R
Single Column Pier Status:	N
Multi Column Pier Status:	R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

Washington State Department of Transportation
Bridge Seismic Retrofit Information

Structure ID: 0005433B **Bridge Number:** 18/6	**Bridge Name:** W VALLEY HIGHWAY OC		**Route:** 18	**Milepost:** 2.3	**Region:** Northwest **County:** King
Location: 2.7 E JCT I-5 **Detour Length:** 1 miles	**Longitude:** ° ' " 122 15 24	**Latitude:** ° ' " 47 18 6	**Structure Length:** 114 ft.		**Out to Out Width:** 73 ft.
Feature Intersected: W VALLEY HWY(OLD SR 181)	**PGA (500 yr):** 30.87 %g	**PGA (1000 yr):** 40.5% %g	**Span Type:** CVS		**Main Spans:** 3 **Appr. Spans:** 0
Year Built: 1957 **Year Rebuilt:** 0 **ADT:** 44000 **Truck Pct:** 15 %	**11-13 Rank:** 150	**Skew Angle:** 3	**Pier Type:** Pier with more than two columns		**Footing Type:** Concrete Pile

Bridge Notes:

Intermediate piers, piers 2 and 3, each has six 21" square columns on pile footing. Ties are #3 bars @ 12". Vertical #9 bars have 2'-0" lap splices at top of footings. End piers, piers 1 and 4, are 30 ton concrete pile bents.

Retrofit Program Notes:

Completed Retrofit Notes:

Remaining Retrofit Notes:

Retrofit columns at Piers 2 and 3. (6 ea. 12 total, 21"x21")

Overall Retrofit Status: R
Single Column Pier Status: N
Multi Column Pier Status: R

C=Complete P=Partially Complet
R=Required N=Not Required
D=Differed X=Excluded I=In Progress

Estimated Total Bridge Item Cost:

Estimated Total Retrofit Project Cost:

WSDOT Scour Projects - 2011-13 Bien

(Sorted by Bridge Number)

Bridge Number	Bridge Name	Length	Mile post	Region	PIN #	Year Planned	11-13 #	Project Total$'s
003/015	SHERWOOD CR	147	20.36	Olympic	300379A	2012	5	$996,488
097/120	CANAL DRAIN DITCH	121	60.82	South Central	509703E	2011	2	$448,000
101/251	SNOW CREEK	71	282.62	Olympic	310170S	2012	9	$824,000
101/302	RUSSELL H. BARKER M	370	185.6	Olympic	310186F	2012	7	$846,000
108/004	WILDCAT CR	26	0.5	Olympic	310808A	2012	6	$627,000
142/013.25	SPRING CR	22	29.92	Southwest	414205R	2011	1	$956,000
224/010	YAKIMA OVERFLOW BRI	80	9.43	South Central	522401C	2012	3	$636,000
410/101	WHITE R	292	21.99	Northwest	141001C	2011	1	$956,000
823/003E	YAKIMA RIVER	335	0.09	South Central	582301M	2011	4	$624,000
906/105	COAL CREEK	54	2.99	South Central	590601H	2012	8	$391,000

Total Number of Bridges = 10

Total Bien$'s = $7,304,488

WSDOT Scour Projects - 2011-13 Bien

(Sorted by Priority Number)

Bridge Number	Bridge Name	Length	Mile post	Region	PIN #	Year Planned	11-13 #	Project Total$'s
410/101	WHITE R	292	21.99	Northwest	141001C	2011	1	$956,000
142/013.25	SPRING CR	22	29.92	Southwest	414205R	2011	1	$956,000
097/120	CANAL DRAIN DITCH	121	60.82	South Central	509703E	2011	2	$448,000
224/010	YAKIMA OVERFLOW BRI	80	9.43	South Central	522401C	2012	3	$636,000
823/003E	YAKIMA RIVER	335	0.09	South Central	582301M	2011	4	$624,000
003/015	SHERWOOD CR	147	20.36	Olympic	300379A	2012	5	$996,488
108/004	WILDCAT CR	26	0.5	Olympic	310808A	2012	6	$627,000
101/302	RUSSELL H. BARKER M	370	185.6	Olympic	310186F	2012	7	$846,000
906/105	COAL CREEK	54	2.99	South Central	590601H	2012	8	$391,000
101/251	SNOW CREEK	71	282.62	Olympic	310170S	2012	9	$824,000

Total Number of Bridges = 10

Total Bien$'s = $7,304,488

WSDOT Bridge over Water

Scour Form

Bridge ID:	Bridge Number:	Bridge Name:	State Route:	
0004133A	3/15	SHERWOOD CR	3	Olympic
			Mile Post: 20.36	Cnty: Mason

Year Built:	Span Type:	ADT:	Structure Length:	main span	Detour Length:
1952	CTB	8920	147 ft.	3	22 miles
Rebuilt:		ADT Truck Pct: 5 %	Width: 26 ft.	aprch: 0	

Substructure Stability: Code: 2	Streambed Material: 3	Scour History: Code: C	Last Scour repair Project
Spread footing, continuous spans.	Gravel	Current scour problems.	Yr: C#:

Scour Code:	Scour Rating Description:	Substr Code:	sufficiency_rating:
3	Bridge is scour critical; bridge foundations determined unstable for calculated scour depths: 1) Within limits of footings or piles (Figure WB 76-80B) 2) Below footing base or pile tips (Figure WB 76-80C).	5	52.21 FO

Deficiencies:

Bridge has spread footings. Riprap near piers 2 and 3 is no longer in place. Riprap placed just upstream that protect NW embankment is now in the middle of stream. The embankment is being undermined. P2 and P3 have 2ft footings on 6ft seals. P2 seal bottom is 12ft below channel, P3 is 8ft.

First Noted:	11/20/2000
BPO Repair List Priority:	1
Funding - P2 or M:	P2
BPO Repair Num:	10000
11-13 Priority Rank:	5

Recommended Action:

BPO - The rip rap has settled into the stream and the bank is beginning to erode. Place riprap against the eroded upstream banks at both abutments.
Bridge Management Unit - The scour repair is scheduled to be completed in 2012.

WIN:

PIN: 300379A

Total Cost Estimate:

$996,488

Washington State Department of Transportation

Bridge and Structures Office

2/4/2011

WSDOT Bridge over Water

Scour Form

Bridge ID:	Bridge Number:	Bridge Name:	State Route:	
0001516B	97/120	CANAL DRAIN DITCH	97	South Central
			Mile Post: 60.82	Cnty: Yakima

Year Built:	Span Type:	ADT:	Structure Length:	main span	Detour Length:
1931	CS	3802	121 ft.	6	22 miles
Rebuilt: 1975		ADT Truck Pct: 26 %	Width: 40 ft.	aprch: 0	

Substructure Stability: Code: 4	Streambed Material: 3	Scour History: Code: C	Last Scour repair Project
Pile foundation, continuous spans.	Gravel	Current scour problems.	Yr: C#:

Scour Code:	Scour Rating Description:	Substr Code:	sufficiency_rating:
3	Bridge is scour critical; bridge foundations determined unstable for calculated scour depths: 1) Within limits of footings or piles (Figure WB 76-80B) 2) Below footing base or pile tips (Figure WB 76-80C).	5	64.53

Deficiencies:

Scour hole behind Piles 2D, 2E, 2F in Pier 1 embankment. Debris hung up on Piles 3A, 3E and 3F. Calculated scour falls below pile tips at Pier 2. Monitor for channel migration. Current bottom of south channel is 4' above pile tips at Pier 2.

First Noted:	5/16/2003
BPO Repair List Priority:	1
Funding - P2 or M:	P2
BPO Repair Num:	10000
11-13 Priority Rank:	2

Recommended Action:

BPO - Fill scour area in Span 1 with quarry spalls back to original ground line.
Bridge Management Unit - The Scour Repair is scheduled to be done by contract in 2011.

WIN:

PIN: 509703E

Total Cost Estimate:
$448,000

Washington State Department of Transportation
Bridge and Structures Office

2/2/2011

WSDOT Bridge over Water

Scour Form

Bridge ID:	Bridge Number:	Bridge Name:	State Route: 101	Olympic
0013073B	101/251	SNOW CREEK	Mile Post: 282.62	Cnty: Jefferson

Year Built: 1986	Span Type:	ADT: 6839	Structure Length: 71 ft.	main span 1	Detour Length:
Rebuilt:	PCS	ADT Truck Pct: 10 %	Width: 56.9 ft.	aprch: 0	3 miles

Substructure Stability: Code: 3	Streambed Material: 3	Scour History: Code: C	Last Scour repair Project
Pile foundation, simple spans.	Gravel	Current scour problems.	Yr: C#:

Scour Code:	Scour Rating Description:	Substr Code:	sufficiency_rating:
8	Bridge foundations determined stable for calculated/evaluated scour conditions. Calculated/evaluated scour is above top of footing. (Figure WB76-80, A).	7	95.3

Deficiencies:

Pier 1 is south (west geographically) towards Port Angeles. Bridge Foundations are on steel piles that have approx 50 ft embedment. Creek bears on north abutment. North abutment pile cap is exposed full width up to 36" deep at the west end. South abutment pile cap has been exposed and undermined near centerline.

First Noted:	12/12/2006
BPO Repair List Priority:	1
Funding - P2 or M:	P2
BPO Repair Num:	10000
11-13 Priority Rank:	9

Recommended Action:

BPO - Place riprap, armor the piers and protect the approach fills.
Bridge Management Unit - Scour repair is scheduled to be completed by contract in 2012 or 2013.

WIN:

PIN: 310170S

Total Cost Estimate:
$824,000

Washington State Department of Transportation
Bridge and Structures Office

2/2/2011

WSDOT Bridge over Water

Scour Form

Bridge ID:	Bridge Number:	Bridge Name:	State Route: 101	Olympic
0012600A	101/302	RUSSELL H. BARKER MEM.	Mile Post: 185.60	Cnty: Clallam

Year Built: 1985	Span Type:	ADT: 1694	Structure Length: 370 ft.	main span 3	Detour Length:
Rebuilt:	PCG	ADT Truck Pct: 20 %	Width: 36 ft.	aprch: 0	99 miles

Substructure Stability: Code: 9	Streambed Material: 3	Scour History: Code: C	Last Scour repair Project
shafts	Gravel	Current scour problems.	Yr: C#:

Scour Code:	Scour Rating Description:	Substr Code:	sufficiency_rating:
4	Bridge foundations determined stable for calculated scour condition: field review indicates action is required to protect exposed foundations from effects of additional erosion.	5	61.48

Deficiencies:

Local scour problem at pier 3, where shaft cap is exposed. Debris piled up behind pier 3. Majority of river water bears against pier 3. High water erosion has caused undermining of heavy riprap bank protection on north bank. Drilled shaft foundations for piers 2 and 3. BPO Priority changed from "4" to "1" in 2005.

First Noted:	6/22/2005
BPO Repair List Priority:	1
Funding - P2 or M:	P2
BPO Repair Num:	14934
11-13 Priority Rank:	7

Recommended Action:

BPO - Cover the Pier 3 Cap with special heavy loose riprap at a 2:1 slope and blend into existing groundline and bank.
Bridge Management Unit - Scour Repair is scheduled to be completed in 2012 or 2013.

WIN:

PIN: 310186F

Total Cost Estimate:
$846,000

Washington State Department of Transportation
Bridge and Structures Office

2/2/2011

WSDOT Bridge over Water

Scour Form

Bridge ID:	Bridge Number:	Bridge Name:	State Route: 108	Olympic
0002214A	108/4	WILDCAT CR	Mile Post: 0.50	Cnty: Grays Harbor

Year Built: 1936	Span Type:	ADT: 4765	Structure Length: 26 ft.	main span 1	Detour Length:
Rebuilt:	CEFA	ADT Truck Pct: 15 %	Width: 29.5 ft.	aprch: 0	3 miles

Substructure Stability: Code: 1	Streambed Material: 3	Scour History: Code: C	Last Scour repair Project
Spread footing, simple spans.	Gravel	Current scour problems.	Yr: C#:

Scour Code:	Scour Rating Description:	Substr Code:	sufficiency_rating:
3	Bridge is scour critical; bridge foundations determined unstable for calculated scour depths: 1) Within limits of footings or piles (Figure WB 76-80B) 2) Below footing base or pile tips (Figure WB 76-80C).	5	67.15 FO

Deficiencies:

P1 apron is undermined approx. 2' at the NW corner. P2 is undermined up to 4' at the NE corner and it has many holes scattered throughout. The stream appears to have shifted to the East but bends back to the bridge opening. 10" dia. riprap scattered in waterway under and downstream of bridge.

First Noted:	7/22/2001
BPO Repair List Priority:	1
Funding - P2 or M:	P2
BPO Repair Num:	10000
11-13 Priority Rank:	6

Recommended Action:

BPO - Repair undermining of apron at NE corner of Pier 2 and all of Pier 1.
Bridge Management Unit - Scour repair is scheduled to be completed in 2012.

WIN:

PIN: 310808A

Total Cost Estimate:
$627,000

Washington State Department of Transportation
Bridge and Structures Office

2/2/2011

WSDOT Bridge over Water

Scour Form

Bridge ID:	Bridge Number:	Bridge Name:	State Route: 142	Southwest
000000BE	142/13	SPRING CR	Mile Post: 29.92	Cnty: Klickitat

Year Built: 1950	Span Type:	ADT: 1125	Structure Length: 22 ft.	main span 1	Detour Length:
Rebuilt:	SB	ADT Truck Pct: 15 %	Width: 23.5 ft.	aprch: 0	6 miles

Substructure Stability: Code: 1	Streambed Material: 2	Scour History: Code: N	Last Scour repair Project
Spread footing, simple spans.	Sediment	No history of scour.	Yr: C#:

Scour Code:	Scour Rating Description:	Substr Code:	sufficiency_rating:
3	Bridge is scour critical; bridge foundations determined unstable for calculated scour depths: 1) Within limits of footings or piles (Figure WB 76-80B) 2) Below footing base or pile tips (Figure WB 76-80C).	4	48.77

Deficiencies:

Stream flows against both abutments. Heavy silt deposition 2' thick at west abutment. Abutments are Stone & mortar wall. Unknown foundation depth. Mortar has been eroded by the stream action. Bridge has contraction scour problem and needs as much hydraulic opening as possible.

First Noted:	6/6/2006
BPO Repair List Priority:	1
Funding - P2 or M:	P2
BPO Repair Num:	10000
11-13 Priority Rank:	1

Recommended Action:

BPO - Place well graded light loose riprap, two to three layers deep (1' thick min.) along both stone & mortar abutment walls, tapering out at a 2:1 slope, blending into the existing groundline and banks. Repair modified 6/6/06 to priority 1 due to undermining of the east abutment per JHL/DCC.
Bridge Management Unit - Scour repair is scheduled to be done by SW Region Maintenance in 2011.

WIN:

PIN: 414205R

Total Cost Estimate:
$280,000

Washington State Department of Transportation
Bridge and Structures Office

2/2/2011

WSDOT Bridge over Water

Scour Form

Bridge ID:	Bridge Number:	Bridge Name:	State Route:	
0014085C	224/10	YAKIMA OVERFLOW BRIDGE	224	South Central
			Mile Post: 9.43	Cnty: Benton

Year Built:	Span Type:	ADT:	Structure Length:	main span	Detour Length:
1993	CS	17125	80 ft.	2	1 miles
Rebuilt:		ADT Truck Pct: 10 %	Width: 72 ft.	aprch: 0	

Substructure Stability: Code: 2	Streambed Material: 2	Scour History: Code: C	Last Scour repair Project
Spread footing, continuous spans.	Sediment	Current scour problems.	Yr: C#:

Scour Code:	Scour Rating Description:	Substr Code:	sufficiency_rating:
3	Bridge is scour critical; bridge foundations determined unstable for calculated scour depths: 1) Within limits of footings or piles (Figure WB 76-80B) 2) Below footing base or pile tips (Figure WB 76-80C).	5	86.23

Deficiencies:

High water, high flow event has caused severe erosion. Abutments are exposed, see photos 3, 6, and 7. Scour hole around Column 3B. Riprap has been washed from Pier 3 abument at the north. Riprap in place at remaining corners of bridge.

First Noted:	5/3/2005
BPO Repair List Priority:	1
Funding - P2 or M:	P2
BPO Repair Num:	10001
11-13 Priority Rank:	1

Recommended Action:

BPO - Mitigate scour at abuments and Pier 2. Repair design in progress; construction not likely before 2009; review/update status each inspection; monitor until construction.
Bridge Management Unit - Prioritize with other statewide scour needs in the 2011-13 biennium.

WIN:

PIN:

Total Cost Estimate:

Washington State Department of Transportation

Bridge and Structures Office

2/2/2011

WSDOT Bridge over Water

Scour Form

Bridge ID:	Bridge Number:	Bridge Name:	State Route:	
0003523A	410/101	WHITE R	410	Northwest
			Mile Post: 21.99	Cnty: Pierce

Year Built:	Span Type:	ADT:	Structure Length:	main span	Detour Length:
1949	STrus CTB	16066	292 ft.	1	38 miles
Rebuilt:		ADT Truck Pct: 8 %	Width: 32 ft.	aprch: 3	

Substructure Stability: Code: 1	Streambed Material: 3	Scour History: Code: C	Last Scour repair Project
Spread footing, simple spans.	Gravel	Current scour problems.	Yr: C#:

Scour Code:	Scour Rating Description:	Substr Code:	sufficiency_rating:
3	Bridge is scour critical; bridge foundations determined unstable for calculated scour depths: 1) Within limits of footings or piles (Figure WB 76-80B) 2) Below footing base or pile tips (Figure WB 76-80C).	5	52.1

Deficiencies:

Pier 2 consists of spread footings 14' x 16'and 2.25' on 4' seals. The as-built plans say the foundation is on cemented sands. The footing at North end of Pier is exposed 1.3ft on the upstream side and 2.4ft on the down stram side. Hydraulics Office 5/28/96 - This bridge is scour critical if the thalweg migrates to Pier 2 or Pier 3. Riprap must be maintained at pier 2. Calc scour depth is 10ft below bottom of footings.

First Noted:	7/18/2005
BPO Repair List Priority:	1
Funding - P2 or M:	P2
BPO Repair Num:	12611
11-13 Priority Rank:	1

Recommended Action:

BPO - Place heavy loose riprap, 2 layers thick over footing, at a minimum of 2:1 slope.
Bridge Management Unit - The Cn phase for this P2 funded project is scheduled to be constructed in 2011.

WIN:

PIN: 141001C

Total Cost Estimate:
$956,000

Washington State Department of Transportation
Bridge and Structures Office

2/2/2011

WSDOT Bridge over Water

Scour Form

Bridge ID:	Bridge Number:	Bridge Name:	State Route:	
0003209A	823/3E	YAKIMA RIVER	823	South Central
			Mile Post: 0.09	Cnty: Yakima

Year Built:	Span Type:	ADT:	Structure Length:	main span	Detour Length:
1947	CTB	13500	335 ft.	5	3 miles
Rebuilt:		ADT Truck Pct: 5 %	Width: 28 ft.	aprch: 0	

Substructure Stability: Code: 2	Streambed Material: 3	Scour History: Code: N	Last Scour repair Project
Spread footing, continuous spans.	Gravel	No history of scour.	Yr: C#:

Scour Code:	Scour Rating Description:	Substr Code:	sufficiency_rating:
3	Bridge is scour critical; bridge foundations determined unstable for calculated scour depths: 1) Within limits of footings or piles (Figure WB 76-80B) 2) Below footing base or pile tips (Figure WB 76-80C).	5	63.86

No Photo Available

Deficiencies:

Previous inspections: Footing of P3 exposed up to 12" along the middle 12 feet of the so side. Rip-rap at nose and tail of Pier 3. The footing face of P4 exposed 5" along the north half, east end and exposed 2" along the south half, east end. The top of the east half of the Pier 4 footing is fully exposed. The top of the nw footing is exposed for 5 ft.

First Noted:	10/31/2001
BPO Repair List Priority:	1
Funding - P2 or M:	P2
BPO Repair Num:	13055
11-13 Priority Rank:	4

Recommended Action:

BPO - Replace missing riprap at piers 3 & 4.
Bridge Management Unit - The scour repair is scheduled to be completed in 2011.

WIN:

PIN: 582301M

Total Cost Estimate:
$624,000

Washington State Department of Transportation
Bridge and Structures Office

2/2/2011

WSDOT Bridge over Water

Scour Form

Bridge ID:	Bridge Number:	Bridge Name:	State Route: 906	South Central
0008863A	906/105	COAL CREEK	Mile Post: 2.98	Cnty: Kittitas

Year Built: 1970	Span Type:	ADT: 260	Structure Length: 54 ft.	main span 1	Detour Length:
Rebuilt:	TTLB	ADT Truck Pct: 5 %	Width: 28.5 ft.	aprch:	miles

Substructure Stability: Code: 1	Streambed Material:	Scour History: Code: C	Last Scour repair Project
Spread footing, simple spans.		Current scour problems.	Yr: C#:

Scour Code:	Scour Rating Description:	Substr Code:	sufficiency_rating:
3	Bridge is scour critical; bridge foundations determined unstable for calculated scour depths: 1) Within limits of footings or piles (Figure WB 76-80B) 2) Below footing base or pile tips (Figure WB 76-80C).	4	54.88 SD

Deficiencies:

The concrete abutment is a 2 ft. x 2 ft. concrete beam which appears to be acting as a spread footing. The west abutment is undermined on the south end below the Girder E bearing, 4.5 ft. wide x 2 ft. high x 2 ft. deep. The east abutment has a 13 ft. long crack on the vertical face at 1" below the top.

First Noted: 2/16/2006
BPO Repair List Priority: 1
Funding - P2 or M: P2
BPO Repair Num: 10000
11-13 Priority Rank: 8

Recommended Action:

BPO - Fill void and place riprap on bank per repair drawings.
Bridge Management Unit - Scour Repair Scheduled to be completed by contract in 2012 or 2013.

WIN:

PIN: 590601H

Total Cost Estimate: $391,000

Washington State Department of Transportation

Bridge and Structures Office

2/2/2011