

APPENDIX D

PAVEMENT MAINTENANCE/PRESERVATION DETAILED FORECASTS FOR CITIES AND COUNTIES

20 Year Pavement Maintenance/Preservation Cost CITIES

	Miles	Pavement Width	Treatment Type							
			Crack Seal				Single Chip Seal			
			Cost/ Sq.Yd.	Cost/mile	20 year cost	average cost per year	Cost/ Sq.Yd.	Cost/mile	20 year cost	average cost per year
Asotin County										
Asotin	14.00	32	\$ 1.00	\$ 19,000	\$ 1,773,000	\$ 88,650	\$ 1.00	\$ 19,000	\$ 760,000	\$ 38,000
Clarkston	32.78	32	\$ 1.00	\$ 19,000	\$ 4,152,000	\$ 207,600	\$ 1.00	\$ 19,000	\$ 1,779,000	\$ 88,950
Total	46.78				\$ 5,925,000	\$ 296,250			\$ 2,539,000	\$ 126,950
Columbia County										
Dayton	17.85	32	\$ 1.00	\$ 19,000	\$ 2,261,000	\$ 113,050	\$ 1.00	\$ 19,000	\$ 969,000	\$ 48,450
Starbuck	1.16	32	\$ 1.00	\$ 19,000	\$ 147,000	\$ 7,350	\$ 1.00	\$ 19,000	\$ 63,000	\$ 3,150
Total	19.01				\$ 2,408,000	\$ 120,400			\$ 1,032,000	\$ 51,600
Garfield County										
Pomeroy	18.00	32	\$ 1.00	\$ 19,000	\$ 2,280,000	\$ 114,000	\$ 1.00	\$ 19,000	\$ 977,000	\$ 48,850
Total	18.00				\$ 2,280,000	\$ 114,000			\$ 977,000	\$ 48,850
Whitman County										
Albion	7.01	32	\$ 1.00	\$ 19,000	\$ 888,000	\$ 44,400	\$ 1.00	\$ 19,000	\$ 381,000	\$ 19,050
Colfax	17.60	32	\$ 1.00	\$ 19,000	\$ 2,229,000	\$ 111,450	\$ 1.00	\$ 19,000	\$ 955,000	\$ 47,750
Colton	5.48	32	\$ 1.00	\$ 19,000	\$ 694,000	\$ 34,700	\$ 1.00	\$ 19,000	\$ 297,000	\$ 14,850
Endicott	5.31	32	\$ 1.00	\$ 19,000	\$ 673,000	\$ 33,650	\$ 1.00	\$ 19,000	\$ 288,000	\$ 14,400
Farmington	4.75	32	\$ 1.00	\$ 19,000	\$ 602,000	\$ 30,100	\$ 1.00	\$ 19,000	\$ 258,000	\$ 12,900
Garfield	8.63	32	\$ 1.00	\$ 19,000	\$ 1,093,000	\$ 54,650	\$ 1.00	\$ 19,000	\$ 468,000	\$ 23,400
LaCrosse	5.20	32	\$ 1.00	\$ 19,000	\$ 659,000	\$ 32,950	\$ 1.00	\$ 19,000	\$ 282,000	\$ 14,100
Lamont	2.20	32	\$ 1.00	\$ 19,000	\$ 279,000	\$ 13,950	\$ 1.00	\$ 19,000	\$ 119,000	\$ 5,950
Malden	4.38	32	\$ 1.00	\$ 19,000	\$ 555,000	\$ 27,750	\$ 1.00	\$ 19,000	\$ 238,000	\$ 11,900
Oakesdale	11.50	32	\$ 1.00	\$ 19,000	\$ 1,457,000	\$ 72,850	\$ 1.00	\$ 19,000	\$ 624,000	\$ 31,200
Palouse	10.00	32	\$ 1.00	\$ 19,000	\$ 1,267,000	\$ 63,350	\$ 1.00	\$ 19,000	\$ 543,000	\$ 27,150
Pullman	66.40	32	\$ 1.00	\$ 19,000	\$ 8,411,000	\$ 420,550	\$ 1.00	\$ 19,000	\$ 3,605,000	\$ 180,250
Rosalia	13.50	32	\$ 1.00	\$ 19,000	\$ 1,710,000	\$ 85,500	\$ 1.00	\$ 19,000	\$ 733,000	\$ 36,650
St. John	8.70	32	\$ 1.00	\$ 19,000	\$ 1,102,000	\$ 55,100	\$ 1.00	\$ 19,000	\$ 472,000	\$ 23,600
Tekoa	12.19	32	\$ 1.00	\$ 19,000	\$ 1,544,000	\$ 77,200	\$ 1.00	\$ 19,000	\$ 662,000	\$ 33,100
Uniontown	7.32	32	\$ 1.00	\$ 19,000	\$ 927,000	\$ 46,350	\$ 1.00	\$ 19,000	\$ 397,000	\$ 19,850
WSU	13.68	32	\$ 1.00	\$ 19,000	\$ 1,733,000	\$ 86,650	\$ 1.00	\$ 19,000	\$ 743,000	\$ 37,150
Total	56.18				\$ 25,823,000	\$ 1,291,150			\$ 11,065,000	\$ 553,250

Note: City road widths assumes a 32 foot wide road.
City road miles are taken 2008 WSDOT Revenue & Expenditures Summary.
Crack seal cost estimate assumes \$1.00 per sq.yd. for cities
Chip seal cost estimate assumes \$1.00 per sq.yd for cities
Crack seal assumes a 3yr maintenance plan
Chip seal assumes a 7yr maintenance plan

20 Year Pavement Maintenance/Preservation Cost COUNTIES

Asotin County

Treatment Type

County	Miles	Pavement Width	Crack Seal				Single Chip Seal			
			Cost/Sq.Yd.	Cost/mile	20 year cost	average cost per year	Cost/Sq.Yd.	Cost/mile	20 year cost	average cost per year
Asotin	0.98	12	\$ 1.00	\$ 7,000	\$ 46,000	\$ 2,300	\$ 1.00	\$ 7,000	\$ 27,000	\$ 1,350
Asotin	0.51	14	\$ 1.00	\$ 8,000	\$ 27,000	\$ 1,350	\$ 1.00	\$ 8,000	\$ 16,000	\$ 800
Asotin	0.79	16	\$ 1.00	\$ 9,000	\$ 47,000	\$ 2,350	\$ 1.00	\$ 9,000	\$ 28,000	\$ 1,400
Asotin	2.86	18	\$ 1.00	\$ 11,000	\$ 210,000	\$ 10,500	\$ 1.00	\$ 11,000	\$ 126,000	\$ 6,300
Asotin	13.32	20	\$ 1.00	\$ 12,000	\$ 1,065,000	\$ 53,250	\$ 1.00	\$ 12,000	\$ 639,000	\$ 31,950
Asotin	0.17	21	\$ 1.00	\$ 12,000	\$ 14,000	\$ 700	\$ 1.00	\$ 12,000	\$ 8,000	\$ 400
Asotin	4.51	22	\$ 1.00	\$ 13,000	\$ 391,000	\$ 19,550	\$ 1.00	\$ 13,000	\$ 235,000	\$ 11,750
Asotin	29.17	24	\$ 1.00	\$ 14,000	\$ 2,722,000	\$ 136,100	\$ 1.00	\$ 14,000	\$ 1,633,000	\$ 81,650
Asotin	31.64	26	\$ 1.00	\$ 15,000	\$ 3,164,000	\$ 158,200	\$ 1.00	\$ 15,000	\$ 1,898,000	\$ 94,900
Asotin	0.67	27	\$ 1.00	\$ 16,000	\$ 71,000	\$ 3,550	\$ 1.00	\$ 16,000	\$ 43,000	\$ 2,150
Asotin	31.12	28	\$ 1.00	\$ 16,000	\$ 3,320,000	\$ 166,000	\$ 1.00	\$ 16,000	\$ 1,992,000	\$ 99,600
Asotin	3.33	30	\$ 1.00	\$ 18,000	\$ 399,000	\$ 19,950	\$ 1.00	\$ 18,000	\$ 240,000	\$ 12,000
Asotin	9.04	32	\$ 1.00	\$ 19,000	\$ 1,146,000	\$ 57,300	\$ 1.00	\$ 19,000	\$ 687,000	\$ 34,350
Asotin	0.06	33	\$ 1.00	\$ 19,000	\$ 8,000	\$ 400	\$ 1.00	\$ 19,000	\$ 5,000	\$ 250
Asotin	1.95	34	\$ 1.00	\$ 20,000	\$ 260,000	\$ 13,000	\$ 1.00	\$ 20,000	\$ 156,000	\$ 7,800
Asotin	18.63	36	\$ 1.00	\$ 21,000	\$ 2,608,000	\$ 130,400	\$ 1.00	\$ 21,000	\$ 1,565,000	\$ 78,250
Asotin	0.28	38	\$ 1.00	\$ 22,000	\$ 41,000	\$ 2,050	\$ 1.00	\$ 22,000	\$ 25,000	\$ 1,250
Asotin	5.98	40	\$ 1.00	\$ 23,000	\$ 917,000	\$ 45,850	\$ 1.00	\$ 23,000	\$ 550,000	\$ 27,500
Asotin	1.90	42	\$ 1.00	\$ 25,000	\$ 317,000	\$ 15,850	\$ 1.00	\$ 25,000	\$ 190,000	\$ 9,500
Asotin	0.83	43	\$ 1.00	\$ 25,000	\$ 138,000	\$ 6,900	\$ 1.00	\$ 25,000	\$ 83,000	\$ 4,150
Asotin	4.21	44	\$ 1.00	\$ 26,000	\$ 730,000	\$ 36,500	\$ 1.00	\$ 26,000	\$ 438,000	\$ 21,900
Asotin	2.52	48	\$ 1.00	\$ 28,000	\$ 471,000	\$ 23,550	\$ 1.00	\$ 28,000	\$ 283,000	\$ 14,150
Asotin	0.27	52	\$ 1.00	\$ 30,000	\$ 54,000	\$ 2,700	\$ 1.00	\$ 31,000	\$ 34,000	\$ 1,700
Asotin	0.35	56	\$ 1.00	\$ 33,000	\$ 76,000	\$ 3,800	\$ 1.00	\$ 33,000	\$ 46,000	\$ 2,300
Asotin	0.02	57	\$ 1.00	\$ 33,000	\$ 5,000	\$ 250	\$ 1.00	\$ 33,000	\$ 3,000	\$ 150
Asotin	0.11	60	\$ 1.00	\$ 35,000	\$ 27,000	\$ 1,350	\$ 1.00	\$ 35,000	\$ 16,000	\$ 800
Asotin	0.36	64	\$ 1.00	\$ 37,000	\$ 88,000	\$ 4,400	\$ 1.00	\$ 38,000	\$ 54,000	\$ 2,700
Asotin	0.03	66	\$ 1.00	\$ 39,000	\$ 7,000	\$ 350	\$ 1.00	\$ 39,000	\$ 4,000	\$ 200
Asotin	0.10	68	\$ 1.00	\$ 40,000	\$ 27,000	\$ 1,350	\$ 1.00	\$ 40,000	\$ 16,000	\$ 800
Asotin	0.04	72	\$ 1.00	\$ 42,000	\$ 11,000	\$ 550	\$ 1.00	\$ 42,000	\$ 6,000	\$ 300
Asotin	0.06	74	\$ 1.00	\$ 43,000	\$ 17,000	\$ 850	\$ 1.00	\$ 43,000	\$ 10,000	\$ 500
Asotin	0.02	76	\$ 1.00	\$ 44,000	\$ 6,000	\$ 300	\$ 1.00	\$ 45,000	\$ 3,000	\$ 150
Asotin	0.09	80	\$ 1.00	\$ 47,000	\$ 28,000	\$ 1,400	\$ 1.00	\$ 47,000	\$ 17,000	\$ 850
Asotin	0.12	84	\$ 1.00	\$ 49,000	\$ 38,000	\$ 1,900	\$ 1.00	\$ 49,000	\$ 23,000	\$ 1,150
Asotin	0.04	88	\$ 1.00	\$ 51,000	\$ 13,000	\$ 650	\$ 1.00	\$ 52,000	\$ 8,000	\$ 400
Asotin	0.01	92	\$ 1.00	\$ 54,000	\$ 4,000	\$ 200	\$ 1.00	\$ 54,000	\$ 3,000	\$ 150
Total	166.08				\$ 15,539,000	\$ 776,950			\$ 9,323,000	\$ 466,150

Columbia County

Treatment Type

County	Miles	Pavement Width	Crack Seal				Single Chip Seal			
			Cost/Sq.Yd.	Cost/mile	20 year cost	average cost per year	Cost/Sq.Yd.	Cost/mile	20 year cost	average cost per year
Columbia	0.22	12	\$ 1.00	\$ 7,000	\$ 10,000	\$ 500	\$ 1.00	\$ 7,000	\$ 6,000	\$ 300
Columbia	0.16	14	\$ 1.00	\$ 8,000	\$ 9,000	\$ 450	\$ 1.00	\$ 8,000	\$ 5,000	\$ 250
Columbia	0.97	16	\$ 1.00	\$ 9,000	\$ 58,000	\$ 2,900	\$ 1.00	\$ 9,000	\$ 35,000	\$ 1,750
Columbia	1.15	18	\$ 1.00	\$ 11,000	\$ 84,000	\$ 4,200	\$ 1.00	\$ 11,000	\$ 51,000	\$ 2,550
Columbia	53.69	20	\$ 1.00	\$ 12,000	\$ 4,295,000	\$ 214,750	\$ 1.00	\$ 12,000	\$ 2,577,000	\$ 128,850
Columbia	37.65	22	\$ 1.00	\$ 13,000	\$ 3,263,000	\$ 163,150	\$ 1.00	\$ 13,000	\$ 1,958,000	\$ 97,900
Columbia	45.81	24	\$ 1.00	\$ 14,000	\$ 4,276,000	\$ 213,800	\$ 1.00	\$ 14,000	\$ 2,566,000	\$ 128,300
Columbia	0.88	28	\$ 1.00	\$ 16,000	\$ 94,000	\$ 4,700	\$ 1.00	\$ 16,000	\$ 57,000	\$ 2,850
Columbia	1.93	30	\$ 1.00	\$ 18,000	\$ 232,000	\$ 11,600	\$ 1.00	\$ 18,000	\$ 139,000	\$ 6,950
Columbia	4.22	34	\$ 1.00	\$ 20,000	\$ 562,000	\$ 28,100	\$ 1.00	\$ 20,000	\$ 337,000	\$ 16,850
Total	146.69				\$ 12,883,000	\$ 644,150			\$ 7,731,000	\$ 386,550

Garfield County

Treatment Type

County	Miles	Pavement Width	Crack Seal				Single Chip Seal			
			Cost/ Sq.Yd.	Cost/mile	20 year cost	average cost per year	Cost/ Sq.Yd.	Cost/mile	20 year cost	average cost per year
Garfield	0.17	14	\$ 1.00	\$ 8,000	\$ 9,000	\$ 450	\$ 1.00	\$ 8,000	\$ 5,000	\$ 250
Garfield	0.45	16	\$ 1.00	\$ 9,000	\$ 27,000	\$ 1,350	\$ 1.00	\$ 9,000	\$ 16,000	\$ 800
Garfield	1.47	18	\$ 1.00	\$ 11,000	\$ 108,000	\$ 5,400	\$ 1.00	\$ 11,000	\$ 65,000	\$ 3,250
Garfield	2.14	20	\$ 1.00	\$ 12,000	\$ 171,000	\$ 8,550	\$ 1.00	\$ 12,000	\$ 103,000	\$ 5,150
Garfield	7.91	22	\$ 1.00	\$ 13,000	\$ 686,000	\$ 34,300	\$ 1.00	\$ 13,000	\$ 411,000	\$ 20,550
Garfield	30.52	24	\$ 1.00	\$ 14,000	\$ 2,848,000	\$ 142,400	\$ 1.00	\$ 14,000	\$ 1,709,000	\$ 85,450
Garfield	37.36	26	\$ 1.00	\$ 15,000	\$ 3,736,000	\$ 186,800	\$ 1.00	\$ 15,000	\$ 2,242,000	\$ 112,100
Garfield	48.39	28	\$ 1.00	\$ 16,000	\$ 5,162,000	\$ 258,100	\$ 1.00	\$ 16,000	\$ 3,097,000	\$ 154,850
Garfield	2.90	30	\$ 1.00	\$ 18,000	\$ 348,000	\$ 17,400	\$ 1.00	\$ 18,000	\$ 209,000	\$ 10,450
Garfield	1.26	32	\$ 1.00	\$ 19,000	\$ 160,000	\$ 8,000	\$ 1.00	\$ 19,000	\$ 96,000	\$ 4,800
Garfield	0.11	34	\$ 1.00	\$ 20,000	\$ 15,000	\$ 750	\$ 1.00	\$ 20,000	\$ 9,000	\$ 450
Garfield	0.02	44	\$ 1.00	\$ 26,000	\$ 4,000	\$ 200	\$ 1.00	\$ 26,000	\$ 2,000	\$ 100
Garfield	0.04	50	\$ 1.00	\$ 29,000	\$ 8,000	\$ 400	\$ 1.00	\$ 29,000	\$ 5,000	\$ 250
Total	132.75				\$ 13,282,000	\$ 664,100			\$ 7,969,000	\$ 398,450

Whitman County

Treatment Type

County	Miles	Pavement Width	Crack Seal				Single Chip Seal			
			Cost/ Sq.Yd.	Cost/mile	20 year cost	average cost per year	Cost/ Sq.Yd.	Cost/mile	20 year cost	average cost per year
Whitman	0.29	12	\$ 1.00	\$ 7,000	\$ 14,000	\$ 700	\$ 1.00	\$ 7,000	\$ 8,000	\$ 400
Whitman	0.40	15	\$ 1.00	\$ 9,000	\$ 24,000	\$ 1,200	\$ 1.00	\$ 9,000	\$ 14,000	\$ 700
Whitman	0.99	16	\$ 1.00	\$ 9,000	\$ 59,000	\$ 2,950	\$ 1.00	\$ 9,000	\$ 36,000	\$ 1,800
Whitman	4.31	18	\$ 1.00	\$ 11,000	\$ 316,000	\$ 15,800	\$ 1.00	\$ 11,000	\$ 190,000	\$ 9,500
Whitman	31.30	20	\$ 1.00	\$ 12,000	\$ 2,504,000	\$ 125,200	\$ 1.00	\$ 12,000	\$ 1,502,000	\$ 75,100
Whitman	47.78	22	\$ 1.00	\$ 13,000	\$ 4,141,000	\$ 207,050	\$ 1.00	\$ 13,000	\$ 2,485,000	\$ 124,250
Whitman	12.02	23	\$ 1.00	\$ 13,000	\$ 1,042,000	\$ 52,100	\$ 1.00	\$ 13,000	\$ 625,000	\$ 31,250
Whitman	122.46	24	\$ 1.00	\$ 14,000	\$ 11,429,000	\$ 571,450	\$ 1.00	\$ 14,000	\$ 6,857,000	\$ 342,850
Whitman	15.73	25	\$ 1.00	\$ 15,000	\$ 1,573,000	\$ 78,650	\$ 1.00	\$ 15,000	\$ 944,000	\$ 47,200
Whitman	78.79	26	\$ 1.00	\$ 15,000	\$ 7,879,000	\$ 393,950	\$ 1.00	\$ 15,000	\$ 4,727,000	\$ 236,350
Whitman	0.08	27	\$ 1.00	\$ 16,000	\$ 9,000	\$ 450	\$ 1.00	\$ 16,000	\$ 5,000	\$ 250
Whitman	66.14	28	\$ 1.00	\$ 16,000	\$ 7,055,000	\$ 352,750	\$ 1.00	\$ 16,000	\$ 4,233,000	\$ 211,650
Whitman	8.77	30	\$ 1.00	\$ 18,000	\$ 1,052,000	\$ 52,600	\$ 1.00	\$ 18,000	\$ 631,000	\$ 31,550
Whitman	10.48	32	\$ 1.00	\$ 19,000	\$ 1,327,000	\$ 66,350	\$ 1.00	\$ 19,000	\$ 796,000	\$ 39,800
Whitman	19.12	34	\$ 1.00	\$ 20,000	\$ 2,549,000	\$ 127,450	\$ 1.00	\$ 20,000	\$ 1,529,000	\$ 76,450
Whitman	8.35	36	\$ 1.00	\$ 21,000	\$ 1,169,000	\$ 58,450	\$ 1.00	\$ 21,000	\$ 701,000	\$ 35,050
Whitman	6.56	38	\$ 1.00	\$ 22,000	\$ 963,000	\$ 48,150	\$ 1.00	\$ 22,000	\$ 578,000	\$ 28,900
Whitman	3.00	40	\$ 1.00	\$ 23,000	\$ 459,000	\$ 22,950	\$ 1.00	\$ 23,000	\$ 276,000	\$ 13,800
Whitman	0.75	42	\$ 1.00	\$ 25,000	\$ 125,000	\$ 6,250	\$ 1.00	\$ 25,000	\$ 75,000	\$ 3,750
Whitman	0.14	44	\$ 1.00	\$ 26,000	\$ 25,000	\$ 1,250	\$ 1.00	\$ 26,000	\$ 15,000	\$ 750
Total	437.45				\$ 43,714,000	\$ 2,185,700			\$ 26,227,000	\$ 1,311,350

Note:

- County road width and miles are actual amounts from the County Road Log.
- Crack seal cost estimate assumes \$1.00 per sq.yd. for counties
- Chip seal cost estimate assumes \$1.00 per sq.yd for counties
- Crack seal assumes a 3yr maintenance plan
- Chip seal assumes a 7yr maintenance plan
- Whitman County City road milage includes roads owned by Washington State University (13.68 miles)