

## Bridge Preservation Seismic Retrofit Projects Funded by the 2005 Transportation Partnership Account

(Sorted by bridge number)

Project #	Bridge Number	Bridge Name	Milepost	Region	Project Year	Project Name
3	5/521N-W	N-W RAMP E-N S-N RAMP OC	154.52	Northwest	2008	Project R
3	5/522S-E	S-E RAMP E-N RAMP OC	154.52	Northwest	2008	Project R
3	5/522W	E-N RAMP OC	154.52	Northwest	2008	Project R
3	5/524	I-5 OC, S 144TH ST	155.32	Northwest	2008	Project R
3	5/525.5E	INTERURBAN AVE OC	155.98	Northwest	2008	Project R
3	5/525.5W	INTERURBAN AVE OC	155.98	Northwest	2008	Project R
1	5/590	I-5 OC, NE 130TH ST	173.83	Northwest	2008	Project K
1	5/593E	NE 155TH ST OC	175.11	Northwest	2008	Project K
1	5/593W	NE 155TH ST OC	175.11	Northwest	2008	Project K
1	5/595E	NE 175TH ST OC	176.13	Northwest	2008	Project K
1	5/595W	NE175TH ST OC	176.13	Northwest	2008	Project K
1	5/599E	SR 104 OC NE 205TH ST	177.78	Northwest	2008	Project K
1	5/599NCD	NBCD, SR 104 OC	177.78	Northwest	2008	Project K
1	5/599W	SR 104 OC NE 205TH ST	177.78	Northwest	2008	Project K
1	5/602	I-5 OC, 236TH	178.27	Northwest	2008	Project K
1	5/603	I-5 OC, 228TH ST SW	178.74	Northwest	2008	Project K
1	5/605	I-5 OC, 220TH ST SW	179.29	Northwest	2008	Project K
1	5/607E	212TH ST SW OC	179.91	Northwest	2008	Project K
1	5/607W	212TH ST SW OC	179.89	Northwest	2008	Project K
1	5/608E	52ND AVE W OC	180.07	Northwest	2008	Project K
1	5/608W	52ND AVE W OC	180.08	Northwest	2008	Project K
1	5/609E	SR 524 (44TH AVE W) OC	180.71	Northwest	2008	Project K
1	5/609W	SR 524 (44TH AVE W) OC	180.71	Northwest	2008	Project K
1	5/612E	I-405 UC/RAMP OC	182.59	Northwest	2008	Project K
20	5/615	I-5 OC, 164TH ST SW	183.9	Northwest	2014	Project G
20	5/646	I-5 OC, 12TH AVE NE	196	Northwest	2014	Project G
18	5/647E	UNION SLOUGH	197.09	Northwest	2012	Project H
18	5/647W	UNION SLOUGH	197.09	Northwest	2012	Project H
18	5/648E	STEAMBOAT SLOUGH	197.9	Northwest	2012	Project H
18	5/648W	STEAMBOAT SLOUGH	197.9	Northwest	2012	Project H
20	5/649E	SR 529 OC	198.27	Northwest	2014	Project G
20	5/649W	SR 529 OC	198.27	Northwest	2014	Project G
19	5/650E	EBEY SL BN RY SR 529 OC	198.5	Northwest	2012	Project I
19	5/650W	EBEY SL BN RY SR 529 OC	198.51	Northwest	2012	Project I
20	5/651E	SR 528 OC 4TH ST	199.13	Northwest	2014	Project G
20	5/651W	SR 528 OC 4TH ST	199.11	Northwest	2014	Project G
21	5/656	116TH ST NE UC	202.47	Northwest	2014	Project J
21	5/657	I-5 OC, STIMSON RD	203.74	Northwest	2014	Project J
21	5/658E	BN RR OC (GN)	204.12	Northwest	2014	Project J



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Project #	Bridge Number	Bridge Name	Milepost	Region	Project Year	Project Name
21	5/658W	BN RR OC (GN)	204.14	Northwest	2014	Project J
21	5/662	I-5 OC, KING THOMPSON RD	207.77	Northwest	2014	Project J
21	5/670E	STILLAGUAMISH R	209.35	Northwest	2014	Project J
21	5/670W	STILLAGUAMISH R	209.35	Northwest	2014	Project J
21	5/671	I-5 OC, JACKSON	210.31	Northwest	2014	Project J
18	5/672E	PILCHUCK CR	210.6	Northwest	2012	Project H
18	5/673E	SR 532/268TH ST NE OC	212.63	Northwest	2012	Project H
18	5/673W	SR 532/268TH ST NE OC	212.63	Northwest	2012	Project H
18	5/674E	300TH ST NW OC	215.04	Northwest	2012	Project H
18	5/674W	300TH ST NW OC	215.02	Northwest	2012	Project H
18	5/675E	DAWSON RD OC	216.75	Northwest	2012	Project H
18	5/675W	DAWSON RD OC	216.75	Northwest	2012	Project H
18	5/701	I-5 OC, STARBIRD RD	218.54	Northwest	2012	Project H
8	90/10EB	I-5 OC	2.4	Northwest	2010	Project N
8	90/10WB	I-5 OC	2.39	Northwest	2010	Project N
8	90/15	12TH AVE S UC		Northwest	2010	Project N
9	90/40N	EAST CHANNEL-LK WASH	8.48	Northwest	2010	Project F
7	90/43ECD	EBCD MERCER SL BR	9.24	Northwest	2010	Project O
7	90/43N	MERCER SL	9.24	Northwest	2010	Project O
7	90/43S	MERCER SL	9.24	Northwest	2010	Project O
7	90/43WCD	WBCD MERCER SL BR	9.24	Northwest	2010	Project O
4	90/48W-N	W-N RAMP R-W RAMP OC	9.88	Northwest	2008	Project P
4	90/50N	RICHARDS RD OC	9.88	Northwest	2008	Project P
4	90/50S	RICHARDS RD OC	9.88	Northwest	2008	Project P
4	90/50W-S	W-S RAMP RICHARD RD OC	9.88	Northwest	2008	Project P
4	90/52	142ND AVE UC	11	Northwest	2008	Project P
4	90/54E	I-90 OC, 150TH AVE	11.54	Northwest	2008	Project P
4	90/54PS	S EASTGATE PEDESTRIAN U		Northwest	2008	Project P
4	90/54W	I-90 OC, 150TH AVE	11.54	Northwest	2008	Project P
4	90/56P	PEDESTRIAN UC		Northwest	2008	Project P
9	90/59E-N	W LAKE SAMMAMISH PKWY	13.68	Northwest	2010	Project F
9	90/59N	W LAKE SAMMAMISH PKWY	13.68	Northwest	2010	Project F
9	90/59S	W LAKE SAMMAMISH PKWY	13.68	Northwest	2010	Project F
9	90/65N	221 ST OC	16.92	Northwest	2010	Project F
9	90/65S	221 ST OC	16.92	Northwest	2010	Project F
9	90/66N	FRONT STREET OC	17.12	Northwest	2010	Project F
9	90/66S	FRONT ST N OC	17.12	Northwest	2010	Project F
7	90/72N	E FK ISSAQUAH CR	18.66	Northwest	2010	Project O
9	90/78S	SR 18 OC	25.54	Northwest	2010	Project F
9	90/79N	GAME CROSSING	26.87	Northwest	2010	Project F



## Bridge Preservation Seismic Retrofit Projects Funded by the 2005 Transportation Partnership Account

(Sorted by bridge number)

Project #	Bridge Number	Bridge Name	Milepost	Region	Project Year	Project Name
9	90/79S	GAME CROSSING	26.87	Northwest	2010	Project F
14	99/500	SR 518 OC RIVERTON HTS	20.38	Northwest	2012	Project S
14	99/507S-S	PACIFIC HWY OC	22.94	Northwest	2012	Project S
14	99/507W	S 116TH PL OC	22.94	Northwest	2012	Project S
14	99/508	PACIFIC HWY OC	22.94	Northwest	2012	Project S
14	99/511	SR 99 OC, 14TH AVE S	24.81	Northwest	2012	Project S
6	99/560	AURORA AVE-G WASH MEM	34.14	Northwest	2008	Project L
5	405/22	SR 900 (SUNSET BLVD) OC	4.49	Northwest	2008	Project Q
5	405/23E	SR 900 OC N RENTON	5.4	Northwest	2008	Project Q
5	405/23W	SR 900 OC N RENTON	5.4	Northwest	2008	Project Q
5	405/25E	MAY CR	7.17	Northwest	2008	Project Q
5	405/25W	MAY CR	7.17	Northwest	2008	Project Q
5	405/26	I-405 OC, SE 44TH ST	7.47	Northwest	2008	Project Q
5	405/30E	COAL CR PKWY OC	10.18	Northwest	2008	Project Q
5	405/30W	COAL CR PKWY OC	10.18	Northwest	2008	Project Q
5	405/42	I-405 OC, MAIN ST	13.31	Northwest	2008	Project Q
15	509/113	SR 509 OC, S160TH ST	24.83	Northwest	2012	Project T
15	509/114	SR 509 OC, S 156TH ST	25.1	Northwest	2012	Project T
15	509/115	SR 509 OC, S152ND ST	25.36	Northwest	2012	Project T
15	509/116	SR 509 OC, S 146TH ST	25.73	Northwest	2012	Project T
15	509/117	SR 509 OC, S 136TH ST	26.38	Northwest	2012	Project T
15	509/120	S 128TH ST OC	26.86	Northwest	2012	Project T
15	509/123	GLENDALE WAY OC	27.85	Northwest	2012	Project T
15	509/126	SR 509 OC, CLOVERDALE ST	29.37	Northwest	2012	Project T
15	509/126E-N	N-N RAMP BR SR 509 OC	29.37	Northwest	2012	Project T
15	509/126S-W	S-S RAMP BR S-E RAMP OC	29.37	Northwest	2012	Project T
16	518/8	SR 509 OC	0	Northwest	2012	Project U
16	518/9	8TH AVE OC	0.39	Northwest	2012	Project U
16	518/10	DES MOINES WAY S OC	0.56	Northwest	2012	Project U
16	518/12	SR 518 OC, 24TH AVE S	1.46	Northwest	2012	Project U
16	518/13	SR 518 OC, S 154TH ST	2.26	Northwest	2012	Project U
16	518/14N-W	N-W RAMP, SR 518 OC	2.26	Northwest	2012	Project U
2	520/1	SR 520 OC, 10TH AVE	0	Northwest	2008	Project M
2	520/16	108TH AVE NE OC	6.27	Northwest	2008	Project M
2	520/21	116TH AVE NE OC	6.7	Northwest	2008	Project M
2	520/22N	BN RR OC (NP)	7.09	Northwest	2008	Project M
2	520/22S	BNRR OC	7.09	Northwest	2008	Project M
2	520/25N	NORTHUP WAY OC	7.25	Northwest	2008	Project M
2	520/25S	NORTHUP WAY OC	7.27	Northwest	2008	Project M
2	520/27N	N-W RAMP OC	7.52	Northwest	2008	Project M



**Bridge Preservation Seismic Retrofit Projects  
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<b>Project #</b>	<b>Bridge Number</b>	<b>Bridge Name</b>	<b>Milepost</b>	<b>Region</b>	<b>Project Year</b>	<b>Project Name</b>
2	520/27S	N-W RAMP OC	7.54	Northwest	2008	Project M
2	520/30	130TH AVE NE OC	7.92	Northwest	2008	Project M
2	520/34S	NE 24TH ST OC	8.83	Northwest	2008	Project M
1	522/28ECD	EBCD NORTH CR	11.1	Northwest	2008	Project K
1	523/5	I-5 OC	0.92	Northwest	2008	Project K
1	524/10	196th St. SW over I-5	5.2	Northwest	2008	Project K
14	599/5E	133RD ST OC	0.33	Northwest	2012	Project S
14	599/5W	133RD ST OC	0.33	Northwest	2012	Project S
14	599/10E	42ND AVE S OC	0.65	Northwest	2012	Project S
14	599/10W	42ND AVE S OC	0.65	Northwest	2012	Project S
14	599/15	SR 599 OC E MARGINAL WAY	1.38	Northwest	2012	Project S
5	900/20	CEDAR R	10.72	Northwest	2008	Project Q
5	900/23	PCC RR OC HOUSER WAY	12.5	Northwest	2008	Project Q

Total Number of Bridges = 132



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Project #	Bridge Number	Bridge Name	Milepost	Region	Project Year	Project Name
1	5/590	I-5 OC, NE 130TH ST	173.83	Northwest	2008	Project K
1	5/593E	NE 155TH ST OC	175.11	Northwest	2008	Project K
1	5/593W	NE 155TH ST OC	175.11	Northwest	2008	Project K
1	5/595E	NE 175TH ST OC	176.13	Northwest	2008	Project K
1	5/595W	NE175TH ST OC	176.13	Northwest	2008	Project K
1	5/599E	SR 104 OC NE 205TH ST	177.78	Northwest	2008	Project K
1	5/599NCD	NBCD, SR 104 OC	177.78	Northwest	2008	Project K
1	5/599W	SR 104 OC NE 205TH ST	177.78	Northwest	2008	Project K
1	5/602	I-5 OC, 236TH	178.27	Northwest	2008	Project K
1	5/603	I-5 OC, 228TH ST SW	178.74	Northwest	2008	Project K
1	5/605	I-5 OC, 220TH ST SW	179.29	Northwest	2008	Project K
1	5/607E	212TH ST SW OC	179.91	Northwest	2008	Project K
1	5/607W	212TH ST SW OC	179.89	Northwest	2008	Project K
1	5/608E	52ND AVE W OC	180.07	Northwest	2008	Project K
1	5/608W	52ND AVE W OC	180.08	Northwest	2008	Project K
1	5/609E	SR 524 (44TH AVE W) OC	180.71	Northwest	2008	Project K
1	5/609W	SR 524 (44TH AVE W) OC	180.71	Northwest	2008	Project K
1	5/612E	I-405 UC/RAMP OC	182.59	Northwest	2008	Project K
1	522/28ECD	EBCD NORTH CR	11.1	Northwest	2008	Project K
1	523/5	I-5 OC	0.92	Northwest	2008	Project K
1	524/10	196th St. SW over I-5	5.2	Northwest	2008	Project K
2	520/1	SR 520 OC, 10TH AVE	0	Northwest	2008	Project M
2	520/16	108TH AVE NE OC	6.27	Northwest	2008	Project M
2	520/21	116TH AVE NE OC	6.7	Northwest	2008	Project M
2	520/22N	BN RR OC (NP)	7.09	Northwest	2008	Project M
2	520/22S	BNRR OC	7.09	Northwest	2008	Project M
2	520/25N	NORTHUP WAY OC	7.25	Northwest	2008	Project M
2	520/25S	NORTHUP WAY OC	7.27	Northwest	2008	Project M
2	520/27N	N-W RAMP OC	7.52	Northwest	2008	Project M
2	520/27S	N-W RAMP OC	7.54	Northwest	2008	Project M
2	520/30	130TH AVE NE OC	7.92	Northwest	2008	Project M
2	520/34S	NE 24TH ST OC	8.83	Northwest	2008	Project M
3	5/521N-W	N-W RAMP E-N S-N RAMP OC	154.52	Northwest	2008	Project R
3	5/522S-E	S-E RAMP E-N RAMP OC	154.52	Northwest	2008	Project R
3	5/522W	E-N RAMP OC	154.52	Northwest	2008	Project R
3	5/524	I-5 OC, S 144TH ST	155.32	Northwest	2008	Project R
3	5/525.5E	INTERURBAN AVE OC	155.98	Northwest	2008	Project R
3	5/525.5W	INTERURBAN AVE OC	155.98	Northwest	2008	Project R
4	90/48W-N	W-N RAMP R-W RAMP OC	9.88	Northwest	2008	Project P



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Project #	Bridge Number	Bridge Name	Milepost	Region	Project Year	Project Name
4	90/50N	RICHARDS RD OC	9.88	Northwest	2008	Project P
4	90/50S	RICHARDS RD OC	9.88	Northwest	2008	Project P
4	90/50W-S	W-S RAMP RICHARD RD OC	9.88	Northwest	2008	Project P
4	90/52	142ND AVE UC	11	Northwest	2008	Project P
4	90/54E	I-90 OC, 150TH AVE	11.54	Northwest	2008	Project P
4	90/54PS	S EASTGATE PEDESTRIAN U		Northwest	2008	Project P
4	90/54W	I-90 OC, 150TH AVE	11.54	Northwest	2008	Project P
4	90/56P	PEDESTRIAN UC		Northwest	2008	Project P
5	405/22	SR 900 (SUNSET BLVD) OC	4.49	Northwest	2008	Project Q
5	405/23E	SR 900 OC N RENTON	5.4	Northwest	2008	Project Q
5	405/23W	SR 900 OC N RENTON	5.4	Northwest	2008	Project Q
5	405/25E	MAY CR	7.17	Northwest	2008	Project Q
5	405/25W	MAY CR	7.17	Northwest	2008	Project Q
5	405/26	I-405 OC, SE 44TH ST	7.47	Northwest	2008	Project Q
5	405/30E	COAL CR PKWY OC	10.18	Northwest	2008	Project Q
5	405/30W	COAL CR PKWY OC	10.18	Northwest	2008	Project Q
5	405/42	I-405 OC, MAIN ST	13.31	Northwest	2008	Project Q
5	900/20	CEDAR R	10.72	Northwest	2008	Project Q
5	900/23	PCC RR OC HOUSER WAY	12.5	Northwest	2008	Project Q
6	99/560	AURORA AVE-G WASH MEM	34.14	Northwest	2008	Project L
7	90/43ECD	EBCD MERCER SL BR	9.24	Northwest	2010	Project O
7	90/43N	MERCER SL	9.24	Northwest	2010	Project O
7	90/43S	MERCER SL	9.24	Northwest	2010	Project O
7	90/43WCD	WBCD MERCER SL BR	9.24	Northwest	2010	Project O
7	90/72N	E FK ISSAQUAH CR	18.66	Northwest	2010	Project O
8	90/10EB	I-5 OC	2.4	Northwest	2010	Project N
8	90/10WB	I-5 OC	2.39	Northwest	2010	Project N
8	90/15	12TH AVE S UC		Northwest	2010	Project N
9	90/40N	EAST CHANNEL-LK WASH	8.48	Northwest	2010	Project F
9	90/59E-N	W LAKE SAMMAMISH PKWY	13.68	Northwest	2010	Project F
9	90/59N	W LAKE SAMMAMISH PKWY	13.68	Northwest	2010	Project F
9	90/59S	W LAKE SAMMAMISH PKWY	13.68	Northwest	2010	Project F
9	90/65N	221 ST OC	16.92	Northwest	2010	Project F
9	90/65S	221 ST OC	16.92	Northwest	2010	Project F
9	90/66N	FRONT STREET OC	17.12	Northwest	2010	Project F
9	90/66S	FRONT ST N OC	17.12	Northwest	2010	Project F
9	90/78S	SR 18 OC	25.54	Northwest	2010	Project F
9	90/79N	GAME CROSSING	26.87	Northwest	2010	Project F
9	90/79S	GAME CROSSING	26.87	Northwest	2010	Project F
14	99/500	SR 518 OC RIVERTON HTS	20.38	Northwest	2012	Project S



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14	99/507S-S	PACIFIC HWY OC	22.94	Northwest	2012	Project S
14	99/507W	S 116TH PL OC	22.94	Northwest	2012	Project S
14	99/508	PACIFIC HWY OC	22.94	Northwest	2012	Project S
14	99/511	SR 99 OC, 14TH AVE S	24.81	Northwest	2012	Project S
14	599/5E	133RD ST OC	0.33	Northwest	2012	Project S
14	599/5W	133RD ST OC	0.33	Northwest	2012	Project S
14	599/10E	42ND AVE S OC	0.65	Northwest	2012	Project S
14	599/10W	42ND AVE S OC	0.65	Northwest	2012	Project S
14	599/15	SR 599 OC E MARGINAL WAY	1.38	Northwest	2012	Project S
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15	509/116	SR 509 OC, S 146TH ST	25.73	Northwest	2012	Project T
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15	509/120	S 128TH ST OC	26.86	Northwest	2012	Project T
15	509/123	GLENDALE WAY OC	27.85	Northwest	2012	Project T
15	509/126	SR 509 OC, CLOVERDALE ST	29.37	Northwest	2012	Project T
15	509/126E-N	N-N RAMP BR SR 509 OC	29.37	Northwest	2012	Project T
15	509/126S-W	S-S RAMP BR S-E RAMP OC	29.37	Northwest	2012	Project T
16	518/8	SR 509 OC	0	Northwest	2012	Project U
16	518/9	8TH AVE OC	0.39	Northwest	2012	Project U
16	518/10	DES MOINES WAY S OC	0.56	Northwest	2012	Project U
16	518/12	SR 518 OC, 24TH AVE S	1.46	Northwest	2012	Project U
16	518/13	SR 518 OC, S 154TH ST	2.26	Northwest	2012	Project U
16	518/14N-W	N-W RAMP, SR 518 OC	2.26	Northwest	2012	Project U
18	5/647E	UNION SLOUGH	197.09	Northwest	2012	Project H
18	5/647W	UNION SLOUGH	197.09	Northwest	2012	Project H
18	5/648E	STEAMBOAT SLOUGH	197.9	Northwest	2012	Project H
18	5/648W	STEAMBOAT SLOUGH	197.9	Northwest	2012	Project H
18	5/672E	PILCHUCK CR	210.6	Northwest	2012	Project H
18	5/673E	SR 532/268TH ST NE OC	212.63	Northwest	2012	Project H
18	5/673W	SR 532/268TH ST NE OC	212.63	Northwest	2012	Project H
18	5/674E	300TH ST NW OC	215.04	Northwest	2012	Project H
18	5/674W	300TH ST NW OC	215.02	Northwest	2012	Project H
18	5/675E	DAWSON RD OC	216.75	Northwest	2012	Project H
18	5/675W	DAWSON RD OC	216.75	Northwest	2012	Project H
18	5/701	I-5 OC, STARBIRD RD	218.54	Northwest	2012	Project H
19	5/650E	EBEY SL BN RY SR 529 OC	198.5	Northwest	2012	Project I
19	5/650W	EBEY SL BN RY SR 529 OC	198.51	Northwest	2012	Project I
20	5/615	I-5 OC, 164TH ST SW	183.9	Northwest	2014	Project G



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Project #	Bridge Number	Bridge Name	Milepost	Region	Project Year	Project Name
20	5/646	I-5 OC, 12TH AVE NE	196	Northwest	2014	Project G
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20	5/649W	SR 529 OC	198.27	Northwest	2014	Project G
20	5/651E	SR 528 OC 4TH ST	199.13	Northwest	2014	Project G
20	5/651W	SR 528 OC 4TH ST	199.11	Northwest	2014	Project G
21	5/656	116TH ST NE UC	202.47	Northwest	2014	Project J
21	5/657	I-5 OC, STIMSON RD	203.74	Northwest	2014	Project J
21	5/658E	BN RR OC (GN)	204.12	Northwest	2014	Project J
21	5/658W	BN RR OC (GN)	204.14	Northwest	2014	Project J
21	5/662	I-5 OC, KING THOMPSON RD	207.77	Northwest	2014	Project J
21	5/670E	STILLAGUAMISH R	209.35	Northwest	2014	Project J
21	5/670W	STILLAGUAMISH R	209.35	Northwest	2014	Project J
21	5/671	I-5 OC, JACKSON	210.31	Northwest	2014	Project J

Total Number of Bridges = 132



# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007401H		<b>Bridge Name:</b> N-W RAMP E-N S-N RAMP OC		<b>Route:</b> 5	<b>Milepost:</b> 154.52	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/521N-W						<b>County:</b> King	
<b>Location:</b> 5.2 N JCT SR 516		<b>Longitude:</b> 122 15 42 "	<b>Latitude:</b> 47 27 42 "	<b>Structure Length:</b> 215 ft.		<b>Out to Out Width:</b> 25 ft.	
<b>Feature Intersected:</b> N-W RAMP E-E S-E RAMP		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 9312	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 45	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Timber pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns. #3 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$93,357.00**

**Estimated Total Retrofit Project Cost: \$168,042.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 00074011		<b>Bridge Name:</b> S-E RAMP E-N RAMP OC		<b>Route:</b> 5	<b>Milepost:</b> 154.52	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/522S-E						<b>County:</b> King	
<b>Location:</b> 0.1 N JCT I-405		<b>Longitude:</b> 122 15 54 "	<b>Latitude:</b> 47 27 42 "	<b>Structure Length:</b> 176 ft.		<b>Out to Out Width:</b> 33 ft.	
<b>Feature Intersected:</b> S-E RAMP E-N RAMP		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 29163	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 45	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Timber pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns. #3 hoops @ 12". longitudinal #9 bars with 3'-4" lap splices. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$96,437.00**

**Estimated Total Retrofit Project Cost: \$173,586.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007401G		<b>Bridge Name:</b> E-N RAMP OC		<b>Route:</b> 5	<b>Milepost:</b> 154.52	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/522W						<b>County:</b> King	
<b>Location:</b> 0.1 N JCT I-405		<b>Longitude:</b> 122 15 54 "	<b>Latitude:</b> 47 27 42 "	<b>Structure Length:</b> 168 ft.		<b>Out to Out Width:</b> 81.6 ft.	
<b>Feature Intersected:</b> E-N RAMP		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1965	<b>ADT:</b> 102000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 45	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Timber pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %						



**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:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$186,736.00**

**Estimated Total Retrofit Project Cost: \$336,124.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007618A		<b>Bridge Name:</b> I-5 OC, S 144TH ST		<b>Route:</b> 5	<b>Milepost:</b> 155.32	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/524						<b>County:</b> King	
<b>Location:</b> 0.9 N JCT I-405		<b>Longitude:</b> 122 16 6 "	<b>Latitude:</b> 47 28 30 "	<b>Structure Length:</b> 329 ft.		<b>Out to Out Width:</b> 35.6 ft.	
<b>Feature Intersected:</b> I-5		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1965	<b>ADT:</b> 2692	<b>Detour Length:</b> 4 miles	<b>Skew Angle:</b> 16	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 1 %						



**Bridge Notes:**

Piers 2, 3 and 4, 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:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (2 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$179,074.50**

**Estimated Total Retrofit Project Cost: \$322,334.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007618C		<b>Bridge Name:</b> INTERURBAN AVE OC		<b>Route:</b> 5	<b>Milepost:</b> 155.98	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/525.5E						<b>County:</b> King	
<b>Location:</b> 0.1 N JCT SR 599		<b>Longitude:</b> 122 16 12 "	<b>Latitude:</b> 47 29 0 "	<b>Structure Length:</b> 160 ft.		<b>Out to Out Width:</b> 69.7 ft.	
<b>Feature Intersected:</b> INTERURBAN AVE		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 94500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 11	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b> 1996	<b>Truck Pct:</b> 15 %						



**Bridge Notes:**

Piers 2 and 3, each has five 3'-0" diameter columns. Retrofit four north columns only. These columns have #3 hoops @ 12". longitudinal #9 bars with 3'-4" lap 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.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$183,370.00**

**Estimated Total Retrofit Project Cost: \$330,066.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007618D		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/525.5W		INTERURBAN AVE OC		5	155.98	<b>County:</b> King
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
0.1 N JCT SR 599		122 16 12 "	47 29 0 "	149 ft.		78.5 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 3	
SR 181		33.11 %g	C	PCB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 94500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %	1 miles	0	Pier with more than two columns	Concrete 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:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$178,029.50**

**Estimated Total Retrofit Project Cost: \$320,453.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007270B		<b>Bridge Name:</b> I-5 OC, NE 130TH ST		<b>Route:</b> 5	<b>Milepost:</b> 173.83	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/590						<b>County:</b> King	
<b>Location:</b> 3.1 N JCT SR 522		<b>Longitude:</b> 122 19 24 "	<b>Latitude:</b> 47 43 24 "	<b>Structure Length:</b> 240 ft.		<b>Out to Out Width:</b> 63.6 ft.	
<b>Feature Intersected:</b> I-5		<b>PGA:</b> 32.06 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1964	<b>ADT:</b> 24000	<b>Detour Length:</b> 2 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Piers 2 and 4, each has four 2'-6" square columns on spread footings. Pier 3 has four 2'-6"x2'-0" columns on spread footings. #3 hoops @ 12". Longitudinal bars have lap splices at top of footing. Footings have no top mat. Piers 1 and 5 (end piers), each has four 2'-6"x1'-6" columns. Each column has two hinges.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (4 ea. 12 total, 30"x30" except P3 4-30"x24")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$366,536.50**

**Estimated Total Retrofit Project Cost: \$659,765.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007270C		<b>Bridge Name:</b> NE 155TH ST OC		<b>Route:</b> 5	<b>Milepost:</b> 175.11	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/593E						<b>County:</b> King	
<b>Location:</b> 0.5 N JCT SR 523		<b>Longitude:</b> 122° 19' 41.5"	<b>Latitude:</b> 47° 44' 28.3"	<b>Structure Length:</b> 147 ft.		<b>Out to Out Width:</b> 79 ft.	
<b>Feature Intersected:</b> NE 155TH ST		<b>PGA:</b> 32.06 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1964	<b>ADT:</b> 95500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 13	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %						

No Photo Available



**Bridge Notes:**

Piers 2 and 3, each has five 2'-6" square columns on spread footings. #3 hoops @ 12". Longitudinal #11 bars have 4'-2" lap splices at top of footing. Footings have no top mat. Piers 1 and 4 (end piers), each has five 2'-6"x1'-6" columns. Each column has a hinge at top of column.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 30"x30"). deep excavation (15.5 ft)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

Estimated Total Bridge Item Cost: \$594,423.50

Estimated Total Retrofit Project Cost: \$1,069,962.30

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007270D		<b>Bridge Name:</b> NE 155TH ST OC		<b>Route:</b> 5	<b>Milepost:</b> 175.11	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/593W						<b>County:</b> King	
<b>Location:</b> 0.5 N JCT SR 523		<b>Longitude:</b> 122 19 42 "	<b>Latitude:</b> 47 44 30 "	<b>Structure Length:</b> 147 ft.		<b>Out to Out Width:</b> 71 ft.	
<b>Feature Intersected:</b> NE 155TH ST		<b>PGA:</b> 32.06 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1964	<b>ADT:</b> 95500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 13	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %						



**Bridge Notes:**

Piers 2 and 3, each has five 2'-6" square columns on spread footings. #3 hoops @ 12". Longitudinal #11 bars have 4'-2" lap splices at top of footing. Footings have no top mat. Piers 1 and 4 (end piers), each has five 2'-6"x1'-6" columns. Each column has a hinge at top of column.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 30"x30"). deep excavation (15.5 ft)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$610,423.00**

**Estimated Total Retrofit Project Cost: \$1,098,761.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007299A		<b>Bridge Name:</b> NE 175TH ST OC		<b>Route:</b> 5	<b>Milepost:</b> 176.13	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/595E						<b>County:</b> King	
<b>Location:</b> 1.6 N JCT SR 523		<b>Longitude:</b> 122 19 42.2	<b>Latitude:</b> 47 45 20.7	<b>Structure Length:</b> 163 ft.		<b>Out to Out Width:</b> 66.5 ft.	
<b>Feature Intersected:</b> NE 175TH ST		<b>PGA:</b> 30.58 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1964	<b>ADT:</b> 84000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 8	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1983	<b>Truck Pct:</b> 15 %						



**Bridge Notes:**

Piers 2 and 3, each has five 2'-6" square columns on spread footings. Retrofit four E. columns only. #3 hoops @ 12". Longitudinal #11 bars have lap splices at top of footing. Footings have no top mat. Piers 1 and 4 (end piers), each has six 2'-6"x1'-6" columns. Each column has a hinge at top of column.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns built in 1964 at Piers 2 and 3. (4 ea. 8 total, 30"x30")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$262,361.00**

**Estimated Total Retrofit Project Cost: \$472,249.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007299B		<b>Bridge Name:</b> NE175TH ST OC		<b>Route:</b> 5	<b>Milepost:</b> 176.13	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/595W						<b>County:</b> King	
<b>Location:</b> 1.6 N JCT SR 523		<b>Longitude:</b> 122 19 42 "	<b>Latitude:</b> 47 45 24 "	<b>Structure Length:</b> 163 ft.		<b>Out to Out Width:</b> 66.5 ft.	
<b>Feature Intersected:</b> NE175TH ST		<b>PGA:</b> 30.58 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1964	<b>ADT:</b> 84000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 19	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1983	<b>Truck Pct:</b> 15 %						



**Bridge Notes:**

Piers 2 and 3, each has five 2'-6" square columns on spread footings. Retrofit four W. columns only. #3 hoops @ 12". Longitudinal #11 bars have lap splices at top of footing. Footings have no top mat. Piers 1 and 4 (end piers), each has six 2'-6"x1'-6" columns. Each column has a hinge at top of column.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns built in 1964 at Piers 2 and 3. (4 ea. 8 total, 30"x30")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$256,140.50**

**Estimated Total Retrofit Project Cost: \$461,052.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007071A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/599E		SR 104 OC NE 205TH ST		5	177.78	<b>County:</b> Snohomish
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
3.1 N JCT SR 513		122 19 0"	47 46 42"	200 ft.		69.8 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 3	
SR 104 NE205TH ST		30.58 %g	C	PCB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 79500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1995	<b>Truck Pct:</b> 15 %	1 miles	8	Pier with more than two columns		



No Photo Available

**Bridge Notes:**

Piers 2 and 3, each has six 3' diameter columns on spread footings. Retrofit four E. columns only. These columns have #3 hoops @ 12", Longitudinal bars have lap splices at top of footings. Footings have no top mat. Piers 1 and 4 are "L" abutments. 5/599E is parallel to bridge 5/599NCD. Profile photo shown is 5/599NCD.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod restrainers at Piers 2 and 3. (Improvement)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

Estimated Total Bridge Item Cost: \$194,573.50

Estimated Total Retrofit Project Cost: \$350,232.30

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007071C		<b>Bridge Name:</b> NBCD, SR 104 OC		<b>Route:</b> 5	<b>Milepost:</b> 177.78	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/599NCD						<b>County:</b> Snohomish	
<b>Location:</b> 3.1 N JCT SR 513		<b>Longitude:</b> 122 19 0 "	<b>Latitude:</b> 47 46 42 "	<b>Structure Length:</b> 206 ft.		<b>Out to Out Width:</b> 45 ft.	
<b>Feature Intersected:</b> SR104		<b>PGA:</b> 30.58 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 12788	<b>Detour Length:</b> 2 miles	<b>Skew Angle:</b> 8	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1995	<b>Truck Pct:</b> 5 %						



No Photo Available

**Bridge Notes:**

Piers 2 and 3, each has four 3' diameter columns on spread footings. Retrofit three W. columns only. These columns have #3 hoops @ 12", Longitudinal bars have lap splices at top of footings. Footings have no top mat. Piers 1 and 4 are "L" abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod restrainers at Piers 2 and 3. (Improvement)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

Estimated Total Bridge Item Cost: \$144,100.00

Estimated Total Retrofit Project Cost: \$259,380.00

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007071B		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/599W		SR 104 OC NE 205TH ST		5	177.78	<b>County:</b> Snohomish
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
3.1 N JCT SR 513		° ' "	° ' "	188 ft.		70.5 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 3
SR 104 NE205TH ST		30.58 %g	C	PCB		<b>Appr. Spans:</b> 0
<b>Year Built:</b> 1963	<b>ADT:</b> 79500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1983	<b>Truck Pct:</b> 15 %	1 miles	8	Pier with more than two columns		



No Photo Available

**Bridge Notes:**

Piers 2 and 3, each has six 3' diameter columns on spread footings. Retrofit five W. columns only. These columns have #3 hoops @ 12". Longitudinal bars have lap splices at top of footings. Footings have no top mat. Piers 1 and 4 are "L" abutments. Bridge 5/599W is parallel with bridge 5/599SCD. Profile Photo shown is bridge 5/599SCD.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod restrainers at Piers 2 and 3. (Improvement)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

Estimated Total Bridge Item Cost: \$233,194.50

Estimated Total Retrofit Project Cost: \$419,750.10

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007227A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/602		I-5 OC, 236TH		5	178.27	<b>County:</b> Snohomish	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
0.4 N JCT SR 104		122 18 54 "	47 47 6 "	318 ft.		57.5 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 4	
I-5		30.58 %g	C	PCB		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 12578	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1983	<b>Truck Pct:</b> 5 %	0 miles	0	Pier with more than two columns			



**Bridge Notes:**

Piers 2, 3 and 4, each has five 3' diameter columns on spread footings. Retrofit three center columns only. These columns have #3 hoops @ 12", Longitudinal bars have lap splices at top of footings. Footings have no top mat. Piers 1 and 5 are "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.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$268,092.00**

**Estimated Total Retrofit Project Cost: \$482,565.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007071D		<b>Bridge Name:</b> I-5 OC, 228TH ST SW		<b>Route:</b> 5	<b>Milepost:</b> 178.74	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/603						<b>County:</b> Snohomish	
<b>Location:</b> 0.7 N JCT SR 104		<b>Longitude:</b> 122 18 59.6 "	<b>Latitude:</b> 47 47 31.4 "	<b>Structure Length:</b> 338 ft.		<b>Out to Out Width:</b> 38 ft.	
<b>Feature Intersected:</b> I-5		<b>PGA:</b> 30.58 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 5 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 2237	<b>Detour Length:</b> 2 miles	<b>Skew Angle:</b> 99	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 1 %						



**Bridge Notes:**

Piers 2 thru 5, each has three 3' diameter columns on spread footings. These columns have #3 hoops @ 12", Longitudinal bars have lap splices at top of footings. Footings have no top mat. Piers 1 and 6 are spill through "L" abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Transverse stops at Bents 1 & 6. Longitudinal restrainers and transverse stops at bents 2, 3, 4 and 5. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3, 4 and 5. (3 ea. 12 total, 3' dia.). Install girder stops at Piers 2-5 (4 ea. 12 total). Large skew.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** P

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$639,683.00**

**Estimated Total Retrofit Project Cost: \$1,151,429.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0012790A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/605		I-5 OC, 220TH ST SW		5	179.29	<b>County:</b> Snohomish	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
1.5 N JCT SR 104		122 18 48	47 48 0	338 ft.		82.7 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 4	
I-5		30.58 %g	C	PCB		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 30432	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1985	<b>Truck Pct:</b> 5 %	2 miles	9	Pier with more than two columns		Spread footing	



**Bridge Notes:**

Piers 2, 3 and 4, each has seven 3' diameter columns on spread footings. Retrofit three north columns only. These columns have #3 hoops @ 12", Longitudinal bars have lap splices at top of footings. Footings have no top mat. Piers 1 and 5 are "L" abutments.

**Retrofit Program Notes:**

Four columns are added to the existing three, the new columns may provided lateral support. Retrofit may not required.

**Completed Retrofit Notes:**

Girder stops at Piers 1 and 5. Longitudinal restrainers and girder stops at Piers 2, 3 and 4. (WIDENING)

**Remaining Retrofit Notes:**

Retrofit 3 North columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.).

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$355,113.00**

**Estimated Total Retrofit Project Cost: \$639,203.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007071G		<b>Bridge Name:</b> 212TH ST SW OC		<b>Route:</b> 5	<b>Milepost:</b> 179.91	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/607E						<b>County:</b> Snohomish	
<b>Location:</b> 2.2 N JCT SR 104		<b>Longitude:</b> 122 18 18 "	<b>Latitude:</b> 47 48 24 "	<b>Structure Length:</b> 278 ft.		<b>Out to Out Width:</b> 71 ft.	
<b>Feature Intersected:</b> 212TH ST SW		<b>PGA:</b> 30.58 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 92500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 51	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1995	<b>Truck Pct:</b> 15 %						



**Bridge Notes:**

Piers 2 and 3, each has seven 3'-0" diameter columns. Retrofit five east columns only. #3 hoops @ 12". longitudinal bars with lap splices. Footing without top mat. (E-54m)

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod restrainers at Piers 2 and 3. (Improvement)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$410,388.00**

**Estimated Total Retrofit Project Cost: \$738,698.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007071F		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/607W		212TH ST SW OC		5	179.89	<b>County:</b> Snohomish
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
2.2 N JCT SR 104		122 18 18"	47 48 24"	278 ft.		71 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 3	
212TH ST SW		30.58 %g	C	PCB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 92500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1993	<b>Truck Pct:</b> 15 %	1 miles	51	Pier with more than two columns		



**Bridge Notes:**

Piers 2 and 3, each has seven 3'-0" diameter columns. Retrofit five west columns only. #3 hoops @ 12". longitudinal bars with lap splices. Footing without top mat. (E-54m)

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod Restrainers at Piers 2 & 3. (HOV)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$477,614.50**

**Estimated Total Retrofit Project Cost: \$859,706.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007227B		<b>Bridge Name:</b> 52ND AVE W OC		<b>Route:</b> 5	<b>Milepost:</b> 180.07	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/608E						<b>County:</b> Snohomish
<b>Location:</b> 2.3 N JCT SR 104		<b>Longitude:</b> 122 18 6 "	<b>Latitude:</b> 47 48 30 "	<b>Structure Length:</b> 189 ft.		<b>Out to Out Width:</b> 70.2 ft.
<b>Feature Intersected:</b> 52ND AVE W		<b>PGA:</b> 30.58 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1963	<b>ADT:</b> 92500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 38	<b>Pier Type:</b> Pier with more than two columns	<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b> 1995	<b>Truck Pct:</b> 15 %					



**Bridge Notes:**

Piers 2 and 3, each has six 3'-0" diameter columns. Retrofit five east columns only. #3 hoops @ 12". longitudinal bars with lap splices. Footing without top mat. (E-54m). Piers 1 and 4 are "L" abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod restrainers at Piers 2 and 3. (Improvement)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.). 10' excavation.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$326,551.50**

**Estimated Total Retrofit Project Cost: \$587,792.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007227C		<b>Bridge Name:</b> 52ND AVE W OC		<b>Route:</b> 5	<b>Milepost:</b> 180.08	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/608W						<b>County:</b> Snohomish	
<b>Location:</b> 2.3 N JCT SR 104		<b>Longitude:</b> 122 18 6 "	<b>Latitude:</b> 47 48 30 "	<b>Structure Length:</b> 172 ft.		<b>Out to Out Width:</b> 71.4 ft.	
<b>Feature Intersected:</b> 52ND AVE W		<b>PGA:</b> 30.58 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 92500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 38	<b>Pier Type:</b> Pier with more than two columns	<b>Footing Type:</b> Concrete Pile		
<b>Year Rebuilt:</b> 1993	<b>Truck Pct:</b> 15 %						



**Bridge Notes:**

Piers 2 and 3, each has six 3'-0" diameter columns. Retrofit five west columns only. #3 hoops @ 12". longitudinal bars with lap splices. Footing without top mat. (E-54m). Piers 1 and 4 are "L" abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod Restrainers at Piers 2 & 3. (HOV)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$200,156.00**

**Estimated Total Retrofit Project Cost: \$360,280.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007118A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/609E		SR 524 (44TH AVE W) OC		5	180.71	<b>County:</b> Snohomish
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
3.0 N JCT SR 104		122 17 30"	47 48 48"	245 ft.		71 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 3	
SR 524/44TH AVE W		30.58 %g	C	PCB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 92500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1995	<b>Truck Pct:</b> 15 %	1 miles	38	Pier with more than two columns		



**Bridge Notes:**

Piers 2 and 3, each has seven 3'-0" diameter columns. Retrofit five east columns only. #3 hoops @ 12". longitudinal bars with lap splices. Footing without top mat. (E-54m). Piers 1 and 4 are "L" abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod restrainers at Piers 2 and 3. (Improvement)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$359,513.00**

**Estimated Total Retrofit Project Cost: \$647,123.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007118B		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/609W		SR 524 (44TH AVE W) OC		5	180.71	<b>County:</b> Snohomish
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
3.0 N JCT SR 104		122 17 30"	47 48 48"	260 ft.		71 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 3	
SR 524/44TH AVE W		30.58 %g	C	PCB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 92500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1995	<b>Truck Pct:</b> 15 %	1 miles	38	Pier with more than two columns		



**Bridge Notes:**

Piers 2 and 3, each has seven 3'-0" diameter columns. Retrofit five west columns only. #3 hoops @ 12". longitudinal bars with lap splices. Footing without top mat. (E-54m). Piers 1 and 4 are "L" abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod restrainers at Piers 2 and 3. (Improvement)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$218,372.00**

**Estimated Total Retrofit Project Cost: \$393,069.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007134A		<b>Bridge Name:</b> I-405 UC/RAMP OC		<b>Route:</b> 5	<b>Milepost:</b> 182.59	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/612E						<b>County:</b> Snohomish
<b>Location:</b> 1.1 N JCT SR 524		<b>Longitude:</b> 122 15 42 "	<b>Latitude:</b> 47 49 54 "	<b>Structure Length:</b> 274 ft.		<b>Out to Out Width:</b> 71 ft.
<b>Feature Intersected:</b> I-405 & RAMPS		<b>PGA:</b> 30.58 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1964	<b>ADT:</b> 63500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 50	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>
<b>Year Rebuilt:</b> 1995	<b>Truck Pct:</b> 15 %					



**Bridge Notes:**

Piers 2 and 3, each has six 3'-0" diameter columns. Retrofit four east columns only. #3 hoops @ 12". longitudinal bars with lap splices. Footing without top mat. (E-54m). Piers 1 and 4 are "L" abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod restrainers at Piers 2 and 3. (Improvement)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$198,264.00**

**Estimated Total Retrofit Project Cost: \$356,875.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0011561A		<b>Bridge Name:</b> I-5 OC, 164TH ST SW		<b>Route:</b> 5	<b>Milepost:</b> 183.9	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/615						<b>County:</b> Snohomish	
<b>Location:</b> 1.3 N JCT I-405		<b>Longitude:</b> 122 15 24 "	<b>Latitude:</b> 47 51 0 "	<b>Structure Length:</b> 323 ft.		<b>Out to Out Width:</b> 95.8 ft.	
<b>Feature Intersected:</b> I-5		<b>PGA:</b> 30.42 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 26490	<b>Detour Length:</b> 0 miles	<b>Skew Angle:</b> 9	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Spread footing	
<b>Year Rebuilt:</b> 2001	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Piers 2 thru 4, each has six 3'-0" diameter columns. Retrofit three columns built in 1963 only (columns 2 thru 4 from north). #3 hoops @ 12". Longitudinal bars with lap splices. Footing without top mat. (E-51).

**Retrofit Program Notes:**

Bridge widened in 2001. Adds three columns to existing three columns. New columns may provide lateral restraint. Retrofit may not required.

**Completed Retrofit Notes:**

Girder restrainers at end of new girders and girder stops at Piers 2, 3 and 4. Girder stops at Piers 1 and 5. (WIDENING)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$222,211.00**

**Estimated Total Retrofit Project Cost: \$399,979.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008226A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/646		I-5 OC, 12TH AVE NE		5	196	<b>County:</b> Snohomish	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
2.2 N JCT US 2		122 10 30"	48 0 30"	212 ft.		33.2 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 4	
I-5		27.61 %g	C	PCB		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1967	<b>ADT:</b> 2280	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %	2 miles	0	Double Column Pier		Concrete Pile	



**Bridge Notes:**

Piers 2, 3 and 4, each has two 3'-0" diameter columns. #3 hoops @ 12". Vertical #9 bars with 3'-4" lap splices at top of footings. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers and Transverse pipe restrainers at Piers 2, 3 and 4. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (2 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$109,576.50**

**Estimated Total Retrofit Project Cost: \$197,237.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008226B		<b>Bridge Name:</b> UNION SLOUGH		<b>Route:</b> 5	<b>Milepost:</b> 197.09	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/647E						<b>County:</b> Snohomish
<b>Location:</b> 3.3 N JCT US 2		<b>Longitude:</b> 122 10 30	<b>Latitude:</b> 48 1 24	<b>Structure Length:</b> 396 ft.		<b>Out to Out Width:</b> 51.4 ft.
<b>Feature Intersected:</b> UNION SLOUGH		<b>PGA:</b> 27.61 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB CTB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 1
<b>Year Built:</b> 1968	<b>ADT:</b> 63000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Timber pile
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %					



**Bridge Notes:**

Piers 2 thru 5, each has three 3'-0" diameter columns. #3 hoops @ 12". Vertical #9 bars with 4'-4" splices at top of footings. Footing without top mat except piers 3 and 6. Piers 3 and 6, each has a combined footing.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers and Transverse pipe restrainers at Piers 2 thru 5. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3, 4 and 5. (3 ea. 12 total, 3' dia.) High water elevation at EL. 4.5, Piers 3, 4 and 5 need 22 ft Cofferdam for construction.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 9

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$728,706.00**

**Estimated Total Retrofit Project Cost: \$1,311,670.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008226C		<b>Bridge Name:</b> UNION SLOUGH		<b>Route:</b> 5	<b>Milepost:</b> 197.09	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/647W						<b>County:</b> Snohomish	
<b>Location:</b> 3.3 N JCT US 2		<b>Longitude:</b> 122° 10' 30"	<b>Latitude:</b> 48° 1' 24"	<b>Structure Length:</b> 396 ft.		<b>Out to Out Width:</b> 51.4 ft.	
<b>Feature Intersected:</b> UNION SLOUGH		<b>PGA:</b> 27.61 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB CTB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 1	
<b>Year Built:</b> 1968	<b>ADT:</b> 63000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Timber pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %						
No Photo Available							
<b>Bridge Notes:</b> Piers 2 thru 5, each has three 3'-0" diameter columns. #3 hoops @ 12". Vertical #9 bars with 4'-4" splices at top of footings. Footing without top mat except pier 3. Pier 3 has a combined footing.				<b>Retrofit Program Notes:</b>			
<b>Completed Retrofit Notes:</b> Longitudinal restrainers and Transverse pipe restrainers at Piers 2 thru 5. (Seismic Retrofit)				<b>Remaining Retrofit Notes:</b> Retrofit columns at Piers 2, 3, 4 and 5. (3 ea. 12 total, 3' dia.) High water elevation at EL. 4.5, Piers 3, 4 and 5 need 22 ft Cofferdam for construction.			
<b>All Bridge Retrofit Status:</b> P		<b>Total Number of Columns:</b>		<b>07-09 Rank:</b>			
<b>Special Br Retrofit Status:</b>		<b>No. of Wet Retrofitted Columns:</b> 9					
<b>Superstr Retrofit Status:</b> C		<b>Isolation Bearing Candidate:</b> <input type="checkbox"/>		<b>2005-07 CN Funding:</b> 0			
<b>Substr Group 3 Status:</b> N		<b>Bridge Requires Further Evaluation:</b> <input type="checkbox"/>		<b>2005 New Revenue Funding Category:</b> M			
<b>Substr Group 4 Status:</b> R		Estimated Total Bridge Item Cost: \$728,706.00					
C=Complete P=Partially Complet		Estimated Total Retrofit Project Cost: <u>\$1,311,670.80</u>					
R=Required N=Not Required							
D=Differed X=Excluded I=In Progress							

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008226D		<b>Bridge Name:</b> STEAMBOAT SLOUGH		<b>Route:</b> 5	<b>Milepost:</b> 197.9	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/648E						<b>County:</b> Snohomish	
<b>Location:</b> 4.1 N JCT US 2		<b>Longitude:</b> 122 10 42 "	<b>Latitude:</b> 48 2 6 "	<b>Structure Length:</b> 1026 ft.		<b>Out to Out Width:</b> 51.4 ft.	
<b>Feature Intersected:</b> STEAMBOAT SLOUGH		<b>PGA:</b> 27.61 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 9 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 63000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Timber pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %						



**Bridge Notes:**

Piers 2 thru 9, each has two 4'-0" diameter columns. #4 hoops @ 12". Vertical # 11 bars with 4'-2\4" splices at top of footings at piers 3 thru 9. Pier 2 has #14 vertical bars without splice. Footings have no top mat. Note: Cross beams for bridges 5/648E and 5/648W are continuous.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers and Transverse pipe restrainers at Piers 2 and 9. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 thru 9 (2 ea. 16 total, 4' dia.). Normal H.W. El. at El. 5.80. Require 26 ft. max. coffer dam.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 16

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$1,691,426.00**

**Estimated Total Retrofit Project Cost: \$3,044,566.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008226E		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/648W		STEAMBOAT SLOUGH		5	197.9	<b>County:</b> Snohomish
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
4.1 N JCT US 2		122 10 36	48 2 12	1026 ft.		51.4 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 9	
STEAMBOAT SLOUGH		27.61 %g	C	PCB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 63000	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %	1 miles	0	Pier with more than two columns	Timber pile	



**Bridge Notes:**

Piers 2 thru 9, each has two 4'-0" diameter columns. #4 hoops @ 12". Vertical # 11 bars with 4'-2\4" splices at top of footings at piers 3 thru 9. Pier 2 has #14 vertical bars without splice. Footings have no top mat. Note: Cross beams for bridges 5/648E and 5/648W are continuous.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers and Transverse pipe restrainers at Piers 2 and 9. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 thru 9 (2 ea. 16 total, 4' dia.). Normal H.W. El. at El. 5.80. Require 26 ft. max. coffer dam.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 16

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$1,691,426.00**

**Estimated Total Retrofit Project Cost: \$3,044,566.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008372A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/649E		SR 529 OC		5	198.27	<b>County:</b> Snohomish	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
4.4 N JCT US 2		122 10 46"	48 2 24"	245 ft.		55.4 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 3	
SR 529		27.61 %g	C	PCB		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 52500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %	1 miles	45	Pier with more than two columns		Concrete Pile	



**Bridge Notes:**

Piers 2 and 3, each has three 3'-0" diameter columns. #3 hoops @ 12". Vertical #9 bars with 3'-4" lap splices at top of footings. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers and Transverse pipe restrainers at Piers 2 and 3. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$108,438.00**

**Estimated Total Retrofit Project Cost: \$195,188.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008372B		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/649W		SR 529 OC		5	198.27	<b>County:</b> Snohomish	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
4.4 N JCT US 2		122 10 42"	48 2 30"	232 ft.		55.4 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 3	
SR 529		27.61 %g	C	PCB		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 52500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %	1 miles	45	Pier with more than two columns		Concrete Pile	



**Bridge Notes:**

Piers 2 and 3, each has three 3'-0" diameter columns. #3 hoops @ 12". Vertical #9 bars with 3'-4" lap splices at top of footings. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers and Transverse pipe restrainers at Piers 2 and 3. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$106,909.00**

**Estimated Total Retrofit Project Cost: \$192,436.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008400A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/650E		EBEY SL BN RY SR 529 OC		5	198.5	<b>County:</b> Snohomish
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
4.6 N JCT US 2		122 10 54	48 2 38	2062 ft.		63.4 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 21	
EBEY SL BN RY SR 529		27.61 %g	C	PCB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1969	<b>ADT:</b> 52500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %	1 miles	0	Double Column Pier	Timber pile	



**Bridge Notes:**

Piers 2 thru 21, each has two 4'-0" diameter columns. #4 hoops @ 12". Piers 2 thru 15, 20 and 21 have #11 vertical bars with 4'-2" lap splices at top of pedestals. Piers 16 and 19 have #18 vertical bars with field weld splices. Footing without top mat. Piers 17 and 18, each has two 5'-0" diameter columns with in fill walls to approx. 4' above mean high water elevation.. #4 hoops @ 12".

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers and Transverse pipe restrainers at Piers 4, 7, 9, 13, 16 thru 19. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 thru 21. (2 ea. 40 total, 4' Dia. except P17 & P18 2-5' Dia. Ea.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 28

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$1,674,810.50**

**Estimated Total Retrofit Project Cost: \$3,014,658.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0004196A		<b>Bridge Name:</b> EBEY SL BN RY SR 529 OC		<b>Route:</b> 5	<b>Milepost:</b> 198.51	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/650W						<b>County:</b> Snohomish
<b>Location:</b> 4.7 N JCT US 2		<b>Longitude:</b> 122 10 54 "	<b>Latitude:</b> 48 2 48 "	<b>Structure Length:</b> 1920 ft.		<b>Out to Out Width:</b> 66.8 ft.
<b>Feature Intersected:</b> EBEY SL BN RY SR 529		<b>PGA:</b> 26.42 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SG CTB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 25
<b>Year Built:</b> 1954	<b>ADT:</b> 52500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Timber pile
<b>Year Rebuilt:</b> 1968	<b>Truck Pct:</b> 15 %					



**Bridge Notes:**

Contract 4597: Pier 1 has 8- 25"x36" columns. Pier 2 has two 5'-6" square columns. Contract 4111: Piers 1, 2 and 3, each has two 4'-3" square columns. Piers 4 thru 11, each has two 4'-6" square columns. Contract 4196: Piers 12 thru 19 and 24, 25, each has four 3'-6" square columns with horizontal struts. Piers 20 thru 23 are pier walls.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers at Piers 20 and 23. Conc. catchers at Piers 20 and 23. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit 72 columns (Column size vary).

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 62

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$6,262,998.50**

**Estimated Total Retrofit Project Cost: \$11,273,397.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008753A		<b>Bridge Name:</b> SR 528 OC 4TH ST		<b>Route:</b> 5	<b>Milepost:</b> 199.13	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/651E						<b>County:</b> Snohomish
<b>Location:</b> 5.3 N JCT US 2		<b>Longitude:</b> 122° 11' 0" W	<b>Latitude:</b> 48° 3' 6" N	<b>Structure Length:</b> 124 ft.		<b>Out to Out Width:</b> 55.4 ft.
<b>Feature Intersected:</b> SR 528 4TH ST		<b>PGA:</b> 26.42 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CTB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1971	<b>ADT:</b> 44500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %					



**Bridge Notes:**

Piers 1 thru 4, each has seven 22"x30" columns on combined spread footings. #3 hoops @ 12", #11 bars with 2'-4" splices. Piers 1 and 4 (end piers) buried in ground.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (7 ea. 14 total, 22"x30")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$213,103.00**

**Estimated Total Retrofit Project Cost: \$383,585.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0004178A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/651W		SR 528 OC 4TH ST		5	199.11	<b>County:</b> Snohomish
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
5.3 N JCT US 2		122 11 0"	48 3 12"	124 ft.		60.4 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 3	
SR 528 4TH ST		26.42 %g	C	CTB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1952	<b>ADT:</b> 44500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %	1 miles	0	Pier with more than two columns		



**Bridge Notes:**

Piers 1 thru 4, each has seven 22"x30" columns on combined spread footings. #3 hoops @ 12", #11 bars with 2'-4" splices. Piers 1 and 4 (end piers) buried in ground.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (7 ea. 14 total, 22"x30")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$198,154.00**

**Estimated Total Retrofit Project Cost: \$356,677.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008941B		<b>Bridge Name:</b> 116TH ST NE UC		<b>Route:</b> 5	<b>Milepost:</b> 202.47	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/656						<b>County:</b> Snohomish
<b>Location:</b> 3.3 N JCT SR 528		<b>Longitude:</b> 122 11 0 "	<b>Latitude:</b> 48 6 0 "	<b>Structure Length:</b> 217 ft.		<b>Out to Out Width:</b> 47.5 ft.
<b>Feature Intersected:</b> I-5		<b>PGA:</b> 26.42 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 2 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1971	<b>ADT:</b> 13800	<b>Detour Length:</b> 5 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b>
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %					



**Bridge Notes:**

Pier 2 has two 3'-0" diameter columns. #3 hoops @ 12". #11 vertical bars have 2'-11" lap splices at top of footings. Footings without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit 2 columns at Pier 2. (3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**#07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$47,366.00**

**Estimated Total Retrofit Project Cost: \$85,258.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008632A		<b>Bridge Name:</b> I-5 OC, STIMSON RD		<b>Route:</b> 5	<b>Milepost:</b> 203.74	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/657						<b>County:</b> Snohomish	
<b>Location:</b> 4.6 N JCT SR 528		<b>Longitude:</b> 122 11 0 "	<b>Latitude:</b> 48 7 6 "	<b>Structure Length:</b> 214 ft.		<b>Out to Out Width:</b> 43.4 ft.	
<b>Feature Intersected:</b> I-5		<b>PGA:</b> 26.42 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 2 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1970	<b>ADT:</b> 3500	<b>Detour Length:</b> 3 miles	<b>Skew Angle:</b> 2	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Timber pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Pier 2 has two 3'-0" diameter columns. #3 hoops @ 12". #9 vertical bars have 3'-4" lap splices at top of footings. Footings without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit 2 columns at pier 2. (3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$40,249.00**

**Estimated Total Retrofit Project Cost: \$72,448.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008632B		<b>Bridge Name:</b> BN RR OC (GN)		<b>Route:</b> 5	<b>Milepost:</b> 204.12	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/658E						<b>County:</b> Snohomish
<b>Location:</b> 5.0 N JCT SR 528		<b>Longitude:</b> 122° 11' 6"	<b>Latitude:</b> 48° 7' 30"	<b>Structure Length:</b> 421 ft.		<b>Out to Out Width:</b> 55.4 ft.
<b>Feature Intersected:</b> GN RY		<b>PGA:</b> 26.42 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1970	<b>ADT:</b> 38500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 64	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Timber pile
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %					



**Bridge Notes:**

Piers 2 and 3, each has five 3'-0" diameter columns. #4 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$276,529.00**

**Estimated Total Retrofit Project Cost: \$497,752.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008632C		<b>Bridge Name:</b> BN RR OC (GN)		<b>Route:</b> 5	<b>Milepost:</b> 204.14	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/658W						<b>County:</b> Snohomish
<b>Location:</b> 5.0 N JCT SR 528		<b>Longitude:</b> 122 11 6 "	<b>Latitude:</b> 48 7 30 "	<b>Structure Length:</b> 421 ft.		<b>Out to Out Width:</b> 55.4 ft.
<b>Feature Intersected:</b> GN RY		<b>PGA:</b> 26.42 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1970	<b>ADT:</b> 38500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 64	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Timber pile
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %					



**Bridge Notes:**

Piers 2 and 3, each has five 3'-0" diameter columns. #4 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$263,659.00**

**Estimated Total Retrofit Project Cost: \$474,586.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008631A		<b>Bridge Name:</b> I-5 OC, KING THOMPSON RD		<b>Route:</b> 5	<b>Milepost:</b> 207.77	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/662						<b>County:</b> Snohomish	
<b>Location:</b> 8.6 N JCT SR 528		<b>Longitude:</b> 122 11 30 "	<b>Latitude:</b> 48 10 36 "	<b>Structure Length:</b> 254 ft.		<b>Out to Out Width:</b> 37.4 ft.	
<b>Feature Intersected:</b> I-5		<b>PGA:</b> 25.25 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 2 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1970	<b>ADT:</b> 2310	<b>Detour Length:</b> 0 miles	<b>Skew Angle:</b> 15	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Timber pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 1 %						



**Bridge Notes:**

Pier 2 has two columns. Column section various, 2'-6" x 2'-6" at top of footing. 4'-5" x 4'-0" at bottom of X-beam. Vertical #11 bars have 4'-2" splices at top of footings. #4 ties @ 12". Footings have no top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit 2 columns at Pier 2. (Section vary, 30"x30" at bottom)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$83,935.50**

**Estimated Total Retrofit Project Cost: \$151,083.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008791A		<b>Bridge Name:</b> STILLAGUAMISH R		<b>Route:</b> 5	<b>Milepost:</b> 209.35	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/670E						<b>County:</b> Snohomish
<b>Location:</b> 0.7 N JCT SR 530		<b>Longitude:</b> 122° 12' 36" W	<b>Latitude:</b> 48° 11' 48" N	<b>Structure Length:</b> 661 ft.		<b>Out to Out Width:</b> 55 ft.
<b>Feature Intersected:</b> STILLAGUAMISH R		<b>PGA:</b> 25.25 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1971	<b>ADT:</b> 36500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 16	<b>Pier Type:</b> Pier Wall		<b>Footing Type:</b> Timber pile
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %					



**Bridge Notes:**

Piers 2, 3, and 4, each has a 4'-0" x 50'-6" pier wall, No retrofit recommended. Expansion rockers at Piers 2, 4 and 5 (4 ea, 12 total).

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Install restrainers and/or catcher blocks for bearings at Piers 2, 4 and 5.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$57,750.00**

**Estimated Total Retrofit Project Cost: \$103,950.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0001652A		<b>Bridge Name:</b> STILLAGUAMISH R		<b>Route:</b> 5	<b>Milepost:</b> 209.35	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/670W						<b>County:</b> Snohomish	
<b>Location:</b> 0.7 N JCT SR 530		<b>Longitude:</b> 122 12 36 " <small>o ' "</small>	<b>Latitude:</b> 48 11 48 " <small>o ' "</small>	<b>Structure Length:</b> 859 ft.		<b>Out to Out Width:</b> 49.1 ft.	
<b>Feature Intersected:</b> STILLAGUAMISH R		<b>PGA:</b> 25.25 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> ST CTB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 5	
<b>Year Built:</b> 1933	<b>ADT:</b> 36500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier Wall		<b>Footing Type:</b> Timber pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %						



**Bridge Notes:**

Piers 1, 2, 3 and 4 are 2 column piers with in-fill walls. No retrofit recommended. Bents 2, 3, and 4, each has four 20"x36" columns with partial height in-fill walls and horizontal struts. Retrofit portions of these columns above the in-fill walls.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Bridge built in 1933. No substructure retrofit recommended. Install longitudinal and transverse restrainers at bents 2, 3 and 4. Catchers for trusses at Piers 1, 2, 3 and 4.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 12

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$125,400.00**

**Estimated Total Retrofit Project Cost: \$225,720.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009130A		<b>Bridge Name:</b> I-5 OC, JACKSON		<b>Route:</b> 5	<b>Milepost:</b> 210.31	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/671						<b>County:</b> Snohomish
<b>Location:</b> 1.0 N JCT SR 530		<b>Longitude:</b> 122 12 54 "	<b>Latitude:</b> 48 12 36 "	<b>Structure Length:</b> 270 ft.		<b>Out to Out Width:</b> 41.4 ft.
<b>Feature Intersected:</b> I-5		<b>PGA:</b> 25.25 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 2 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1975	<b>ADT:</b> 12578	<b>Detour Length:</b> 0 miles	<b>Skew Angle:</b> 15	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %					



**Bridge Notes:**

Pier 2 has three 3'-0" x 4'-0" columns on spread footing. #4 hoops @ 12". Vertical #11 bars have 4'-2" lap splices at top of footing. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit 3 columns at pier 2. (36"x48")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$112,645.50**

**Estimated Total Retrofit Project Cost: \$202,761.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009130B		<b>Bridge Name:</b> PILCHUCK CR		<b>Route:</b> 5	<b>Milepost:</b> 210.6	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/672E						<b>County:</b> Snohomish	
<b>Location:</b> 2.0 N JCT SR 530		<b>Longitude:</b> 122° 13' 6"	<b>Latitude:</b> 48° 12' 48"	<b>Structure Length:</b> 306 ft.		<b>Out to Out Width:</b> 67 ft.	
<b>Feature Intersected:</b> PILCHUCK CR		<b>PGA:</b> 25.25 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1973	<b>ADT:</b> 38500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 30	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %						



No Photo Available

**Bridge Notes:**

Piers 2 and 3, each has four 3'-0" diameter columns. #4 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. 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.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 8

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

Estimated Total Bridge Item Cost: \$235,378.00

Estimated Total Retrofit Project Cost: \$423,680.40

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0005423A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/673E		SR 532/268TH ST NE OC		5	212.63	<b>County:</b> Snohomish	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
4.0 N JCT SR 530		122 14 24"	48 14 24"	135 ft.		56 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 3	
SR532/268TH ST NE		25.25 %g	C	CS		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1957	<b>ADT:</b> 38500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1971	<b>Truck Pct:</b> 15 %	0 miles	32	Pier with more than two columns			



**Bridge Notes:**

Piers 2 and 3, each has three 24" square columns. #3 hoops @ 12". Vertical #11 bars have 2'-0" lap splices at top of footing. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 24"x24")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$189,651.00**

**Estimated Total Retrofit Project Cost: \$341,371.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008879A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/673W		SR 532/268TH ST NE OC		5	212.63	<b>County:</b> Snohomish
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
4.0 N JCT SR 530		122 14 24"	48 14 24"	135 ft.		55 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 3	
SR 532 / 268TH ST NE		25.25 %g	C	CS	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 38500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %	0 miles	32	Pier with more than two columns		



**Bridge Notes:**

Piers 2 and 3, each has four 24" square columns. #4 hoops @ 12". Vertical #10 bars have 2'-11" lap splices at top of footing. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 24"x24")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$184,156.50**

**Estimated Total Retrofit Project Cost: \$331,481.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0005423B		<b>Bridge Name:</b> 300TH ST NW OC		<b>Route:</b> 5	<b>Milepost:</b> 215.04	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/674E						<b>County:</b> Snohomish	
<b>Location:</b> 2.6 N JCT SR 532		<b>Longitude:</b> 122 10 8.9 "	<b>Latitude:</b> 48 16 3.8 "	<b>Structure Length:</b> 119 ft.		<b>Out to Out Width:</b> 55.4 ft.	
<b>Feature Intersected:</b> FREEBORN RD		<b>PGA:</b> 24.49 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CS		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1957	<b>ADT:</b> 38500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 15	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1971	<b>Truck Pct:</b> 15 %						



**Bridge Notes:**

Piers 2 and 3, each has two 2'-3" square columns. #3 hoops @ 12". Vertical #11 bars have 2'-4" lap splices at top of footing. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 27"x27")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$168,982.00**

**Estimated Total Retrofit Project Cost: \$304,167.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008879B		<b>Bridge Name:</b> 300TH ST NW OC		<b>Route:</b> 5	<b>Milepost:</b> 215.02	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/674W						<b>County:</b> Snohomish
<b>Location:</b> 2.4 N JCT SR 532		<b>Longitude:</b> 122° 16' 8.9"	<b>Latitude:</b> 48° 16' 3.7"	<b>Structure Length:</b> 150 ft.		<b>Out to Out Width:</b> 55 ft.
<b>Feature Intersected:</b> FREEBORN RD		<b>PGA:</b> 25.22 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1971	<b>ADT:</b> 38500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 9	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %					



**Bridge Notes:**

Piers 2 and 3, each has three 2'-7" square columns. #4 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 31"x31")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$168,635.50**

**Estimated Total Retrofit Project Cost: \$303,543.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008879C		<b>Bridge Name:</b> DAWSON RD OC		<b>Route:</b> 5	<b>Milepost:</b> 216.75	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/675E						<b>County:</b> Snohomish
<b>Location:</b> 4.1 N JCT SR 532		<b>Longitude:</b> 122 17 24 "	<b>Latitude:</b> 48 17 18 "	<b>Structure Length:</b> 138 ft.		<b>Out to Out Width:</b> 54.4 ft.
<b>Feature Intersected:</b> DAWSON RD		<b>PGA:</b> 25.22 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CS		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1971	<b>ADT:</b> 28500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 12	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 15 %					



**Bridge Notes:**

Piers 2 and 3, each has three 2'-6" square columns, #4 hoops @ 12", Vertical #10 bars with 3'-9" lap splices at top of footings. Footings have no top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 30"x30")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$247,802.50**

**Estimated Total Retrofit Project Cost: \$446,044.50**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0005422A		<b>Bridge Name:</b> DAWSON RD OC		<b>Route:</b> 5	<b>Milepost:</b> 216.75	<b>Region:</b> Northwest
<b>Bridge Number:</b> 5/675W						<b>County:</b> Snohomish
<b>Location:</b> 4.3 N JCT SR 532		<b>Longitude:</b> 122 17 24 "	<b>Latitude:</b> 48 17 18 "	<b>Structure Length:</b> 119 ft.		<b>Out to Out Width:</b> 61 ft.
<b>Feature Intersected:</b> DAWSON RD		<b>PGA:</b> 25.22 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CS		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1957	<b>ADT:</b> 28500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>
<b>Year Rebuilt:</b> 1971	<b>Truck Pct:</b> 15 %					



**Bridge Notes:**

Piers 2 and 3, each has three 2'-3" square columns. 2 East columns have #3 hoops @ 12". vertical #11 bars have 2'-4" lap splices at top of footing. West column has #4 hoops @ 12". Vertical #9 bars have 3'-4" lap splices at top of footing. Footing without top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 27"x27")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$247,802.50**

**Estimated Total Retrofit Project Cost: \$446,044.50**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009260A		<b>Bridge Name:</b> I-5 OC, STARBIRD RD		<b>Route:</b> 5	<b>Milepost:</b> 218.54	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 5/701						<b>County:</b> Skagit	
<b>Location:</b> 0.8 N SNOHOMIS		<b>Longitude:</b> 122° 18' 54" "	<b>Latitude:</b> 48° 18' 30" "	<b>Structure Length:</b> 363 ft.		<b>Out to Out Width:</b> 41 ft.	
<b>Feature Intersected:</b> I-5		<b>PGA:</b> 25.22 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1972	<b>ADT:</b> 1270	<b>Detour Length:</b> 6 miles	<b>Skew Angle:</b> 20	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 1 %						



**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:**

**Completed Retrofit Notes:**

Longitudinal restrainers at Piers 2 and 4. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 1, 2 and 3. (3 ea. 9 total, 20"x36" at P1 & P2, 20"x42" at P3)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$284,086.00**

**Estimated Total Retrofit Project Cost: \$511,354.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007565P		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 90/10EB		I-5 OC		90	2.4	<b>County:</b> King
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
JCT I-5		122 19 6 "	47 35 30 "	1705 ft.		45 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 10	
I-5		33.77 %g	C	POBX CBOX	<b>Appr. Spans:</b> 9	
<b>Year Built:</b> 1966	<b>ADT:</b> 48000	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1991	<b>Truck Pct:</b> 25 %	3 miles	0	Double Column Pier	Drilled shaft	



**Bridge Notes:**

Double deck structure over I-5 NB and SB lanes. Bridge built in 1966, contract 7565. EB upper deck. WB lower deck. Piers 9 thru 14, each has two 4'-6" x 5'-0" columns on 7' dia. drilled shaft (except 8' at pier 9). #4 ties @12". Lap splices at top of shafts. Outrigger beams.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Bridges 90/10EB and 90/10WB are double deck. Retrofit columns at Piers 9-14 (2 ea. 12 total, 54" x 60") and outriggers (6 total).

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$1,705,962.50**

**Estimated Total Retrofit Project Cost: \$3,070,732.50**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007565C		<b>Bridge Name:</b> I-5 OC		<b>Route:</b> 90	<b>Milepost:</b> 2.39	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/10WB						<b>County:</b> King	
<b>Location:</b> JCT I-5		<b>Longitude:</b> 122 19 6 "	<b>Latitude:</b> 47 35 30 "	<b>Structure Length:</b> 1685 ft.		<b>Out to Out Width:</b> 36 ft.	
<b>Feature Intersected:</b> I-5		<b>PGA:</b> 33.77 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> POBX CBOX		<b>Main Spans:</b> 7 <b>Appr. Spans:</b> 10	
<b>Year Built:</b> 1966	<b>ADT:</b> 48000	<b>Detour Length:</b> 0 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Double Column Pier	<b>Footing Type:</b> Drilled shaft		
<b>Year Rebuilt:</b> 1991	<b>Truck Pct:</b> 25 %						



No Photo Available

**Bridge Notes:**

Double deck structure over I-5 NB and SB lanes. Bridge built in 1966, contract 7565. EB upper deck. WB lower deck. Piers 9 thru 14, each has two 4'-6" x 5'-0" columns on 7' dia. drilled shaft (except 8' at pier 9). #4 ties @12". Lap splices at top of shafts. Outrigger beams.

**Retrofit Program Notes:**

Double deck structure over I-5 NB and SB lanes. Bridge built in 1966, contract 7565. EB upper deck. WB lower deck.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Combine with bridge 90/10EB (Double deck).

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

Estimated Total Bridge Item Cost: \$1,705,962.50

Estimated Total Retrofit Project Cost: \$3,070,732.50

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008155F		<b>Bridge Name:</b> 12TH AVE S UC		<b>Route:</b> 90	<b>Milepost:</b> 2.61	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/15						<b>County:</b> King	
<b>Location:</b> 0.2 E JCT I-5		<b>Longitude:</b> 122° 18' 48"	<b>Latitude:</b> 47° 35' 42"	<b>Structure Length:</b> 366 ft.		<b>Out to Out Width:</b> 65 ft.	
<b>Feature Intersected:</b> I-90		<b>PGA:</b> 33.77 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 4500	<b>Detour Length:</b> 99 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Drilled shaft	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 1 %						



**Bridge Notes:**

Complete set of plans were not available. Based on review of Bridge Plan and Profile sheet, photographs, inspection report, and telephone conversation with Gary Battin the bridge has (3) piers with (2) columns each that require retrofitting (6) columns total. The columns are 4'-6" square.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Transverse Restrainers (Brackets) at Pier1. Longitudinal Rod restrainers and Transverse Restrainers (Brackets) at Pier4. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Complete set of plans were not available. Based on review of Bridge Plan and Profile sheet, photographs, inspection report, and telephone conversation with Gary Battin the bridge has (3) piers with (2) columns each that require retrofitting (6) columns total. The columns are 4'-6" square.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$609,053.50**

**Estimated Total Retrofit Project Cost: \$1,096,296.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0011490A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 90/40N		EAST CHANNEL-LK WASH		90	8.48	<b>County:</b> King
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
5.9 E JCT I-5		° ' "	° ' "	2224 ft.		91.9 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 9	
EAST CHANNEL-LK WASH		32.51 %g	C	SBOX	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1981	<b>ADT:</b> 67000	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 25 %	1 miles	99			



**Bridge Notes:**

Retrofit columns built in 1971. ( two s. columns at pier 2, four each at piers 3 thru 8, one S. column at pier 9). No plan for columns at pier 2. Columns at piers 3 thru 9 are 8'-0" square columns. #4 ties @12".

**Retrofit Program Notes:**

Replace bearings with isolation bearings.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Replace bearings with isolation bearings.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$1,276,000.00**

**Estimated Total Retrofit Project Cost: \$2,296,800.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008610C		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 90/43ECD		EBCD MERCER SL BR		90	9.24	<b>County:</b> King
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
6.6 E JCT I-5		° ' "	° ' "	1723 ft.		51 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 42	
MERCER SLOUGH		32.51 %g	C	CS	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1970	<b>ADT:</b> 23500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1993	<b>Truck Pct:</b> 5 %	1 miles	99	Double Column Pier	Steel pile	



No Photo Available

**Bridge Notes:**

Piers 1 thru 7, each has four columns. Piers 8 thru 21, each has three columns. Retrofit two north columns for each pier. Pier 2 has two columns. Piers 23 thru 27, each has four columns. Piers 28 thru 36, each has three columns. Piers 37 thru 41, each has four columns. All columns are 3'-0" diameter on pile footings. #4 ties @ 12". Vertical #11 bars have no splice at piers 3 thru 24. Footings have no top mat. Connects to bridges 90/43S and 90/43S-C.

**Retrofit Program Notes:**

Verify column size at piers 23-31.

**Completed Retrofit Notes:**

Longitudinal and Transverse Rod Restrainers At in-span Hinges Near Piers 4, 9, 14, 18, 22, 27, 31 & 35. (HOV)

**Remaining Retrofit Notes:**

Retrofit columns at piers 1 thru 41, (111 total, 3' dia. except 32 columns at P23-P31 are 3'-6" dia. (verify))

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 95

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

Estimated Total Bridge Item Cost: \$1,528,785.50

Estimated Total Retrofit Project Cost: \$2,751,813.90

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008610B		<b>Bridge Name:</b> MERCER SL		<b>Route:</b> 90	<b>Milepost:</b> 9.24	<b>Region:</b> Northwest
<b>Bridge Number:</b> 90/43N						<b>County:</b> King
<b>Location:</b> 6.7 E JCT I-5		<b>Longitude:</b> 122 11 12 "	<b>Latitude:</b> 47 34 48 "	<b>Structure Length:</b> 2812 ft.		<b>Out to Out Width:</b> 65 ft.
<b>Feature Intersected:</b> MERCER SL		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX CTB		<b>Main Spans:</b> 8 <b>Appr. Spans:</b> 75
<b>Year Built:</b> 1940	<b>ADT:</b> 131000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 17	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Spread footing
<b>Year Rebuilt:</b> 1970	<b>Truck Pct:</b> 25 %					



No Photo Available

**Bridge Notes:**

Piers 1 thru 4, each has three 4' dia. column on spread footings. Piers 5 and 5A, each has three 4' dia. column on pile footings. Pier 6 has six 20"x 2'-11" columns. Piers 7 thru 18, each has seven 20"x20" columns. Piers 19 thru 21, each has eight 20"x20" columns. Piers 22 thru 46, each has five 20"x20" columns. Piers 47 and 48, each has eight 20"x20" columns. Piers 49 thru 55, each has seven 20"x20" columns. Piers 56 and 57, each has six 20"x20" columns. Piers 58 thru 75, each has five 20"x20" columns. Piers 76 thru 78, each has five 2'-6"x3'-0" columns. Pier 79 has four 2'-6"x3'-0" columns and a 4' diameter column. Horizontal struts at

**Retrofit Program Notes:**

Retrofit columns at piers 1 thru 79. (444 total, size vary includes 19-4' dia. columns, 6-20"x35", 19-30"x36", others 20"x20").

**Completed Retrofit Notes:**

Brg. seat extension at West Abut. Longitudinal Restrainers and Transverse Pipe Restrainers At in-span Hinges Near Piers 4 and at Piers 6, 10, 14, 18,22, 26, 30,34,38,42,46,50, 54, 58, 62,66 & 70. (HOV)

**Remaining Retrofit Notes:**

**All Bridge Retrofit Status:** P  
**Special Br Retrofit Status:**  
**Superstr Retrofit Status:** C  
**Substr Group 3 Status:** N  
**Substr Group 4 Status:** R

C=Complete P=Partially Complet  
R=Required N=Not Required  
D=Differed X=Excluded I=In Progress

**Total Number of Columns:**  
**No. of Wet Retrofitted Columns:** 414  
**Isolation Bearing Candidate:**   
**Bridge Requires Further Evaluation:**

**07-09 Rank:**  
**2005-07 CN Funding:** 0  
**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$5,067,364.50**  
**Estimated Total Retrofit Project Cost: \$9,121,256.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008610A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/43S		MERCER SL		90	9.24	<b>County:</b> King	
<b>Location:</b> 6.6 E JCT I-5		<b>Longitude:</b> ° ' "	<b>Latitude:</b> ° ' "	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
		122 11 12	47 34 48	2669 ft.		75.5 ft.	
<b>Feature Intersected:</b> MERCER SL		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX CS		<b>Main Spans:</b> 4	
						<b>Appr. Spans:</b> 57	
<b>Year Built:</b> 1970	<b>ADT:</b> 65500	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1993	<b>Truck Pct:</b> 5 %	1 miles	99	Pier with more than two columns		Steel pile	



**Bridge Notes:**

Pier 1 has three 4' dia. columns on spread footings. Piers 2 thru 4, each has three 4' dia. columns on pile footings. Piers 5 thru 9, each has five 3' dia. columns on pile footings. Piers 10 thru 17, each has eight 3' dia. columns on pile footings ( two s. columns built in 1993). Piers 18 thru 37, each has four 3' dia. columns on pile footings. Piers 38 and 39, each has six 3' dia. columns on pile footings. Piers 40 thru 56, each has five 3' dia. columns on pile footings. Piers 57 thru 60, each has six 3' dia. columns on pile footings. #4 @ 12". Vertical bars have lap splices at either top of pedestals or footings. Footings have no top mat. West abutment

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Restrainers and Transverse Pipe Restrainers At in-span Hinges Near Piers 4 and at Piers 9, 13, 17, 21,25, 29, 33,37,41,45,49 & 54. (HOV)

**Remaining Retrofit Notes:**

Retrofit columns at piers 1 thru 60. (286 total, 3'-dia. except 12-4' dia. at P1-P4)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 272

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$4,373,974.00**

**Estimated Total Retrofit Project Cost: \$7,873,153.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008610D		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 90/43WCD		WBCD MERCER SL BR		90	9.24	<b>County:</b> King
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
6.2 E JCT SR 900		122 10 54 "	47 34 48 "	1871 ft.		36.5 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 43	
MERCER SLOUGH		32.51 %g	C	CS	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1970	<b>ADT:</b> 25899	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %	1 miles	9	Pier with more than two columns	Steel pile	



**Bridge Notes:**

Piers 1 thru 10, each has two 3' dia. column on pile footing. Piers 11 thru 18 and 22 thru 43, each has three 3' dia. column on pile footing. Piers 19, 20 and 21, each has four 3' dia. column on pile footing. #4 @ 12". No top mat. Column vertical #11 bars have no splices.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod restrainers at in-span hinge near Piers 5, 10, 14, 18, 23, 27, 32, 36 & 40. (South King County Bridges Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at piers 1 thru 43. (122 total, 3' dia.).

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 116

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$1,434,807.00**

**Estimated Total Retrofit Project Cost: \$2,582,652.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008190C		<b>Bridge Name:</b> W-N RAMP R-W RAMP OC		<b>Route:</b> 90	<b>Milepost:</b> 9.88	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/48W-N						<b>County:</b> King	
<b>Location:</b> 0.1 E JCT I-405		<b>Longitude:</b> 122 10 12 "	<b>Latitude:</b> 47 34 54 "	<b>Structure Length:</b> 210 ft.		<b>Out to Out Width:</b> 26.3 ft.	
<b>Feature Intersected:</b> W-N RAMP R-W RAMP		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 15782	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 53	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Spread footing	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns on spread footings. Columns have #4 hoops @ 12". Vertical #10 bars have lap splices at top of footings. Footings have no top mats. Piers 1 and 4 are "L" abutments. Four laminated elastomeric bearing pads per abutment.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$82,104.00**

**Estimated Total Retrofit Project Cost: \$147,787.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0002577A		<b>Bridge Name:</b> RICHARDS RD OC		<b>Route:</b> 90	<b>Milepost:</b> 9.88	<b>Region:</b> Northwest
<b>Bridge Number:</b> 90/50N						<b>County:</b> King
<b>Location:</b> 0.2 E JCT I-405		<b>Longitude:</b> 122 10 6 "	<b>Latitude:</b> 47 34 48 "	<b>Structure Length:</b> 200 ft.		<b>Out to Out Width:</b> 71 ft.
<b>Feature Intersected:</b> RICHARDS RD		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CTB		<b>Main Spans:</b> 5 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1940	<b>ADT:</b> 24074	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns	<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b> 1968	<b>Truck Pct:</b> 24 %					



**Bridge Notes:**

Piers 2 and 3, each has six 1'-8"x3'-0" columns on combined pile footing. 1/4" square bar hoops @ 12", vertical 1" square bars with splices at top of footing. Footings have top mat. Piers have horizontal struts. Piers 1 and 4 are buried in ground. Each has six 1'-8"x3'-0" columns on combined pile footing.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (6 ea. 12 total, 20"x36")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$542,091.00**

**Estimated Total Retrofit Project Cost: \$975,763.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008190A		<b>Bridge Name:</b> RICHARDS RD OC		<b>Route:</b> 90	<b>Milepost:</b> 9.88	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/50S						<b>County:</b> King	
<b>Location:</b> 0.2 E JCT I-405		<b>Longitude:</b> 122 10 6 "	<b>Latitude:</b> 47 34 48 "	<b>Structure Length:</b> 214 ft.		<b>Out to Out Width:</b> 9.5 ft.	
<b>Feature Intersected:</b> RICHARDS RD		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 24074	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 24 %						



**Bridge Notes:**

Piers 2 and 3, each has five 3'-0" diameter columns on pile footings. Columns have #4 hoops @ 12". Vertical #10 bars have lap splices at top of footings. Footings have no top mat. Piers 1 and 4 are "L" abutments with laminated elastomeric bearing pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$309,485.00**

**Estimated Total Retrofit Project Cost: \$557,073.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008190D		<b>Bridge Name:</b> W-S RAMP RICHARD RD OC		<b>Route:</b> 90	<b>Milepost:</b> 9.88	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/50W-S						<b>County:</b> King	
<b>Location:</b> 0.2 E JCT I-405		<b>Longitude:</b> 122 10 6 "	<b>Latitude:</b> 47 34 48 "	<b>Structure Length:</b> 184 ft.		<b>Out to Out Width:</b> 35 ft.	
<b>Feature Intersected:</b> W-S RAMP RICHARD RD		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1969	<b>ADT:</b> 32225	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns on pile footings. Columns have #4 hoops @ 12". Vertical #10 bars have lap splices at top of footings. Footings have no top mat. Piers 1 and 4 are "L" abutments with laminated elastomeric bearing pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$105,330.50**

**Estimated Total Retrofit Project Cost: \$189,594.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009893A		<b>Bridge Name:</b> 142ND AVE UC		<b>Route:</b> 90	<b>Milepost:</b> 11	<b>Region:</b> Northwest
<b>Bridge Number:</b> 90/52						<b>County:</b> King
<b>Location:</b> 1.2 E JCT I-405		<b>Longitude:</b> 122° 8' 54"	<b>Latitude:</b> 47° 34' 48"	<b>Structure Length:</b> 1012 ft.		<b>Out to Out Width:</b> 41.6 ft.
<b>Feature Intersected:</b> I-90		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SB		<b>Main Spans:</b> 5 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1976	<b>ADT:</b> 1250	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Single Column Pier		<b>Footing Type:</b> Spread footing
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %					



**Bridge Notes:**

Piers 2 thru 5, each has a 10'-0"x4'-0" column on spread footing. #4 hoops and 8 #4 ties @ 6". Footings have top mat. Vertical #11 bars at piers 2 and 5 have 6'-8" lap splices at top of footings. Vertical #18 bars at piers 3 and 4 have no splices.

**Retrofit Program Notes:**

May not need retrofit.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Install Column Jacket at Piers 2, 3, 4 and 5. Excavate to top of footing or pedestal. (A09051P). May not need retrofit.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** R

**Substr Group 4 Status:** N

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$428,268.50**

**Estimated Total Retrofit Project Cost: \$770,883.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009134B		<b>Bridge Name:</b> I-90 OC, 150TH AVE		<b>Route:</b> 90	<b>Milepost:</b> 11.54	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/54E						<b>County:</b> King	
<b>Location:</b> 1.7 E JCT I-405		<b>Longitude:</b> 122° 8' 24"	<b>Latitude:</b> 47° 34' 48"	<b>Structure Length:</b> 403 ft.		<b>Out to Out Width:</b> 51.3 ft.	
<b>Feature Intersected:</b> I-90		<b>PGA:</b> 30.79 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SB		<b>Main Spans:</b> 2 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1973	<b>ADT:</b> 6822	<b>Detour Length:</b> 0 miles	<b>Skew Angle:</b> 2	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Spread footing	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Pier 2 has two columns. Column section various, Column 1 has 3'-4 1/2"x 4'-6" at top of pedestal. 5'-0"x 4'-6" at bottom of X-beam. Column 2 has 3'-2 1/4"x 4'-6" at top of pedestal. 5'-0"x 4'-6" at bottom of X-beam. Vertical #11 bars lap splice to #14 dowels with 7'-10" splices. 4 #5 hoops and ties @6". Footing has top mat. Piers 1 and 3, each has five rocker bearings.

**Retrofit Program Notes:**

Good candidate for isolation bearings.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit 2 columns at pier 2. (Column section vary, avg. 64"x77".) Install catcher blocks and restrainers.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$205,205.00**

**Estimated Total Retrofit Project Cost: \$369,369.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009446A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/54PS		S EASTGATE PEDESTRIAN UC		90	11.54	<b>County:</b> King	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
1.7 N JCT I-405		122 8 24"	47 34 42"	266 ft.		10 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 4	
I-90 RAMP		30.79 %g	C	CTB		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1973	<b>ADT:</b> 9536	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 7 %	0 miles	0	Single Column Pier		Spread footing	



**Bridge Notes:**

Single column at Piers 2, 3 and 5. Columns have architecture features. #4 hoops and ties @ 12". Vertical #9 bars have 5'-0" min. lap splices at top of pedestals. Footings have top mats. End piers are stub abutments.

**Retrofit Program Notes:**

Bridge is over ramps. Column jacket will change the appearance of bridge, may not be a feasible solution. Old Bridge Number: 90/54E-S.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Install Column Jacket at Piers 2, 3 and 4. Excavate to top of pedestal. (A09051P)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** R

**Substr Group 4 Status:** N

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$157,036.00**

**Estimated Total Retrofit Project Cost: \$282,664.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009134A		<b>Bridge Name:</b> I-90 OC, 150TH AVE		<b>Route:</b> 90	<b>Milepost:</b> 11.54	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/54W						<b>County:</b> King	
<b>Location:</b> 1.7 E JCT I-405		<b>Longitude:</b> 122 8 24 "	<b>Latitude:</b> 47 34 48 "	<b>Structure Length:</b> 404 ft.		<b>Out to Out Width:</b> 61.9 ft.	
<b>Feature Intersected:</b> I-90		<b>PGA:</b> 30.79 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SB		<b>Main Spans:</b> 2 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1973	<b>ADT:</b> 6822	<b>Detour Length:</b> 0 miles	<b>Skew Angle:</b> 4	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Spread footing	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



No Photo Available

**Bridge Notes:**

Pier 2 has two columns. Column section various, Column 1 has 3'-4 1/2"x 4'-6" at top of pedestal. 5'-0"x 4'-6" at bottom of X-beam. Column 2 has 3'-2 1/4"x 4'-6" at top of pedestal. 5'-0"x 4'-6" at bottom of X-beam. Vertical #11 bars lap splice to #14 dowels with 7'-10" splices. 4 #5 hoops and ties @6". Footing has top mat. Piers 1 and 3, each has five rocker bearings.

**Retrofit Program Notes:**

Good candidate for isolation bearings.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit 2 columns at pier 2. (Column section vary, avg. 64"x77".) Install catcher blocks and restrainers.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

Estimated Total Bridge Item Cost: \$217,288.50

Estimated Total Retrofit Project Cost: \$391,119.30

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009446C		<b>Bridge Name:</b> PEDESTRIAN UC		<b>Route:</b> 90	<b>Milepost:</b> 13.11	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/56P						<b>County:</b> King	
<b>Location:</b> 3.3 E JCT I-405		<b>Longitude:</b> 122 6 36 "	<b>Latitude:</b> 47 34 18 "	<b>Structure Length:</b> 413 ft.		<b>Out to Out Width:</b> 10 ft.	
<b>Feature Intersected:</b> I-90		<b>PGA:</b> 30.79 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> POTB CTB CS		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 2	
<b>Year Built:</b> 1973	<b>ADT:</b> 81252	<b>Detour Length:</b> 0 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Single Column Pier		<b>Footing Type:</b> Spread footing	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 7 %						



**Bridge Notes:**

Single column at piers 2 thru 6. Column section various. Split to two columns at top. 5'-7 1/4" x 3'-8" at bottom of split. 16 1/2: 1 batters transversely. #4 ties and hoops @ 6". Vertical bars have lap splices at top of pedestals.

**Retrofit Program Notes:**

Consider partial height retrofit to reduce the impact to appearance of architecture feature.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Install Column Jacket at Piers 2, 3, 4, 5 and 6. Excavate to top of pedestal. (A09051P)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** R

**Substr Group 4 Status:** N

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$304,001.50**

**Estimated Total Retrofit Project Cost: \$547,202.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009133C		<b>Bridge Name:</b> W LAKE SAMMAMISH PKWY OC		<b>Route:</b> 90	<b>Milepost:</b> 13.68	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/59E-N						<b>County:</b> King	
<b>Location:</b> 3.7 E JCT I-405		<b>Longitude:</b> 122 5 54 "	<b>Latitude:</b> 47 34 0 "	<b>Structure Length:</b> 363 ft.		<b>Out to Out Width:</b> 29.5 ft.	
<b>Feature Intersected:</b> W LAKE SAMMAMISH PKWY		<b>PGA:</b> 30.79 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1972	<b>ADT:</b> 2926	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 45	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Spread footing	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



No Photo Available

**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has two columns on spread footings. Column section various, 7'-0" x 3'-6" at bottom of X-beam. 12:1 batters. #4 hoops & ties @ 6". Vertical #11 bars have 5'-6" lap splices at top of footings. Footing has top mat. End piers are "L" abutments.

**Retrofit Program Notes:**

Recommend replacing bearings with isolation bearings for this steel girder bridge.

**Completed Retrofit Notes:**

Longitudinal restrainers (connecting two spans with steel plates) at in-span hinges span 2 nears Piers 2 & 3. Stiffener retrofits. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, columns section vary, 7'x3'-6" at top). 8.5' excavation.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** P

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

Estimated Total Bridge Item Cost: \$306,080.50

Estimated Total Retrofit Project Cost: \$550,944.90

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009133B		<b>Bridge Name:</b> W LAKE SAMMAMISH PKWY OC		<b>Route:</b> 90	<b>Milepost:</b> 13.68	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/59N						<b>County:</b> King	
<b>Location:</b> 3.7 E JCT I-405		<b>Longitude:</b> 122 5 54 "	<b>Latitude:</b> 47 34 0 "	<b>Structure Length:</b> 344 ft.		<b>Out to Out Width:</b> 71.5 ft.	
<b>Feature Intersected:</b> W LAKE SAMMAMISH PKWY		<b>PGA:</b> 30.79 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1972	<b>ADT:</b> 36370	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 45	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Spread footing	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 24 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four columns on spread footings. Column section various, 7'-0" x 3'-6" at bottom of X-beam. 12:1 batters. #4 hoops & ties @ 6". Vertical #11 bars have 5'-6" lap splices at top of footings. Footing has top mat. End piers are "L" abutments.

**Retrofit Program Notes:**

Recommend replacing bearings with isolation bearings for this steel girder bridge.

**Completed Retrofit Notes:**

Longitudinal restrainers (connecting two spans with steel plates) at in-span hinges span 2 nears Piers 2 & 3. Stiffener retrofits. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at piers 2 and 3. (8 ea. 8 total, column sections vary, 7'x3'-6" at top).

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** P

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$521,944.50**

**Estimated Total Retrofit Project Cost: \$939,500.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009133A		<b>Bridge Name:</b> W LAKE SAMMAMISH PKWY OC		<b>Route:</b> 90	<b>Milepost:</b> 13.68	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/59S						<b>County:</b> King	
<b>Location:</b> 3.7 E JCT I-405		<b>Longitude:</b> 122 5 54 "	<b>Latitude:</b> 47 34 0 "	<b>Structure Length:</b> 360 ft.		<b>Out to Out Width:</b> 71.5 ft.	
<b>Feature Intersected:</b> W LAKE SAMMAMISH PKWY		<b>PGA:</b> 30.79 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1972	<b>ADT:</b> 37500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 45	<b>Pier Type:</b> Pier with more than two columns	<b>Footing Type:</b> Spread footing		
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 24 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four columns on spread footings. Column section various, 7'-0" x 3'-6" at bottom of X-beam. 12:1 batters. #4 hoops & ties @ 6". Vertical #11 bars have 5'-6" lap splices at top of footings. Footing has top mat. End piers are "L" abutments.

**Retrofit Program Notes:**

Recommend replacing bearings with isolation bearings for this steel girder bridge.

**Completed Retrofit Notes:**

Longitudinal restrainers (connecting two spans with steel plates) at in-span hinges span 2 nears Piers 2 & 3. Stiffener retrofits. (Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at piers 2 and 3. (8 ea. 8 total, column sections vary, 7'x3'-6" at top).

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** P

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$570,009.00**

**Estimated Total Retrofit Project Cost: \$1,026,016.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008573D		<b>Bridge Name:</b> BN RR OC (NP)		<b>Route:</b> 90	<b>Milepost:</b> 16.92	<b>Region:</b> Northwest
<b>Bridge Number:</b> 90/65N						<b>County:</b> King
<b>Location:</b> 1.0 E JCT SR 900		<b>Longitude:</b> 122 2 24	<b>Latitude:</b> 47 32 36	<b>Structure Length:</b> 416 ft.		<b>Out to Out Width:</b> 52 ft.
<b>Feature Intersected:</b> 221 ST (BNRY ABANDONED)		<b>PGA:</b> 28.44 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1971	<b>ADT:</b> 25255	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 99	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Steel pile
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 24 %					



**Bridge Notes:**

This bridge was damaged by 2001 Nisqually Eq. Piers 2 and 4, each has three 4'-0" diameter columns on pile footings. #4 hoops @ 12". Vertical #11 bars with 4'-2" lap splices at top of footing. Footing without top mat. Pier 3 has three 4'-0" diameter columns on pile footings. #4 hoops @ 12". Collision wall between columns. Piers 1 and 5 are "L" abutments with laminated elastomeric pads.

**Retrofit Program Notes:**

Retrofit columns at Piers 2, 3, 4 and 5 (18 total, 4' dia.). Retrofit to top of collision wall at Pier 3 and 4. NP Tracks have been Removed.

The Prestressed Girders were damaged by 2001 Nisqually Eq. and repaired in 2002 under contract 6398.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

**All Bridge Retrofit Status:** R  
**Special Br Retrofit Status:**  
**Superstr Retrofit Status:** N  
**Substr Group 3 Status:** N  
**Substr Group 4 Status:** R

**Total Number of Columns:**  
**No. of Wet Retrofitted Columns:**  
**Isolation Bearing Candidate:**   
**Bridge Requires Further Evaluation:**

**07-09 Rank:**  
**2005-07 CN Funding:** 0  
**2005 New Revenue Funding Category:** M

C=Complete P=Partially Complet  
R=Required N=Not Required  
D=Differed X=Excluded I=In Progress

**Estimated Total Bridge Item Cost: \$238,254.50**  
**Estimated Total Retrofit Project Cost: \$428,858.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008573C		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 90/65S		221 ST OC		90	16.92	<b>County:</b> King
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
1.0 E JCT SR 900		122 2 24"	47 32 36"	435 ft.		75.1 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 5	
221 ST (BNRY ABANDONED)		28.44 %g	C	PCB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 25255	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 24 %	1 miles	99	Pier with more than two columns	Steel pile	



**Bridge Notes:**

Piers 2 and 5, each has four 4'-0" diameter columns on pile footings. #4 hoops @ 12". Vertical #11 bars with 4'-2" lap splices at top of footing. Footing without top mat. Piers 3 and 4, each has five 4'-0" diameter columns on pile footings. #4 hoops @ 12". Collision wall between columns. Piers 1 and 6 are "L" abutments with laminated elastomeric pads.

**Retrofit Program Notes:**

Retrofit columns at Piers 2, 3, 4 and 5 (18 total, 4' dia.). Retrofit to top of collision wall at Pier 3 and 4. NP Tracks have been Removed.

The Prestressed Girders were damaged by 2001 Nisqually Eq. and repaired in 2002 under contract 6398.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

**All Bridge Retrofit Status:** R  
**Special Br Retrofit Status:**  
**Superstr Retrofit Status:** N  
**Substr Group 3 Status:** N  
**Substr Group 4 Status:** R

**Total Number of Columns:**  
**No. of Wet Retrofitted Columns:**  
**Isolation Bearing Candidate:**   
**Bridge Requires Further Evaluation:**

**07-09 Rank:**  
**2005-07 CN Funding:** 0  
**2005 New Revenue Funding Category:** M

C=Complete P=Partially Complet  
R=Required N=Not Required  
D=Differed X=Excluded I=In Progress

**Estimated Total Bridge Item Cost: \$370,320.50**  
**Estimated Total Retrofit Project Cost: \$666,576.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008573F		<b>Bridge Name:</b> FRONT STREET OC		<b>Route:</b> 90	<b>Milepost:</b> 17.12	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/66N						<b>County:</b> King	
<b>Location:</b> 1.3 E JCT SR 900		<b>Longitude:</b> 122 2 6 "	<b>Latitude:</b> 47 32 24 "	<b>Structure Length:</b> 230 ft.		<b>Out to Out Width:</b> 64.7 ft.	
<b>Feature Intersected:</b> FRONT STREET		<b>PGA:</b> 28.44 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 12521	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 30	<b>Pier Type:</b> Pier with more than two columns	<b>Footing Type:</b> Steel pile		
<b>Year Rebuilt:</b> 2001	<b>Truck Pct:</b> 24 %						



**Bridge Notes:**

Piers 2 and 3, each has three 3'-0" diameter columns on pile footings. #3 hoops @ 12". Vertical #11 bars with 4'-2" lap splices at top of footings. Footings with top mat. Piers 1 and 4 are "L" abutments with laminated elastomeric pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$137,280.00**

**Estimated Total Retrofit Project Cost: \$247,104.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008573E		<b>Bridge Name:</b> FRONT ST N OC		<b>Route:</b> 90	<b>Milepost:</b> 17.12	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/66S						<b>County:</b> King	
<b>Location:</b> 1.3 E JCT SR 900		<b>Longitude:</b> 122 2 6 "	<b>Latitude:</b> 47 32 24 "	<b>Structure Length:</b> 226 ft.		<b>Out to Out Width:</b> 55.4 ft.	
<b>Feature Intersected:</b> FRONT ST N		<b>PGA:</b> 28.44 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 12521	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 36	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Steel pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 24 %						



**Bridge Notes:**

Piers 2 and 3, each has three 3'-0" diameter columns on pile footings. #3 hoops @ 12". Vertical #11 bars with 4'-2" lap splices at top of footings. Footings with top mat. Piers 1 and 4 are "L" abutments with laminated elastomeric pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$128,738.50**

**Estimated Total Retrofit Project Cost: \$231,729.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009973C		<b>Bridge Name:</b> E FK ISSAQUAH CR		<b>Route:</b> 90	<b>Milepost:</b> 18.66	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/72N						<b>County:</b> King	
<b>Location:</b> 2.9 E JCT SR 900		<b>Longitude:</b> 122 0 24 "	<b>Latitude:</b> 47 32 12 "	<b>Structure Length:</b> 544 ft.		<b>Out to Out Width:</b> 54.5 ft.	
<b>Feature Intersected:</b> E FK ISSAQUAH CR		<b>PGA:</b> 28.44 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 6 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1976	<b>ADT:</b> 18024	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Drilled shaft	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 24 %						



No Photo Available

**Bridge Notes:**

Piers 2 thru 5, each has two 4'-0" diameter columns on 6'-0" diameter drilled shafts. #4 hoops spaced at 6" spacing. Vertical #11 bars with 7'-10" lap splices above top of shafts. Pier 6 has two 4'-0" diameter columns. North column is on spread footing. South column is on rock. #4 hoops spaced at 6" spacing. Footing has top mat. Piers 1 and 7 are abutments with laminated elastomeric pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at piers 2, 3, 4, 5 and 6. (2 ea. 10 total, 4' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:** 10

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

Estimated Total Bridge Item Cost: \$232,507.00

Estimated Total Retrofit Project Cost: \$418,512.60

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009732A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 90/78S		SR 18 OC		90	25.54	<b>County:</b> King	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
9.7 E JCT SR 900		121 52 54 "	47 30 30 "	208 ft.		71 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 3	
SR 18		27.22 %g	C	PCB		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1975	<b>ADT:</b> 15675	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 24 %	1 miles	22	Pier with more than two columns		Spread footing	



**Bridge Notes:**

Piers 2 and 3, each has four 3'-0" diameter columns. #4 hoops @ 6". Vertical #11 bars without splice. Footing with top mat. Piers 1 and 4 are stub abutments with laminated elastomeric pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at piers 2 and 3. (4 ea. 8 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$163,922.00**

**Estimated Total Retrofit Project Cost: \$295,059.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009900B		<b>Bridge Name:</b> GAME CROSSING		<b>Route:</b> 90	<b>Milepost:</b> 26.87	<b>Region:</b> Northwest
<b>Bridge Number:</b> 90/79N						<b>County:</b> King
<b>Location:</b> 1.3 E JCT SR 18		<b>Longitude:</b> ° ' " 121 51 18	<b>Latitude:</b> ° ' " 47 30 42	<b>Structure Length:</b> 80 ft.		<b>Out to Out Width:</b> 86 ft.
<b>Feature Intersected:</b> GAME CROSSING		<b>PGA:</b> 27.22 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CS		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1976	<b>ADT:</b> 23062	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Spread footing
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 24 %					



**Bridge Notes:**

Piers 2 and 3, each has four 3'-0" diameter columns on spread footings. #4 hoops @ 6". Vertical #9 bars with 5'-0" lap splices at top of footings. Footings have top mats. Piers 1 and 4 are stub abutments with bearings pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$189,629.00**

**Estimated Total Retrofit Project Cost: \$341,332.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009900A		<b>Bridge Name:</b> GAME CROSSING		<b>Route:</b> 90	<b>Milepost:</b> 26.87	<b>Region:</b> Northwest
<b>Bridge Number:</b> 90/79S						<b>County:</b> King
<b>Location:</b> 1.3 E JCT SR 18		<b>Longitude:</b> ° ' " 121 51 18	<b>Latitude:</b> ° ' " 47 30 42	<b>Structure Length:</b> 80 ft.		<b>Out to Out Width:</b> 55 ft.
<b>Feature Intersected:</b> GAME CROSSING		<b>PGA:</b> 27.22 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CS		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1976	<b>ADT:</b> 23062	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns	<b>Footing Type:</b> Spread footing	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 24 %					



**Bridge Notes:**

Piers 2 and 3, each has three 3'-0" diameter columns on spread footings. #4 hoops @ 6". Vertical #9 bars with 5'-0" lap splices at top of footings. Footings have top mats. Piers 1 and 4 are pile cap 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.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** M

**Estimated Total Bridge Item Cost: \$139,529.50**

**Estimated Total Retrofit Project Cost: \$251,153.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007046A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 99/500		SR 518 OC RIVERTON HTS		99	20.38	<b>County:</b> King
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
4.9 N JCT SR 516		122 17 21.4	47 27 51.1	324 ft.		77 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 4	
SR 518 RIVERTON HTS		33.11 %g	C	PCB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1962	<b>ADT:</b> 34621	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1971	<b>Truck Pct:</b> 10 %	2 miles	12	Pier with more than two columns		



**Bridge Notes:**

Pier 2, built in 1971, has six 3'-0" diameter columns on spread footings. #4 hoops spaced at 12" spacing. Vertical #9 bars have 3'-4" min. lap splices at top of footings. Footing without top mat.  
Piers 3 and 4, built in 1962, each has six 3'-0" diameter columns on pile footings. #3 hoops spaced at 12" spacing. Vertical #9 bars have 3'-4" min. lap splices at top of footings. 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. (6 ea. 18 total, 3' dia.).

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$447,887.00**

**Estimated Total Retrofit Project Cost: \$806,196.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007967D		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 99/507S-S		PACIFIC HWY OC		99	22.94	<b>County:</b> King
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
1.8 N JCT I-5		° ' "	° ' "	236 ft.		41.6 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 3	
PACIFIC HWY		33.11 %g	C	PCB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 16961	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 10 %	1 miles	37	Pier with more than two columns	Concrete Pile	



No Photo Available

**Bridge Notes:**

Intermediate Piers 2 and 3, each has three 3'-0" diameter columns on pile footings. These columns have #4 hoops @ 12". Vertical #11 bars have 4'-2" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are "L" abutments on piles.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod restrainers at Piers 2 and 3. (Seismic retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.). 7' excavation.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

Estimated Total Bridge Item Cost: \$142,785.50

Estimated Total Retrofit Project Cost: \$257,013.90

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007967C		<b>Bridge Name:</b> S 116TH PL OC		<b>Route:</b> 99	<b>Milepost:</b> 22.94	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 99/507W						<b>County:</b> King	
<b>Location:</b> JCT SR 99		<b>Longitude:</b> 122 17 45.2 "	<b>Latitude:</b> 47 29 51.5 "	<b>Structure Length:</b> 196 ft.		<b>Out to Out Width:</b> 26.4 ft.	
<b>Feature Intersected:</b> S 116TH PL		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 2447	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 23	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Intermediate Piers 2 and 3, each has two 3'-0" diameter columns on pile footings. 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 "L" abutments on piles.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$82,846.50**

**Estimated Total Retrofit Project Cost: \$149,123.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007967B		<b>Bridge Name:</b> PACIFIC HWY OC		<b>Route:</b> 99	<b>Milepost:</b> 22.94	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 99/508						<b>County:</b> King	
<b>Location:</b> 1.8 N JCT I-5		<b>Longitude:</b> 122° 17' 41.3"	<b>Latitude:</b> 47° 29' 53.8"	<b>Structure Length:</b> 248 ft.		<b>Out to Out Width:</b> 55.6 ft.	
<b>Feature Intersected:</b> PACIFIC HWY		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 19960	<b>Detour Length:</b> 2 miles	<b>Skew Angle:</b> 36	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 10 %						
No Photo Available							
<b>Bridge Notes:</b> Intermediate Piers 2 and 3, each has four 3'-0" diameter columns on pile footings. These columns have #3 hoops @ 12". Vertical #10 bars have 3'-9" lap splices at top of footing. Footing without top mat. End piers, 1 and 4, are "L" abutments on piles.				<b>Retrofit Program Notes:</b>			
<b>Completed Retrofit Notes:</b> Longitudinal Rod restrainers at Piers 2 and 3. (Seismic retrofit)				<b>Remaining Retrofit Notes:</b> Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.). 7' excavation.			
<b>All Bridge Retrofit Status:</b> P		<b>Total Number of Columns:</b>		<b>07-09 Rank:</b>			
<b>Special Br Retrofit Status:</b>		<b>No. of Wet Retrofitted Columns:</b>					
<b>Superstr Retrofit Status:</b> C		<b>Isolation Bearing Candidate:</b> <input type="checkbox"/>		<b>2005-07 CN Funding:</b> 0			
<b>Substr Group 3 Status:</b> N		<b>Bridge Requires Further Evaluation:</b> <input type="checkbox"/>		<b>2005 New Revenue Funding Category:</b> H			
<b>Substr Group 4 Status:</b> R		<b>Estimated Total Bridge Item Cost: \$206,673.50</b> <b>Estimated Total Retrofit Project Cost: <u>\$372,012.30</u></b>					
C=Complete P=Partially Complet R=Required N=Not Required D=Differed X=Excluded I=In Progress							

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0006046A		<b>Bridge Name:</b> SR 99 OC, 14TH AVE S		<b>Route:</b> 99	<b>Milepost:</b> 24.81	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 99/511						<b>County:</b> King	
<b>Location:</b> 1.9 N JCT SR 599		<b>Longitude:</b> 122 18 48 "	<b>Latitude:</b> 47 31 12 "	<b>Structure Length:</b> 214 ft.		<b>Out to Out Width:</b> 86.5 ft.	
<b>Feature Intersected:</b> SR 99		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CS		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1959	<b>ADT:</b> 18000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 12	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Intermediate Piers 2, 3 and 4, each has five 3'-0" diameter columns on pile footings. These columns have #4 hoops @ 12". Vertical #11 bars have 2'-4" lap splices at top of footing. Footing without top mat. End piers, 1 and 5, are rigid frame abutments on piles with hinge at top of footing.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (5 ea. 15 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$548,757.00**

**Estimated Total Retrofit Project Cost: \$987,762.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0001447A		<b>Bridge Name:</b> AURORA AVE-G WASH MEM BR		<b>Route:</b> 99	<b>Milepost:</b> 34.14	<b>Region:</b> Northwest
<b>Bridge Number:</b> 99/560						<b>County:</b> King
<b>Location:</b> 7.3 N JCT SR 509		<b>Longitude:</b> 122 20 54 "	<b>Latitude:</b> 47 39 6 "	<b>Structure Length:</b> 2955 ft.		<b>Out to Out Width:</b> 69.5 ft.
<b>Feature Intersected:</b> AURORA AVE, LAKE UNION		<b>PGA:</b> 32.62 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> ST CG		<b>Main Spans:</b> 8 <b>Appr. Spans:</b> 15
<b>Year Built:</b> 1931	<b>ADT:</b> 73836	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Timber pile
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 10 %					



**Bridge Notes:**

See PBQD seismic study report, "SR 99/560 Aurora Avenue Bridge Seismic Vulnerability Assessment and Retrofit Concept Study", December 1993.

**Retrofit Program Notes:**

Stage 1 retrofit completed. Stage 2 retrofit is under construction. Stage 3 retrofit remains.

**Completed Retrofit Notes:**

1" dia. H.S. Rod longitudinal restrainers at Piers S-3, N-3 (two per truss), and 13/8" dia. H.S. Rod longitudinal restrainers both ends of suspended span (10 per joint).

**Remaining Retrofit Notes:**

Stage 3. Retrofit North approach longit girders and trans floor beams and south approach.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:** I

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** N

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** -1

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$0.00**

**Estimated Total Retrofit Project Cost: \$0.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0006912B		<b>Bridge Name:</b> SR 900 (SUNSET BLVD) OC		<b>Route:</b> 405	<b>Milepost:</b> 4.49	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 405/22						<b>County:</b> King	
<b>Location:</b> 0.5 N JCT SR 169		<b>Longitude:</b> 122 11 30 "	<b>Latitude:</b> 47 29 24 "	<b>Structure Length:</b> 286 ft.		<b>Out to Out Width:</b> 109.8 ft.	
<b>Feature Intersected:</b> SR 900 OC SUNSET BLVD		<b>PGA:</b> 32.24 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 22400	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 54	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1994	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Piers 2 thru 4, each has nine 3'-0" diameter columns. Retrofit six columns built in 1963 only ( columns 2 thru 4 and 6 thru 8 from west). These columns have #3 hoops @ 12". Vertical bars have lap splices at top of footing. Footing without top mat. (E-53m). End piers, 1 and 5, are cantilever "L" abutments with bearing pads.

**Retrofit Program Notes:**

Old ID: 0006912C.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (6 ea. 18 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$414,771.50**

**Estimated Total Retrofit Project Cost: \$746,588.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007828A		<b>Bridge Name:</b> SR 900 0C N RENTON		<b>Route:</b> 405	<b>Milepost:</b> 5.4	<b>Region:</b> Northwest
<b>Bridge Number:</b> 405/23E						<b>County:</b> King
<b>Location:</b> JCT SR 900		<b>Longitude:</b> 122 11 42 "	<b>Latitude:</b> 47 30 6 "	<b>Structure Length:</b> 215 ft.		<b>Out to Out Width:</b> 57.5 ft.
<b>Feature Intersected:</b> SR 900 0C N RENTON		<b>PGA:</b> 32.24 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1966	<b>ADT:</b> 50833	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 13	<b>Pier Type:</b> Pier with more than two columns	<b>Footing Type:</b> Spread footing	
<b>Year Rebuilt:</b> 1986	<b>Truck Pct:</b> 8 %					



**Bridge Notes:**

Piers 2 and 3, each has four 3'-0" diameter columns. Retrofit three columns built in 1966 only ( columns 1, 2, 3 from west). 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 stub "L" abutments with bearing pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Girder restrainers (bolt two adjacent end diaphragms) and girder stops at Piers 2 and 3. Girder stops at Piers 1 and 4. (WIDENING)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

<b>All Bridge Retrofit Status:</b> P <b>Special Br Retrofit Status:</b> <b>Superstr Retrofit Status:</b> C <b>Substr Group 3 Status:</b> N <b>Substr Group 4 Status:</b> R  C=Complete P=Partially Complet R=Required N=Not Required D=Differed X=Excluded I=In Progress	<b>Total Number of Columns:</b> <b>No. of Wet Retrofitted Columns:</b> <b>Isolation Bearing Candidate:</b> <input type="checkbox"/> <b>Bridge Requires Further Evaluation:</b> <input type="checkbox"/>	<b>07-09 Rank:</b>  <b>2005-07 CN Funding:</b> 0 <b>2005 New Revenue Funding Category:</b> H
	<b>Estimated Total Bridge Item Cost: \$132,462.00</b> <b>Estimated Total Retrofit Project Cost: <u>\$238,431.60</u></b>	

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007828B		<b>Bridge Name:</b> SR 900 0C N RENTON		<b>Route:</b> 405	<b>Milepost:</b> 5.4	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 405/23W						<b>County:</b> King	
<b>Location:</b> JCT SR 900		<b>Longitude:</b> 122 11 42 "	<b>Latitude:</b> 47 20 12 "	<b>Structure Length:</b> 215 ft.		<b>Out to Out Width:</b> 39.5 ft.	
<b>Feature Intersected:</b> SR 900 0C N RENTON		<b>PGA:</b> 28.19 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 50833	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 13	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Spread footing	
<b>Year Rebuilt:</b> 1986	<b>Truck Pct:</b> 8 %						



**Bridge Notes:**

Piers 2 and 3, each has two 3'-0" diameter columns on spread footings. 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 with bearing pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Girder restrainers (bolt two adjacent end diaphragms) and girder stops at Piers 2 and 3. Girder stops at Piers 1 and 4. (WIDENING)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$100,793.00**

**Estimated Total Retrofit Project Cost: \$181,427.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0005347B		<b>Bridge Name:</b> MAY CR		<b>Route:</b> 405	<b>Milepost:</b> 7.17	<b>Region:</b> Northwest
<b>Bridge Number:</b> 405/25E						<b>County:</b> King
<b>Location:</b> 1.7 N JCT SR 900		<b>Longitude:</b> 122 11 48 "	<b>Latitude:</b> 47 31 42 "	<b>Structure Length:</b> 169 ft.		<b>Out to Out Width:</b> 42 ft.
<b>Feature Intersected:</b> MAY CR		<b>PGA:</b> 32.24 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CTB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1958	<b>ADT:</b> 58528	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b>
<b>Year Rebuilt:</b> 1986	<b>Truck Pct:</b> 8 %					



**Bridge Notes:**

Piers 2 and 3, each has two 3'-3" square columns on spread footing. #3 ties @ 12", Vertical #10 bars have 2'-2" lap splices at top of footing. Footings have no top mat. End piers, piers 1 and 4, are spill through abutments with horizontal strut. Each pier has four 22"x36" columns on combined spread footing.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 39"x39")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$273,042.00**

**Estimated Total Retrofit Project Cost: \$491,475.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0005347C		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 405/25W		MAY CR		405	7.17	<b>County:</b> King	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
1.7 N JCT SR 900		° ' "	° ' "	169 ft.		75.5 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 3	
MAY CR		32.24 %g	C	CTB		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1958	<b>ADT:</b> 58528	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1986	<b>Truck Pct:</b> 8 %	1 miles	0	Pier with more than two columns			



**Bridge Notes:**

Piers 2 and 3, each has four columns. Retrofit two East 3'-3" square columns on spread footing. #3 ties @ 12", Vertical #10 bars have 2'-2" lap splices at top of footing. Footings have no top mat. End piers, piers 1 and 4, are spill through abutments with horizontal strut.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 39"x39')

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$272,338.00**

**Estimated Total Retrofit Project Cost: \$490,208.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007623A		<b>Bridge Name:</b> I-405 OC, SE 44TH ST		<b>Route:</b> 405	<b>Milepost:</b> 7.47	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 405/26						<b>County:</b> King	
<b>Location:</b> 2.0 N JCT SR 900		<b>Longitude:</b> 122 11 48 "	<b>Latitude:</b> 47 31 54 "	<b>Structure Length:</b> 228 ft.		<b>Out to Out Width:</b> 50.6 ft.	
<b>Feature Intersected:</b> I-405		<b>PGA:</b> 32.24 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1965	<b>ADT:</b> 4460	<b>Detour Length:</b> 4 miles	<b>Skew Angle:</b> 15	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Timber pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 8 %						



**Bridge Notes:**

Piers 2, 3 and 4, each has three 3'-0" diameter columns on pile footings. #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. Each abutment has nine neoprene rubber bearing pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.). 7' excavation.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$224,191.00**

**Estimated Total Retrofit Project Cost: \$403,543.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007623C		<b>Bridge Name:</b> COAL CR PKWY OC		<b>Route:</b> 405	<b>Milepost:</b> 10.18	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 405/30E						<b>County:</b> King	
<b>Location:</b> 4.8 N JCT SR 900		<b>Longitude:</b> 122 10 42 "	<b>Latitude:</b> 47 34 6 "	<b>Structure Length:</b> 197 ft.		<b>Out to Out Width:</b> 42.5 ft.	
<b>Feature Intersected:</b> NEWPORT WAY		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1965	<b>ADT:</b> 55738	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 30	<b>Pier Type:</b> Pier with more than two columns	<b>Footing Type:</b> Spread footing		
<b>Year Rebuilt:</b> 1986	<b>Truck Pct:</b> 8 %						



**Bridge Notes:**

Piers 2 and 3, each has three 3'-0" diameter columns. Retrofit two south columns only. These columns have #3 hoops @ 12". Vertical #10 bars have 3'-8" lap splices at top of footing. Footing without top mat. Pier 2 is on pile. Pier 3 is on spread footing. End piers, 1 and 4, are stub abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers at Piers 2 and 3. (WIDENING)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$104,412.00**

**Estimated Total Retrofit Project Cost: \$187,941.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007623D		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 405/30W		COAL CR PKWY OC		405	10.18	<b>County:</b> King
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
4.8 N JCT SR 900		122 10 42"	47 34 6"	224 ft.		46.5 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 3	
NEWPORT WAY		32.51 %g	C	PCB	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1965	<b>ADT:</b> 55738	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1986	<b>Truck Pct:</b> 8 %	1 miles	30	Pier with more than two columns	Spread footing	



**Bridge Notes:**

Piers 2 and 3, each has three 3'-0" diameter columns. Retrofit two north columns only. These columns have #3 hoops @ 12". Vertical #10 bars have 3'-8" lap splices at top of footing. Footing without top mat. Pier 2 is on pile. Pier 3 is on spread footing. End piers, 1 and 4, are stub abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal restrainers at Piers 2 and 3. (WIDENING)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$100,314.50**

**Estimated Total Retrofit Project Cost: \$180,566.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007661A		<b>Bridge Name:</b> I-405 OC, MAIN ST		<b>Route:</b> 405	<b>Milepost:</b> 13.84	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 405/42						<b>County:</b> King	
<b>Location:</b> 2.2 N JCT I-90		<b>Longitude:</b> 122 11 18 "	<b>Latitude:</b> 47 36 36 "	<b>Structure Length:</b> 260 ft.		<b>Out to Out Width:</b> 57.6 ft.	
<b>Feature Intersected:</b> I-405		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1965	<b>ADT:</b> 185000	<b>Detour Length:</b> 99 miles	<b>Skew Angle:</b> 8	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> %						



**Bridge Notes:**

Piers 2 and 3, each has three 3'-0" diameter columns. #3 hoops @ 12". Vertical bars with 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.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$207,201.50**

**Estimated Total Retrofit Project Cost: \$372,962.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008745A		<b>Bridge Name:</b> SR 509 OC, S160TH ST		<b>Route:</b> 509	<b>Milepost:</b> 24.83	<b>Region:</b> Northwest
<b>Bridge Number:</b> 509/113						<b>County:</b> King
<b>Location:</b> 5.2 N JCT SR 516		<b>Longitude:</b> 122 19 38.3 "	<b>Latitude:</b> 47 27 35.4 "	<b>Structure Length:</b> 251 ft.		<b>Out to Out Width:</b> 65 ft.
<b>Feature Intersected:</b> SR 509		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1971	<b>ADT:</b> 5860	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 22	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Timber pile
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 4 %					



**Bridge Notes:**

Intermediate Piers, Piers 2, 3 and 4, each has three 3'-0" diameter columns on pile footings. #4 hoops spaced at 12" spacing. Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no top mat. End Piers 1 and 5 are "L" abutments with laminated elastomeric bearing pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.) Install transverse restrainers.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$247,852.00**

**Estimated Total Retrofit Project Cost: \$446,133.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008745B		<b>Bridge Name:</b> SR 509 OC, S 156TH ST		<b>Route:</b> 509	<b>Milepost:</b> 25.1	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 509/114						<b>County:</b> King	
<b>Location:</b> 5.5 N JCT SR 516		<b>Longitude:</b> 122 19 54.6 "	<b>Latitude:</b> 47 27 48.8 "	<b>Structure Length:</b> 243 ft.		<b>Out to Out Width:</b> 55 ft.	
<b>Feature Intersected:</b> SR 509		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1970	<b>ADT:</b> 8754	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 22	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Timber pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 4 %						



**Bridge Notes:**

Intermediate Piers, Piers 2, 3 and 4, each has three 3'-0" diameter columns on pile footings. #4 hoops spaced at 12" spacing. Vertical #9 bars have 3'-4" lap splices at top of footings. Footings have no top mat. End Piers 1 and 5 are stub abutments with laminated elastomeric bearing pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$206,948.50**

**Estimated Total Retrofit Project Cost: \$372,507.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008745C		<b>Bridge Name:</b> SR 509 OC, S152ND ST		<b>Route:</b> 509	<b>Milepost:</b> 25.36	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 509/115						<b>County:</b> King	
<b>Location:</b> 5.7 N JCT SR 516		<b>Longitude:</b> 122 10 0 "	<b>Latitude:</b> 47 29 0 "	<b>Structure Length:</b> 224 ft.		<b>Out to Out Width:</b> 37 ft.	
<b>Feature Intersected:</b> SR 509		<b>PGA:</b> 32.24 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 11984	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 9	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 4 %						



**Bridge Notes:**

Intermediate Piers, Piers 2, 3 and 4, each has two 3'-0" diameter columns on spread footings. #4 hoops spaced at 12" spacing. Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no top mat. End Piers 1 and 5 are "L" abutments with laminated elastomeric bearing pads.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (2 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$180,103.00**

**Estimated Total Retrofit Project Cost: \$324,185.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008745D		<b>Bridge Name:</b> SR 509 OC, S 146TH ST		<b>Route:</b> 509	<b>Milepost:</b> 25.73	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 509/116						<b>County:</b> King	
<b>Location:</b> 0.4 N JCT SR 518		<b>Longitude:</b> 122° 18' 52"	<b>Latitude:</b> 47° 27' 15"	<b>Structure Length:</b> 296 ft.		<b>Out to Out Width:</b> 41 ft.	
<b>Feature Intersected:</b> SR 509		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1970	<b>ADT:</b> 4159	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 12	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 4 %						



**Bridge Notes:**

Intermediate Piers, Piers 2, 3 and 4, each has two 3'-0" diameter columns on spread footings. #4 hoops spaced at 12" spacing. Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no top mat. End Pier 1 is a "L" abutment with laminated elastomeric bearing pads. Pier 5 is a spill through "L" abutment with two columns.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (2 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$125,466.00**

**Estimated Total Retrofit Project Cost: \$225,838.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008592A		<b>Bridge Name:</b> SR 509 OC, S 136TH ST		<b>Route:</b> 509	<b>Milepost:</b> 26.38	<b>Region:</b> Northwest
<b>Bridge Number:</b> 509/117						<b>County:</b> King
<b>Location:</b> 1.0 N JCT SR 518		<b>Longitude:</b> 122 18 37.8 "	<b>Latitude:</b> 47 27 52.3 "	<b>Structure Length:</b> 209 ft.		<b>Out to Out Width:</b> 55.9 ft.
<b>Feature Intersected:</b> SR 509		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1969	<b>ADT:</b> 7669	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 2	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 4 %					



**Bridge Notes:**

Intermediate Piers, Piers 2, 3 and 4, each has three 3'-0" diameter columns on spread footings. #4 hoops spaced at 12" spacing. Vertical #9 bars have 3'-4" lap splices at top of footings. Footings have no top mat. End Piers 1 and 5 are steel pile bents (10 BP 42).

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$186,609.50**

**Estimated Total Retrofit Project Cost: \$335,897.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008276C		<b>Bridge Name:</b> S 128TH ST OC		<b>Route:</b> 509	<b>Milepost:</b> 26.86	<b>Region:</b> Northwest
<b>Bridge Number:</b> 509/120						<b>County:</b> King
<b>Location:</b> 1.3 N JCT SR 518		<b>Longitude:</b> 122 20 0 "	<b>Latitude:</b> 47 29 0 "	<b>Structure Length:</b> 203 ft.		<b>Out to Out Width:</b> 85 ft.
<b>Feature Intersected:</b> S 128TH ST		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1968	<b>ADT:</b> 36000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 12	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b>
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 3 %					



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 3'-0" diameter columns on spread footings. #3 hoops spaced at 12" spacing. Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no top mat. End Piers 1 and 4 are spill through "L" abutments with laminated elastomeric bearing pads. Each end pier has three columns.

**Retrofit Program Notes:**

520/120W, ID: 0008276B.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (4 ea. 8 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$215,270.00**

**Estimated Total Retrofit Project Cost: \$387,486.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008276D		<b>Bridge Name:</b> GLENDALE WAY OC		<b>Route:</b> 509	<b>Milepost:</b> 27.85	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 509/123						<b>County:</b> King	
<b>Location:</b> 2.3 N JCT SR 518		<b>Longitude:</b> 122 19 27.5 "	<b>Latitude:</b> 47 30 10 "	<b>Structure Length:</b> 200 ft.		<b>Out to Out Width:</b> 100 ft.	
<b>Feature Intersected:</b> GLENDALE WAY		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 37500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 3 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 3'-0" diameter columns on spread footings. #3 hoops spaced at 12" spacing. Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no top mat. End Piers 1 and 4 are spill through "L" abutments with laminated elastomeric bearing pads. Each end pier has three columns.

**Retrofit Program Notes:**

509/123W, ID 0008276E.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$214,934.50**

**Estimated Total Retrofit Project Cost: \$386,882.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008276G		<b>Bridge Name:</b> SR 509 OC, CLOVERDALE ST		<b>Route:</b> 509	<b>Milepost:</b> 29.37	<b>Region:</b> Northwest
<b>Bridge Number:</b> 509/126						<b>County:</b> King
<b>Location:</b> 4.6 N JCT SR 518		<b>Longitude:</b> 122° 19' 54"	<b>Latitude:</b> 47° 32' 0"	<b>Structure Length:</b> 333 ft.		<b>Out to Out Width:</b> 80 ft.
<b>Feature Intersected:</b> SR 509		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SB CBOX		<b>Main Spans:</b> 1 <b>Appr. Spans:</b> 3
<b>Year Built:</b> 1968	<b>ADT:</b> 14158	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 99	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Cased concrete pile
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 4 %					



**Bridge Notes:**

Intermediate Piers, Piers 2, 3 and 4, each has three 6'-0"x3'-0" elliptical columns on pile footings. #4 hoops and #4 ties @ 12". Vertical #14 bars have staggered field weld splices at 5'-0" above top of footing. Footings have top mat. End Piers 1 and 5 are "L" abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Longitudinal Rod restrainers at Piers 3 and 4. (Seismic retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (3 ea. 9 total, 6' x 3' columns).

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$586,580.50**

**Estimated Total Retrofit Project Cost: \$1,055,844.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008276F		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 509/126E-N		N-N RAMP BR SR 509 0C		509	29.37	<b>County:</b> King
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
4.6 N JCT SR 518		122 20 3 "	47 31 39 "	463 ft.		27 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 4	
N-N RAMP BR SR 509 0C		33.11 %g	C	CBOX	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 6709	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %	2 miles	0	Single Column Pier	Cased concrete pile	



**Bridge Notes:**

Intermediate Piers, Piers 2, 3 and 4, each has a 8'-0"x3'-0" elliptical column on pile footing. #5 hoops @ 12" and 3 #5 ties @ 24". Vertical #14 bars have staggered field weld splices at 5'-0" above top of footing. Footings have top mat. End Piers 1 and 5 are "L" abutments. Column height various. 35' at pier 2, 20' at pier 4.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Install Column Jacket at Piers 2, 3 and 4. Excavate to top of Pedestals.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** R

**Substr Group 4 Status:** N

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$175,681.00**

**Estimated Total Retrofit Project Cost: \$316,225.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008276H		<b>Bridge Name:</b> S-S RAMP BR S-E RAMP OC		<b>Route:</b> 509	<b>Milepost:</b> 29.37	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 509/126S-W						<b>County:</b> King	
<b>Location:</b> 4.6 N JCT SR 518		<b>Longitude:</b> 122° 20' 5.1"	<b>Latitude:</b> 47° 31' 35.4"	<b>Structure Length:</b> 147 ft.		<b>Out to Out Width:</b> 37 ft.	
<b>Feature Intersected:</b> S-S RAMP BR S-E RAMP OC		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CS		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 6554	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 27	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Cased concrete pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has two 3'-0" diameter columns on pile footings. #3 ties spaced at 12" spacing. Vertical #11 bars have 4'-2" lap splices at top of footings. End Piers 1 and 4 are "L" abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.) 9' excavation. Install transverse restrainers.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$148,236.00**

**Estimated Total Retrofit Project Cost: \$266,824.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008745E		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 518/8		SR 509 OC		518	0	<b>County:</b> King	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
JCT SR 509		122 19 42"	47 18 18"	241 ft.		96.7 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 4	
SR 509		28.81 %g	C	PCB		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 40320	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 2 %	1 miles	0	Pier with more than two columns			



**Bridge Notes:**

Intermediate Piers, Piers 2, 3 and 4, each has five 3'-0" diameter columns on spread footings. #4 hoops spaced at 12" spacing. Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no top mat. End Piers 1 and 4 are stub abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (5 ea. 15 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$352,918.50**

**Estimated Total Retrofit Project Cost: \$635,253.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008644A		<b>Bridge Name:</b> 8TH AVE 0C		<b>Route:</b> 518	<b>Milepost:</b> 0.39	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 518/9						<b>County:</b> King	
<b>Location:</b> 0.3 E JCT SR 509		<b>Longitude:</b> 122 19 16.68	<b>Latitude:</b> 47 28 11.16	<b>Structure Length:</b> 175 ft.		<b>Out to Out Width:</b> 87 ft.	
<b>Feature Intersected:</b> 8TH AVE 0C		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1970	<b>ADT:</b> 47270	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 2 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 3'-0" diameter columns on spread footings. #4 hoops spaced at 12" spacing. Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no 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. (4 ea. 8 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$157,074.50**

**Estimated Total Retrofit Project Cost: \$282,734.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008644B		<b>Bridge Name:</b> DES MOINES WAY S 0C		<b>Route:</b> 518	<b>Milepost:</b> 0.56	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 518/10						<b>County:</b> King	
<b>Location:</b> 0.6 E JCT SR 509		<b>Longitude:</b> 122 19 10.8 "	<b>Latitude:</b> 47 28 13.1 "	<b>Structure Length:</b> 233 ft.		<b>Out to Out Width:</b> 87 ft.	
<b>Feature Intersected:</b> DES MOINES WAY S 0C		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1970	<b>ADT:</b> 47270	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 40	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 2 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 3'-0" diameter columns on concrete pile footings. #4 hoops @ 6" at plastic hinge zones, @ 12" outside hinge zone. Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no 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. (4 ea. 8 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$175,576.50**

**Estimated Total Retrofit Project Cost: \$316,037.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008644C		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 518/12		SR 518 OC, 24TH AVE S		518	1.46	<b>County:</b> King	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
1.9 E JCT SR 509		122 23 6 "	47 26 18 "	363 ft.		40.4 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 4	
SR 518		31.99 %g	C	PCB		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1970	<b>ADT:</b> 5817	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %	1 miles	30	Double Column Pier			



**Bridge Notes:**

Intermediate Piers, Piers 2, 3 and 4, each has two 3'-0" diameter columns on spread footings. #4 hoops @ 6" at plastic hinge zones, @ 12" outside hinge zone. Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no top mat. End Piers 1 and 5 are stub abutments. Most of pier 4 column are buried in ground.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (2 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$150,315.00**

**Estimated Total Retrofit Project Cost: \$270,567.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008745F		<b>Bridge Name:</b> SR 518 OC, S 154TH ST		<b>Route:</b> 518	<b>Milepost:</b> 2.26	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 518/13						<b>County:</b> King	
<b>Location:</b> 1.65 E JCT SR 509		<b>Longitude:</b> 122 18 1.68	<b>Latitude:</b> 47 27 53.52	<b>Structure Length:</b> 558 ft.		<b>Out to Out Width:</b> 40.4 ft.	
<b>Feature Intersected:</b> SR 518		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SB		<b>Main Spans:</b> 5 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 8800	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 55	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 2 %						



**Bridge Notes:**

Pier 2 has three 4'-0" diameter columns on pile footings. Piers 3, 4 and 5, each has three 4'-0" diameter columns on spread footings. #4 hoops @ 6" at plastic hinge zones, @ 12" outside hinge zone. Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no top mat. End Piers 1 and 6 are "L" abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Install Longitudinal Rod restrainers at in-span hinge near Pier 3. (South King County Bridges Seismic Retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3, 4 and 5. (3 ea. 12 total, 4' dia.) Install catcher blocks.

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** P

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$319,319.00**

**Estimated Total Retrofit Project Cost: \$574,774.20**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008902A		<b>Bridge Name:</b> N-W RAMP, SR 518 OC		<b>Route:</b> 518	<b>Milepost:</b> 2.26	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 518/14N-W						<b>County:</b> King	
<b>Location:</b> 1.8 E JCT SR 509		<b>Longitude:</b> 122° 21' 54"	<b>Latitude:</b> 47° 26' 12"	<b>Structure Length:</b> 609 ft.		<b>Out to Out Width:</b> 41.4 ft.	
<b>Feature Intersected:</b> N-W RAMP, SR 518		<b>PGA:</b> 31.99 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX		<b>Main Spans:</b> 7 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 3430	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 40	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Piers 2, 3, 4 and 7, each has three 3'-0" diameter columns on spread footings. Piers 5 and 6, each has three 4'-0" diameter columns on spread footings. #4 hoops @ 6" at plastic hinge zones, @ 12" outside hinge zone. Vertical #11 bars have 4'-2" lap splices at top of footings. Footings have no top mat. End Piers 1 and 8 are steel pile bents (12 BP 53).

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

Install Longitudinal Rod restrainers at in-span hinge, span 3 near pier 4. (Seismic retrofit)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3, 4, 5, 6 and 7. (3 ea. 18 total, 3' dia. except P5 & P6 4' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$583,214.50**

**Estimated Total Retrofit Project Cost: \$1,049,786.10**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0006861B		<b>Bridge Name:</b> SR 520 OC, 10TH AVE		<b>Route:</b> 520	<b>Milepost:</b> 0	<b>Region:</b> Northwest
<b>Bridge Number:</b> 520/1						<b>County:</b> King
<b>Location:</b> 0.3 E JCT I-5		<b>Longitude:</b> 122 19 6 "	<b>Latitude:</b> 47 38 36 "	<b>Structure Length:</b> 285 ft.		<b>Out to Out Width:</b> 61.6 ft.
<b>Feature Intersected:</b> SR 520		<b>PGA:</b> 33.77 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1963	<b>ADT:</b> 21000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 9	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 3 %					



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has three 4'-0" diameter column on spread footing. #4 hoops spaced at 12" spacing. Vertical #9 bars have 3'-4" lap splices at top of footings. Footings have no top mat. End Piers 1 and 4 are spill through abutments. Each abutment has three 3'-9"x2'-6" columns on spread footings. Hinges at both top and bottom of columns.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 4' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$321,513.50**

**Estimated Total Retrofit Project Cost: \$578,724.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007839B		<b>Bridge Name:</b> 108TH AVE NE OC		<b>Route:</b> 520	<b>Milepost:</b> 6.27	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 520/16						<b>County:</b> King	
<b>Location:</b> 5.3 E JCT SR 513		<b>Longitude:</b> 122 11 42 "	<b>Latitude:</b> 47 38 30 "	<b>Structure Length:</b> 271 ft.		<b>Out to Out Width:</b> 143.6 ft.	
<b>Feature Intersected:</b> 108TH AVE NE		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 82000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 51	<b>Pier Type:</b> Pier with more than two columns	<b>Footing Type:</b> Concrete Pile		
<b>Year Rebuilt:</b> 1998	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has nine 4'-0" diameter columns on pile footings. Four column north bridge, five columns South Bridge. Retrofit center five columns only (built in 1966). #4 hoops spaced at 12" spacing. Vertical #11 bars have 4'-3" lap splices at top of footings. Footings have no top mat. End Piers 1 and 4 are stub abutments.

**Retrofit Program Notes:**

Retrofit columns at Piers 2 and 3. (5 ea. 10 total, 4' dia.)

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$299,376.00**

**Estimated Total Retrofit Project Cost: \$538,876.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008591A		<b>Bridge Name:</b> 116TH AVE NE OC		<b>Route:</b> 520	<b>Milepost:</b> 6.7	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 520/21						<b>County:</b> King	
<b>Location:</b> 0.1 E JCT I-405		<b>Longitude:</b> 122 11 8.52 "	<b>Latitude:</b> 47 37 55.8 "	<b>Structure Length:</b> 165 ft.		<b>Out to Out Width:</b> 133.8 ft.	
<b>Feature Intersected:</b> 116TH AVE NE		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 111000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns	<b>Footing Type:</b>		
<b>Year Rebuilt:</b> 1997	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Piers 2 and 3, North bridge has 5 columns. South bridge has 4 columns. Retrofit columns no. 2, 3, 4, 7, 8 and 9 from North. These columns are 3'-0" diameter columns on spread footings. #3 hoops spaced at 12" spacing. Vertical #9 bars have 3'-4" lap splices at top of footings. Footings have no top mat. End Piers 1 and 4 are stub abutments.

**Retrofit Program Notes:**

Bridge 520/21N & S have been combined and renumbered as 520/21. Bridge 520/21N, ID 0007839C.

**Completed Retrofit Notes:**

Longitudinal Restrainers (Bolted to diaphragms) at Piers 2 & 3. (Widening) (Bridge 520/21N, 0007899C, renumber as 520/21)

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (6 ea. 12 total, 3' dia.)

**All Bridge Retrofit Status:** P

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** C

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$246,603.50**

**Estimated Total Retrofit Project Cost: \$443,886.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007839D		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 520/22N		BN RR OC (NP)		520	7.09	<b>County:</b> King	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
0.2 E JCT I-405		° ' " 122 11 5.41	° ' " 47 37 56.11	199 ft.		69 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 3	
NP RY		32.51 %g	C	PCB		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 48907	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1998	<b>Truck Pct:</b> 3 %	1 miles	12	Pier with more than two columns		Concrete Pile	



**Bridge Notes:**

Piers 2 and 3, each has four 3'-0" diameter columns on pile footings. Retrofit two center columns per pier only. #3 ties spaced at 12" spacing. Vertical #9 bars have 3'-4" lap splices at top of footings. Footings have no top mat. End Piers 1 and 4, are stub abutments. Collision walls between columns at piers 2 and 3.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$101,772.00**

**Estimated Total Retrofit Project Cost: \$183,189.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008591B		<b>Bridge Name:</b> BNRR OC		<b>Route:</b> 520	<b>Milepost:</b> 7.09	<b>Region:</b> Northwest
<b>Bridge Number:</b> 520/22S						<b>County:</b> King
<b>Location:</b> 0.2 E JCT I-405		<b>Longitude:</b> 122 11 4.01 "	<b>Latitude:</b> 47 37 53.11 "	<b>Structure Length:</b> 208 ft.		<b>Out to Out Width:</b> 67 ft.
<b>Feature Intersected:</b> BNRR		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1969	<b>ADT:</b> 48907	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 12	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>
<b>Year Rebuilt:</b> 1993	<b>Truck Pct:</b> 3 %					



**Bridge Notes:**

Piers 2 and 3, each has four 3'-0" diameter columns. Retrofit two north columns per pier only. #3 ties spaced at 12" spacing. Vertical #9 bars have 3'-4" lap splices at top of footings. Footings have no top mat. End Piers 1 and 4, are stub abutments. Collision walls between columns at piers 2 and 3.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$128,617.50**

**Estimated Total Retrofit Project Cost: \$231,511.50**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009086A		<b>Bridge Name:</b> NORTHUP WAY OC		<b>Route:</b> 520	<b>Milepost:</b> 7.25	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 520/25N						<b>County:</b> King	
<b>Location:</b> 0.3 E JCT I-405		<b>Longitude:</b> 122° 10' 54"	<b>Latitude:</b> 47° 37' 54"	<b>Structure Length:</b> 376 ft.		<b>Out to Out Width:</b> 68.6 ft.	
<b>Feature Intersected:</b> NORTHUP WAY		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 109000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 35	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1998	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 5'-0" diameter columns on spread footings. Retrofit three north columns per pier only (built in 1971). #4 hoops spaced at 12" spacing. Vertical #11 or #18 bars have 4'-2" lap splices to #11 dowels at top of footings. Footings have no top mat. End piers, 1 and 4, are spill through abutments. Each abutment has seven 2'-0" square columns. Columns have hinges at top and bottom of columns.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 5' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$255,563.00**

**Estimated Total Retrofit Project Cost: \$460,013.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009086B		<b>Bridge Name:</b> NORTHUP WAY OC		<b>Route:</b> 520	<b>Milepost:</b> 7.27	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 520/25S						<b>County:</b> King	
<b>Location:</b> 0.3 E JCT I-405		<b>Longitude:</b> 122 10 42	<b>Latitude:</b> 47 38 0	<b>Structure Length:</b> 392 ft.		<b>Out to Out Width:</b> 53 ft.	
<b>Feature Intersected:</b> 120TH AVE NE		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CBOX		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 52103	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 36	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1993	<b>Truck Pct:</b> 3 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 5'-0" diameter columns on spread footings. Retrofit three north columns per pier only (built in 1971). #4 hoops spaced at 12" spacing. Vertical #14 or #18 bars have 4'-2" lap splices to #11 dowels at top of footings. Footings have no top mat. End piers, 1 and 4, are spill through abutments. Each abutment has five 2'-0" square columns. Columns have hinges at top and bottom of columns.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 5' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$242,038.50**

**Estimated Total Retrofit Project Cost: \$435,669.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009086C		<b>Bridge Name:</b> N-W RAMP OC		<b>Route:</b> 520	<b>Milepost:</b> 7.52	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 520/27N						<b>County:</b> King	
<b>Location:</b> 0.6 E JCT I-405		<b>Longitude:</b> 122° 10' 31.3"	<b>Latitude:</b> 47° 37' 51"	<b>Structure Length:</b> 255 ft.		<b>Out to Out Width:</b> 59 ft.	
<b>Feature Intersected:</b> 124 AVE NE - NW RAMP		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 38690	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 44	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1998	<b>Truck Pct:</b> 3 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 2'-6"x3'-0" columns on spread footings. Retrofit three north columns per pier only (built in 1971). #5 hoops and ties spaced at 12" spacing. Vertical #9 and #7 bars have 3'-4" and 2'-7" lap splices to #9 and #8 dowels at top of footings. Footings have no 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, 30"x36")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$178,332.00**

**Estimated Total Retrofit Project Cost: \$320,997.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009086D		<b>Bridge Name:</b> N-W RAMP OC		<b>Route:</b> 520	<b>Milepost:</b> 7.54	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 520/27S						<b>County:</b> King	
<b>Location:</b> 0.6 E JCT I-405		<b>Longitude:</b> 122 10 24 "	<b>Latitude:</b> 47 37 54 "	<b>Structure Length:</b> 200 ft.		<b>Out to Out Width:</b> 40.3 ft.	
<b>Feature Intersected:</b> 124 AVE NE - NW RAMP		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1971	<b>ADT:</b> 38690	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 38	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1998	<b>Truck Pct:</b> 3 %						



No Photo Available

**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has four 2'-6"x3'-0" columns on spread footings. Retrofit three south columns per pier only (built in 1971). #5 hoops and ties spaced at 12" spacing. Vertical #9 and #7 bars have 3'-4" and 2'-7" lap splices to #9 and #8 dowels at top of footings. Footings have no 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, 36"x36")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

Estimated Total Bridge Item Cost: \$168,063.50

Estimated Total Retrofit Project Cost: \$302,514.30

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008744B		<b>Bridge Name:</b> 130TH AVE NE OC		<b>Route:</b> 520	<b>Milepost:</b> 7.92	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 520/30						<b>County:</b> King	
<b>Location:</b> 1.0 E JCT I-405		<b>Longitude:</b> 122 9 54 "	<b>Latitude:</b> 47 37 48 "	<b>Structure Length:</b> 210 ft.		<b>Out to Out Width:</b> 118.9 ft.	
<b>Feature Intersected:</b> 130TH AVE NE		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1970	<b>ADT:</b> 38690	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 29	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 3 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has eight 3'-0" square columns on spread footings. Retrofit six outside columns per pier only (built in 1970). #4 hoops spaced at 12" spacing. Vertical #10 bars have 3'-9" lap splices to #10 dowels at top of footings. Footings have no top mat. End piers, 1 and 4, are stub abutments.

**Retrofit Program Notes:**

520/30S, ID 0008744A.

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (6 ea. 12 total includes both NB and SB bridges, 36"x36")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$547,618.50**

**Estimated Total Retrofit Project Cost: \$985,713.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0009259C		<b>Bridge Name:</b> NE 24TH ST OC		<b>Route:</b> 520	<b>Milepost:</b> 8.83	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 520/34S						<b>County:</b> King	
<b>Location:</b> 1.9 E JCT I-405		<b>Longitude:</b> 122° 8' 42"	<b>Latitude:</b> 47° 37' 54"	<b>Structure Length:</b> 329 ft.		<b>Out to Out Width:</b> 85.2 ft.	
<b>Feature Intersected:</b> NE 24TH ST		<b>PGA:</b> 32.51 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1972	<b>ADT:</b> 88000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 45	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b>	
<b>Year Rebuilt:</b> 1998	<b>Truck Pct:</b> 5 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has six 4'-0" diameter columns on spread footings. Retrofit five south columns per pier only (built in 1972). #4 hoops spaced at 12" spacing. Vertical #11 bars have 4'-2" lap splices to #11 dowels at top of footings. Footings have no 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. (5 ea. 10 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$248,677.00**

**Estimated Total Retrofit Project Cost: \$447,618.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008257B		<b>Bridge Name:</b> EBCD NORTH CR		<b>Route:</b> 522	<b>Milepost:</b> 11.1	<b>Region:</b> Northwest
<b>Bridge Number:</b> 522/28ECD						<b>County:</b> King
<b>Location:</b> 1.0 E JCT SR 527		<b>Longitude:</b> 122 11 19.56 "	<b>Latitude:</b> 47 45 25.62 "	<b>Structure Length:</b> 140 ft.		<b>Out to Out Width:</b> 47.9 ft.
<b>Feature Intersected:</b> NORTH CR		<b>PGA:</b> 29.54 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> CS		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0
<b>Year Built:</b> 1968	<b>ADT:</b> 8094	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 28	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b>
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %					



**Bridge Notes:**

Pier 1 is a rigid frame pier wall. Pier 4 is all through rigid frame abutment with two 3'-4" sq. columns on spread footings. Intermediate Piers, Piers 2 and 3, each has two 3'-0" dia. columns on spread footings. These columns have #4 ties spaced at 12" spacing. Vertical bars have lap splices at top of footings. Footings have no top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$105,033.50**

**Estimated Total Retrofit Project Cost: \$189,060.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007270E		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 523/5		I-5 OC		523	0.92	<b>County:</b> King	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
1.0 N JCT SR 99		122 19 24 "	47 44 6 "	249 ft.		72 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 4	
I-5		32.06 %g	C	CBOX		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1963	<b>ADT:</b> 44175	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 2 %	2 miles	15	Pier with more than two columns			



**Bridge Notes:**

End Piers 1 and 5 are spill through abutments. Each abutment has five 30"x18" columns on spread footings. Pier 1 columns have hinges at top and bottom. Pier 5 columns have hinge at top only. Intermediate Piers, Piers 2, 3 and 4, each has five 2'-6" sq. columns on spread footings. #3 ties spaced at 12" spacing. Vertical #10 bars have lap splices at top of footings. Footings have no top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (5 ea. 15 total, 30"x30")

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$636,053.00**

**Estimated Total Retrofit Project Cost: \$1,144,895.40**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007134B		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 524/10		I-5 OC		524	5.2	<b>County:</b> Snohomish	
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>	
1.6 E JCT SR 99		° ' "	° ' "	491 ft.		72.8 ft.	
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>		<b>Main Spans:</b> 5	
I-5		30.58 %g	C	CBOX		<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1964	<b>ADT:</b> 38365	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 4 %	3 miles	51	Pier with more than two columns			



**Bridge Notes:**

End Piers 1 and 6 are "L" abutments. Each abutment has 8 roller bearings (6" dia.). Intermediate Piers, Piers 2 thru 5, each has five 3'-0" diameter columns on spread footings. #4 ties spaced at 12" spacing. Vertical #11 bars have 4'-2" min. lap splices at top of footings. Footings have no top mat.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3, 4 and 5. (5 ea. 20 total, 3' dia.).  
Catchers at Piers 1 and 6.

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$483,818.50**

**Estimated Total Retrofit Project Cost: \$870,873.30**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007956B		<b>Bridge Name:</b> 133RD ST OC		<b>Route:</b> 599	<b>Milepost:</b> 0.33	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 599/5E						<b>County:</b> King	
<b>Location:</b> 0.4 N JCT I-5		<b>Longitude:</b> 122 16 18 "	<b>Latitude:</b> 47 29 0 "	<b>Structure Length:</b> 141 ft.		<b>Out to Out Width:</b> 39.5 ft.	
<b>Feature Intersected:</b> 133RD ST		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 20500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 7 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has two 3'-0" diameter columns on pile footings. #3 ties spaced at 12" spacing. Vertical #9 bars have 3'-4" lap splices at top of footings. End Piers 1 and 4 are "L" abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$68,717.00**

**Estimated Total Retrofit Project Cost: \$123,690.60**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007956C		<b>Bridge Name:</b> 133RD ST OC		<b>Route:</b> 599	<b>Milepost:</b> 0.33	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 599/5W						<b>County:</b> King	
<b>Location:</b> 0.4 N JCT I-5		<b>Longitude:</b> 122 16 18 "	<b>Latitude:</b> 47 29 0 "	<b>Structure Length:</b> 141 ft.		<b>Out to Out Width:</b> 50 ft.	
<b>Feature Intersected:</b> 133RD ST		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 20500	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 0	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 7 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has three 3'-0" diameter columns on pile footings. #3 ties spaced at 12" spacing. Vertical #9 bars have 3'-4" lap splices at top of footings. 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.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$102,745.50**

**Estimated Total Retrofit Project Cost: \$184,941.90**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008103A		<b>Bridge Name:</b> 42ND AVE S OC		<b>Route:</b> 599	<b>Milepost:</b> 0.65	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 599/10E						<b>County:</b> King	
<b>Location:</b> 0.6 N JCT I-5		<b>Longitude:</b> 122 16 36	<b>Latitude:</b> 47 29 12	<b>Structure Length:</b> 234 ft.		<b>Out to Out Width:</b> 39.9 ft.	
<b>Feature Intersected:</b> 42ND AVE S		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 18865	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 47	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 7 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has three 3'-0" diameter columns on pile footings. #3 ties spaced at 12" spacing. Vertical #9 bars have 3'-4" lap splices at top of footings. Pier 1 is on 13" concrete pile bent. Pier 4 is a stub abutment.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$133,276.00**

**Estimated Total Retrofit Project Cost: \$239,896.80**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008103B		<b>Bridge Name:</b> 42ND AVE S OC		<b>Route:</b> 599	<b>Milepost:</b> 0.65	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 599/10W						<b>County:</b> King	
<b>Location:</b> 0.6 N JCT I-5		<b>Longitude:</b> 122 16 36	<b>Latitude:</b> 47 29 12	<b>Structure Length:</b> 220 ft.		<b>Out to Out Width:</b> 39.9 ft.	
<b>Feature Intersected:</b> 42ND AVE S		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 3 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1968	<b>ADT:</b> 18865	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 48	<b>Pier Type:</b> Pier with more than two columns		<b>Footing Type:</b> Concrete Pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 7 %						



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has three 3'-0" diameter columns on pile footings. #3 ties spaced at 12" spacing. Vertical #9 bars have 3'-4" lap splices at top of footings. Pier 1 is on 13" concrete pile bent. Pier 4 is a stub abutment.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (3 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$117,260.00**

**Estimated Total Retrofit Project Cost: \$211,068.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0008103C		<b>Bridge Name:</b> SR 599 OC E MARGINAL WAY		<b>Route:</b> 599	<b>Milepost:</b> 1.38	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 599/15						<b>County:</b> King	
<b>Location:</b> 1.4 N JCT I-5		<b>Longitude:</b> 122 17 18 "	<b>Latitude:</b> 47 29 48 "	<b>Structure Length:</b> 240 ft.		<b>Out to Out Width:</b> 38 ft.	
<b>Feature Intersected:</b> SR 599		<b>PGA:</b> 33.11 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> PCB		<b>Main Spans:</b> 4 <b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1967	<b>ADT:</b> 30000	<b>Detour Length:</b> 1 miles	<b>Skew Angle:</b> 22	<b>Pier Type:</b> Double Column Pier		<b>Footing Type:</b> Timber pile	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 7 %						



**Bridge Notes:**

Intermediate Piers, Piers 2, 3 and 4, each has two 3'-0" diameter columns on pile footings. #3 ties spaced at 12" spacing. Vertical #9 bars have 3'-4" lap splices at top of footings. Piers 1 and 5 are on stub abutments.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2, 3 and 4. (2 ea. 6 total, 3' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$122,226.50**

**Estimated Total Retrofit Project Cost: \$220,007.70**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0002504A		<b>Bridge Name:</b> CEDAR R		<b>Route:</b> 900	<b>Milepost:</b> 10.72	<b>Region:</b> Northwest	
<b>Bridge Number:</b> 900/20						<b>County:</b> King	
<b>Location:</b> 0.2 E JCT SR 515		<b>Longitude:</b> 122° 11' 48"	<b>Latitude:</b> 47° 28' 48"	<b>Structure Length:</b> 156 ft.		<b>Out to Out Width:</b> 70.6 ft.	
<b>Feature Intersected:</b> CEDAR R		<b>PGA:</b> 32.24 %g	<b>Seismic Zone:</b> C	<b>Span Type:</b> SG CTB		<b>Main Spans:</b> 1 <b>Appr. Spans:</b> 2	
<b>Year Built:</b> 1940	<b>ADT:</b> 23000	<b>Detour Length:</b> 2 miles	<b>Skew Angle:</b> 8	<b>Pier Type:</b> Pier Wall		<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 3 %						



**Bridge Notes:**

Two main piers, piers 2 and 3, support steel main span are hollow cell abutments. Pier 3 has two rocker bearings supporting main girders.

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Install catcher blocks at Pier 3. (2 total).

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** R

**Substr Group 3 Status:** N

**Substr Group 4 Status:** N

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$22,000.00**

**Estimated Total Retrofit Project Cost: \$39,600.00**

# Washington State Department of Transportation Bridge Seismic Retrofit Information

<b>Structure ID:</b> 0007955A		<b>Bridge Name:</b>		<b>Route:</b>	<b>Milepost:</b>	<b>Region:</b> Northwest
<b>Bridge Number:</b> 900/23		PCC RR OC HOUSER WAY		900	12.5	<b>County:</b> King
<b>Location:</b>		<b>Longitude:</b>	<b>Latitude:</b>	<b>Structure Length:</b>		<b>Out to Out Width:</b>
0.5 E JCT 8TH AV		122 11 48	47 29 54	239 ft.		77 ft.
<b>Feature Intersected:</b>		<b>PGA:</b>	<b>Seismic Zone:</b>	<b>Span Type:</b>	<b>Main Spans:</b> 3	
PCC RR HOUSER WAY		32.24 %g	C	CBOX	<b>Appr. Spans:</b> 0	
<b>Year Built:</b> 1966	<b>ADT:</b> 19806	<b>Detour Length:</b>	<b>Skew Angle:</b>	<b>Pier Type:</b>	<b>Footing Type:</b>	
<b>Year Rebuilt:</b>	<b>Truck Pct:</b> 5 %	1 miles	30	Double Column Pier	Steel pile	



**Bridge Notes:**

Intermediate Piers, Piers 2 and 3, each has two 5'-0" diameter columns on pile footings. #4 hoops spaced at 12" spacing. Vertical #11 bars have 4'-2" lap splices at top of footings. End Piers 1 and 4 are steel pile bents (12 BP 53).

**Retrofit Program Notes:**

**Completed Retrofit Notes:**

**Remaining Retrofit Notes:**

Retrofit columns at Piers 2 and 3. (2 ea. 4 total, 5' dia.)

**All Bridge Retrofit Status:** R

**Special Br Retrofit Status:**

**Superstr Retrofit Status:** N

**Substr Group 3 Status:** N

**Substr Group 4 Status:** R

C=Complete P=Partially Complet

R=Required N=Not Required

D=Differed X=Excluded I=In Progress

**Total Number of Columns:**

**No. of Wet Retrofitted Columns:**

**Isolation Bearing Candidate:**

**Bridge Requires Further Evaluation:**

**07-09 Rank:**

**2005-07 CN Funding:** 0

**2005 New Revenue Funding Category:** H

**Estimated Total Bridge Item Cost: \$267,289.00**

**Estimated Total Retrofit Project Cost: \$481,120.20**