# Appendix G

Bridge Inspection and Maintenance Cost Estimates

r Pres	ent Value Factor	e 1 Inspection & Routine   Inspection Cost   Routine			ent Value Cost
5	1.0000	\$7,500	\$74,900	\$82,400	\$82,400
6 7	0.9756 0.9518	\$47,700 \$7,500	\$74,900 \$74,900	\$122,600 \$82,400	\$119,610 \$78,430
8	0.9286	\$85,700	\$74,900	\$160,600	\$149,133
9	0.9060 0.8839	\$7,500 \$47,700	\$74,900 \$74,900	\$82,400 \$122,600	\$74,650 \$108,361
1	0.8623	\$7,500	\$74,900	\$82,400	\$71,053
3	0.8413 0.8207	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400	\$135,107 \$67,630
4	0.8207	\$47,700	\$74,900	\$122,600	\$98,169
5	0.7812	\$7,500	\$74,900	\$82,400	\$64,371
6 7	0.7621 0.7436	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400	\$122,400 \$61,269
8	0.7254	\$47,700	\$74,900	\$122,600	\$88,937
9	0.7077	\$7,500	\$74,900	\$82,400	\$58,317
1	0.6905 0.6736	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400	\$110,889 \$55,507
2	0.6572	\$47,700	\$74,900	\$122,600	\$80,572
3 4	0.6412 0.6255	\$7,500 \$85,700	\$74,900 \$74,900	\$82,400 \$160,600	\$52,832 \$100,460
5	0.6103	\$7,500	\$74,900	\$82,400	\$50,286
6	0.5954	\$47,700	\$74,900	\$122,600	\$72,994
7 8	0.5809 0.5667	\$7,500 \$85,700	\$74,900 \$74,900	\$82,400 \$160,600	\$47,863 \$91,012
9	0.5529	\$7,500	\$74,900	\$82,400	\$45,557
0 1	0.5394 0.5262	\$47,700 \$7,500	\$74,900 \$74,900	\$122,600 \$82,400	\$66,129 \$43,362
2	0.5134	\$85,700	\$74,900	\$160,600	\$82,452
3	0.5009	\$7,500	\$74,900	\$82,400	\$41,272
5	0.4887 0.4767	\$47,700 \$7,500	\$74,900 \$74,900	\$122,600 \$82,400	\$59,910 \$39,28 <sup>4</sup>
6	0.4651	\$85,700	\$74,900	\$160,600	\$74,697
7	0.4538	\$7,500 \$47,700	\$74,900	\$82,400	\$37,391
9	0.4427 0.4319	\$47,700 \$7,500	\$74,900 \$74,900	\$122,600 \$82,400	\$54,275 \$35,589
0	0.4214	\$85,700	\$74,900	\$160,600	\$67,672
2	0.4111 0.4011	\$7,500 \$47,700	\$74,900 \$74,900	\$82,400 \$122,600	\$33,874 \$49,171
3	0.4011	\$47,700	\$74,900	\$122,600	\$49,171
4	0.3817	\$85,700	\$74,900	\$160,600	\$61,308
6	0.3724 0.3633	\$7,500 \$47,700	\$74,900 \$74,900	\$82,400 \$122,600	\$30,688 \$44,546
7	0.3545	\$7,500	\$74,900	\$82,400	\$29,210
8	0.3458	\$85,700	\$74,900	\$160,600	\$55,542
0	0.3374 0.3292	\$7,500 \$47,700	\$74,900 \$74,900	\$82,400 \$122,600	\$27,802 \$40,357
1	0.3211	\$7,500	\$74,900	\$82,400	\$26,462
3	0.3133 0.3057	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400	\$50,318 \$25,187
4	0.2982	\$47,700	\$74,900	\$122,600	\$36,561
5	0.2909	\$7,500	\$74,900	\$82,400	\$23,974
7	0.2838 0.2769	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400	\$45,586 \$22,818
8	0.2702	\$47,700	\$74,900	\$122,600	\$33,123
9	0.2636	\$7,500	\$74,900	\$82,400	\$21,719
1	0.2572 0.2509	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400	\$41,298 \$20,672
2	0.2448	\$47,700	\$74,900	\$122,600	\$30,008
3 4	0.2388 0.2330	\$7,500 \$85,700	\$74,900 \$74,900	\$82,400 \$160,600	\$19,676 \$37,414
5	0.2273	\$7,500	\$74,900	\$82,400	\$18,728
6	0.2217	\$47,700	\$74,900	\$122,600	\$27,185
7 8	0.2163 0.2111	\$7,500 \$85,700	\$74,900 \$74,900	\$82,400 \$160,600	\$17,820 \$33,89
9	0.2059	\$7,500	\$74,900	\$82,400	\$16,96
0 1	0.2009 0.1960	\$47,700 \$7,500	\$74,900 \$74,900	\$122,600 \$82,400	\$24,629 \$16,149
2	0.1900	\$85,700	\$74,900	\$160,600	\$30,70
3	0.1865	\$7,500	\$74,900	\$82,400	\$15,37
5	0.1820 0.1776	\$47,700 \$7,500	\$74,900 \$74,900	\$122,600 \$82,400	\$22,31 \$14,63
6	0.1732	\$85,700	\$74,900	\$160,600	\$27,82
7	0.1690	\$7,500	\$74,900	\$82,400	\$13,92
9	0.1649 0.1609	\$47,700 \$7,500	\$74,900 \$74,900	\$122,600 \$82,400	\$20,21 \$13,25
0	0.1569	\$85,700	\$74,900	\$160,600	\$25,20
2	0.1531 0.1494	\$7,500 \$47,700	\$74,900 \$74,900	\$82,400 \$122,600	\$12,61 \$18,31
3	0.1494	\$47,700	\$74,900	\$82,400	\$18,31 \$12,00
4	0.1422	\$85,700	\$74,900	\$160,600	\$22,83
6	0.1387 0.1353	\$7,500 \$47,700	\$74,900 \$74,900	\$82,400 \$122,600	\$11,42 \$16,59
7	0.1333	\$7,500	\$74,900	\$82,400	\$10,87
8	0.1288	\$85,700	\$74,900	\$160,600	\$20,68
0	0.1257 0.1226	\$7,500 \$47,700	\$74,900 \$74,900	\$82,400 \$122,600	\$10,35 \$15,03
1	0.1196	\$7,500	\$74,900	\$82,400	\$9,85
3	0.1167 0.1138	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400	\$18,74 \$9,38
4	0.1111	\$47,700	\$74,900	\$122,600	\$13,61
5	0.1084	\$7,500	\$74,900	\$82,400	\$8,92
7	0.1057 0.1031	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400	\$16,97 \$8,49
8	0.1006	\$47,700	\$74,900	\$122,600	\$12,33
9	0.0982	\$7,500 \$85,700	\$74,900	\$82,400	\$8,08 \$15.38
1	0.0958 0.0934	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400	\$15,38 \$7,69
2	0.0912	\$47,700	\$74,900	\$122,600	\$11,17
3	0.0889	\$7,500	\$74,900	\$82,400	\$7,32 \$13.03
5	0.0868 0.0846	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400	\$13,93 \$6,97
6	0.0826	\$47,700	\$74,900	\$122,600	\$10,12
7	0.0806	\$7,500 \$85,700	\$74,900	\$82,400	\$6,63 \$12.63
9	0.0786 0.0767	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400	\$12,62 \$6,31
0	0.0748	\$47,700	\$74,900	\$122,600	\$9,17
1	0.0730	\$7,500	\$74,900	\$82,400	\$6,01

Routine Inspection NSTM Inspection Routine Inspection In-Depth Inspection\*

4-Year Repeating Cycle

\* In-Depth Inspection includes NSTM Inspection, Ultrasonic Pin Testing, & Full Condition/Recommendation Report.

#### Notes:

- 1. Costs are based on the 2017 LCCA Report/actual costs incurred by the county to inspect and maintain the existing bridge between 2006 and 2015. They were inflated to 2024 dollar values.
- 2. The Subtotal Net Present Value was then inflated (by 33%) to match the  $initial\ and\ future\ cost\ estimate\ dollar$ values used for a 2030 construction start date.
- 3. Discount Rate (i) is assumed to be 2.50%.

Subtotal Net Present Value = 33% (Inflation, 2030 begin construction) = Total Net Present Value = \$4,250,200 \$1,402,600 \$5,652,800

Present Value Cos \$82,4	Total Cost \$82,400	Routine Maint. Cost Cal Routine Maint. Cost \$74,900	Inspection Cost \$7,500	Present Value Factor 1.0000	Year 2025
\$82,4I \$119,6	\$122,600	\$74,900 \$74,900	\$7,500 \$47,700	0.9756	2025
\$78,4	\$82,400	\$74,900	\$7,500	0.9518	2027
\$149,1 \$74,6	\$160,600 \$82,400	\$74,900 \$74,900	\$85,700 \$7,500	0.9286 0.9060	2028 2029
\$108,3	\$122,600	\$74,900	\$47,700	0.8839	2030
\$71,0	\$82,400	\$74,900	\$7,500	0.8623	2031
\$14,4° \$14,1°	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.8413 0.8207	2032 2033
\$13,7	\$17,200	\$15,000	\$2,200	0.8007	2034
\$13,4	\$17,200	\$15,000	\$2,200	0.7812	2035
\$28,50 \$12,78	\$37,400 \$17,200	\$15,000 \$15,000	\$22,400 \$2,200	0.7621 0.7436	2036 2037
\$12,7	\$17,200	\$15,000	\$2,200	0.7254	2037
\$12,1	\$17,200	\$15,000	\$2,200	0.7077	2039
\$11,8° \$25,1°	\$17,200 \$37,400	\$15,000 \$15,000	\$2,200 \$22,400	0.6905 0.6736	2040 2041
\$11,30	\$17,200	\$15,000	\$2,200	0.6572	2041
\$11,0	\$17,200	\$15,000	\$2,200	0.6412	2043
\$10,75 \$10,45	\$17,200 \$17,200	\$15,000	\$2,200 \$2,200	0.6255 0.6103	2044 2045
\$10,4	\$37,400	\$15,000 \$15,000	\$2,200	0.5954	2045
\$9,9	\$17,200	\$15,000	\$2,200	0.5809	2047
\$9,7	\$17,200	\$15,000	\$2,200	0.5667	2048
\$9,50 \$9,2	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.5529 0.5394	2049 2050
\$19,6	\$37,400	\$15,000	\$22,400	0.5262	2051
\$8,8	\$17,200	\$15,000	\$2,200	0.5134	2052
\$8,6 \$8,4	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.5009 0.4887	2053 2054
\$8,2	\$17,200	\$15,000	\$2,200	0.4767	2055
\$17,3	\$37,400	\$15,000	\$22,400	0.4651	2056
\$7,8 \$7,6	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.4538 0.4427	2057 2058
\$7,6	\$17,200	\$15,000	\$2,200	0.4319	2059
\$7,24	\$17,200	\$15,000	\$2,200	0.4214	2060
\$15,3° \$6,89	\$37,400 \$17,200	\$15,000 \$15,000	\$22,400 \$2,200	0.4111 0.4011	2061 2062
\$6,7	\$17,200	\$15,000	\$2,200	0.3913	2063
\$6,5	\$17,200	\$15,000	\$2,200	0.3817	2064
\$6,44 \$13,5	\$17,200 \$37,400	\$15,000 \$15,000	\$2,200 \$22,400	0.3724 0.3633	2065 2066
\$6,0	\$17,200	\$15,000	\$2,200	0.3545	2067
\$5,9	\$17,200	\$15,000	\$2,200	0.3458	2068
\$5,8 \$5,6	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.3374 0.3292	2069 2070
\$12,0	\$37,400	\$15,000	\$22,400	0.3211	2071
\$5,3	\$17,200	\$15,000	\$2,200	0.3133	2072
\$5,2	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.3057	2073 2074
\$5,1 \$5,0	\$17,200	\$15,000	\$2,200	0.2982 0.2909	2074
\$10,6	\$37,400	\$15,000	\$22,400	0.2838	2076
\$4,7 \$4,6	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.2769 0.2702	2077 2078
\$4,5	\$17,200	\$15,000	\$2,200	0.2636	2078
\$4,43	\$17,200	\$15,000	\$2,200	0.2572	2080
\$9,3 \$4,2	\$37,400 \$17,200	\$15,000 \$15,000	\$22,400 \$2,200	0.2509 0.2448	2081 2082
\$4,2	\$17,200	\$15,000	\$2,200	0.2388	2083
\$4,0	\$17,200	\$15,000	\$2,200	0.2330	2084
\$3,9 \$8,2	\$17,200 \$37,400	\$15,000 \$15,000	\$2,200 \$22,400	0.2273 0.2217	2085 2086
\$3,7	\$17,200	\$15,000	\$2,400	0.217	2087
\$3,6	\$17,200	\$15,000	\$2,200	0.2111	2088
\$3,5	\$17,200	\$15,000	\$2,200	0.2059	2089
\$3,4! \$7,3:	\$17,200 \$37,400	\$15,000 \$15,000	\$2,200 \$22,400	0.2009 0.1960	2090 2091
\$3,2	\$17,200	\$15,000	\$2,200	0.1912	2092
\$3,20	\$17,200	\$15,000	\$2,200	0.1865	2093
\$3,1 \$3,0	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.1820 0.1776	2094 2095
\$6,4	\$37,400	\$15,000	\$22,400	0.1770	2096
\$2,9	\$17,200	\$15,000 \$15,000	\$2,200	0.1690	2097
\$2,83 \$2,70	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.1649 0.1609	2098 2099
\$2,69	\$17,200	\$15,000	\$2,200	0.1569	100
\$5,73 \$2,50	\$37,400	\$15,000 \$15,000	\$22,400	0.1531	2101
\$2,50 \$2,50	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.1494 0.1457	102
\$2,4	\$17,200	\$15,000	\$2,200	0.1422	104
\$2,3	\$17,200	\$15,000 \$15,000	\$2,200	0.1387	105
\$5,0 \$2,2	\$37,400 \$17,200	\$15,000 \$15,000	\$22,400 \$2,200	0.1353 0.1320	2106 2107
\$2,2	\$17,200	\$15,000	\$2,200	0.1288	108
\$2,1	\$17,200	\$15,000	\$2,200	0.1257	109
\$2,10 \$4,4	\$17,200 \$37,400	\$15,000 \$15,000	\$2,200 \$22,400	0.1226 0.1196	110
\$2,0	\$17,200	\$15,000	\$2,200	0.1167	2112
\$1,9	\$17,200	\$15,000	\$2,200	0.1138	2113
\$1,9 \$1,8	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.1111 0.1084	114
\$3,9	\$37,400	\$15,000	\$22,400	0.1057	1116
\$1,7	\$17,200	\$15,000	\$2,200	0.1031	117
\$1,73 \$1,63	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.1006 0.0982	118
\$1,68 \$1,68	\$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.0982 0.0958	2119 2120
\$3,4	\$37,400	\$15,000	\$22,400	0.0934	2121
\$1,5	\$17,200	\$15,000	\$2,200	0.0912	2122
\$1,5: \$1,4:	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.0889 0.0868	2123 2124
\$1,4	\$17,200	\$15,000	\$2,200	0.0846	2125
\$3,0	\$37,400	\$15,000	\$22,400	0.0826	2126
\$1,33 \$1,3	\$17,200 \$17,200	\$15,000 \$15,000	\$2,200 \$2,200	0.0806 0.0786	2127 2128
\$1,3	\$17,200 \$17,200	\$15,000	\$2,200 \$2,200	0.0767	2128
\$1,2	\$17,200	\$15,000	\$2,200	0.0748	130
\$2,73 \$1,23	\$37,400	\$15,000 \$15,000	\$22,400	0.0730	2131
\$1.7	\$17,200	\$15,000 Total =	\$2,200	0.0712	2132

Routine Inspection NSTM Inspection Routine Inspection In-Depth Inspection\* Routine Inspection NSTM Inspection Routine Inspection Routine Inspection Routine Inspection Routine Inspection Routine Inspection In-Depth Inspection\*\*

Bridge) until New Bridge is Constructed 5-Year Repeating Cycle (New Bridge)

4-Year

Repeating

Cycle (Exist.

- \* In-Depth Inspection includes NSTM Inspection, Ultrasonic Pin Testing, & Full  ${\it Condition/Recommendation Report.}$
- \*\* In-Depth Inspection includes Full Condition/Recommendation Report.

## Notes:

- 1. Costs are based on the 2017 LCCA Report. They were inflated to 2024 dollar values.
- 2. The Subtotal Net Present Value was then inflated (by 33%) to match the initial and future cost estimate dollar  $values\ used\ for\ a\ 2030\ construction\ start$
- 3. Discount Rate (i) is assumed to be 2.50%.

Total Net Present Value = 33% (Inflation, 2030 begin construction) = Total Net Present Value = \$1,349,300 \$445,300 \$1,794,600

2025	Present Value Factor 1.0000	Inspection Cost \$7,500	Routine Maint. Cost \$74,900	\$82,400	Present Value Cost \$82,400	Routine Inspection
2026	0.9756	\$47,700	\$74,900	\$122,600		NSTM Inspection
2027	0.9518	\$7,500	\$74,900	\$82,400		Routine Inspection
2028 2029	0.9286 0.9060	\$85,700 \$7,500	\$74,900 \$74,900	\$160,600 \$82,400		In-Depth Inspectio Routine Inspection
2030	0.8839	\$47,700	\$74,900	\$122,600		NSTM Inspection
2031	0.8623 0.8413	\$7,500 \$5,000	\$74,900 \$15,000	\$82,400 \$20,000		Routine Inspection Routine Inspection
2033	0.8207	\$5,000	\$15,000	\$20,000		Routine Inspection
2034	0.8007	\$5,000	\$15,000	\$20,000 \$20,000		Routine Inspection
2035 2036	0.7812 0.7621	\$5,000 \$50,000	\$15,000 \$15,000	\$65,000		Routine Inspectior In-Depth Inspection
2037	0.7436	\$5,000	\$15,000	\$20,000	\$14,871	
2038	0.7254 0.7077	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$14,508 \$14,155	* In-Depth Inspo Inspection, Ultro
2040	0.6905	\$5,000	\$15,000	\$20,000	\$13,809	•
2041	0.6736	\$50,000	\$15,000	\$65,000	\$43,786	**, 5 ., ,
2042 2043	0.6572 0.6412	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$13,144 \$12,823	** In-Depth Ins <sub>i</sub> Condition/Reco
2044	0.6255	\$5,000	\$15,000	\$20,000	\$12,511	00114111011411100
2045 2046	0.6103 0.5954	\$5,000 \$50,000	\$15,000 \$15,000	\$20,000 \$65,000	\$12,205 \$38,700	<u>Notes:</u> 1. Costs are bas
2047	0.5809	\$5,000	\$15,000	\$20,000	\$11,617	Report. They w
2048	0.5667	\$5,000	\$15,000	\$20,000	\$11,334	dollar values.
2049 2050	0.5529 0.5394	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$11,058 \$10,788	<ol><li>The Subtotal then inflated (b</li></ol>
2051	0.5262	\$50,000	\$15,000	\$65,000	\$34,205	, ,
2052	0.5134	\$5,000	\$15,000	\$20,000	\$10,268	values used for
2053 2054	0.5009 0.4887	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$10,018 \$9,773	date. 3. Discount Rat
2055	0.4767	\$5,000	\$15,000	\$20,000	\$9,535	2.50%.
2056 2057	0.4651 0.4538	\$50,000 \$5,000	\$15,000 \$15,000	\$65,000 \$20,000	\$30,232 \$9,075	
2057	0.4427	\$5,000	\$15,000	\$20,000	\$8,854	
2059	0.4319	\$5,000	\$15,000	\$20,000	\$8,638	
2060 2061	0.4214 0.4111	\$5,000 \$50,000	\$15,000 \$15,000	\$20,000 \$65,000	\$8,427 \$26,721	
2062	0.4011	\$5,000	\$15,000	\$20,000	\$8,021	
2063 2064	0.3913 0.3817	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$7,826 \$7,635	
2064	0.3724	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000	\$7,635 \$7,449	
2066	0.3633	\$50,000	\$15,000	\$65,000	\$23,618	1
2067 2068	0.3545 0.3458	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$7,090 \$6,917	
2069	0.3374	\$5,000	\$15,000	\$20,000	\$6,748	
2070 2071	0.3292 0.3211	\$5,000 \$50,000	\$15,000 \$15,000	\$20,000 \$65,000	\$6,583 \$20,874	
2072	0.3133	\$5,000	\$15,000	\$20,000	\$6,266	
2073	0.3057	\$5,000	\$15,000	\$20,000	\$6,113	
2074 2075	0.2982 0.2909	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$5,964 \$5,819	
2076	0.2838	\$50,000	\$15,000	\$65,000	\$18,450	
2077 2078	0.2769 0.2702	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$5,538 \$5,403	
2079	0.2636	\$5,000	\$15,000	\$20,000	\$5,272	
2080	0.2572	\$5,000	\$15,000	\$20,000	\$5,143 \$16,207	
2081 2082	0.2509 0.2448	\$50,000 \$5,000	\$15,000 \$15,000	\$65,000 \$20,000	\$16,307 \$4,895	
2083	0.2388	\$5,000	\$15,000	\$20,000	\$4,776	
2084 2085	0.2330 0.2273	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$4,659 \$4,546	
2086	0.2217	\$50,000	\$15,000	\$65,000	\$14,413	
2087	0.2163	\$5,000	\$15,000	\$20,000	\$4,327	
2088 2089	0.2111 0.2059	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$4,221 \$4,118	
2090	0.2009	\$5,000	\$15,000	\$20,000	\$4,018	
2091 2092	0.1960 0.1912	\$50,000 \$5,000	\$15,000 \$15,000	\$65,000 \$20,000	\$12,739 \$3,824	
2093	0.1865	\$5,000	\$15,000	\$20,000	\$3,731	
2094	0.1820	\$5,000	\$15,000	\$20,000	\$3,640	
2095 2096	0.1776 0.1732	\$5,000 \$50,000	\$15,000 \$15,000	\$20,000 \$65,000	\$3,551 \$11,259	
2097	0.1690	\$5,000	\$15,000	\$20,000	\$3,380	
2098 2099	0.1649 0.1609	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$3,298 \$3,217	
2100	0.1569	\$5,000	\$15,000	\$20,000	\$3,139	
2101	0.1531	\$50,000	\$15,000 \$15,000	\$65,000	\$9,952 \$2,987	
2102 2103	0.1494 0.1457	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$2,987 \$2,915	
2104	0.1422	\$5,000	\$15,000	\$20,000	\$2,843	
2105 2106	0.1387 0.1353	\$5,000 \$50,000	\$15,000 \$15,000	\$20,000 \$65,000	\$2,774 \$8,796	
100	0.1333	\$5,000	\$15,000	\$20,000	\$2,640	
108	0.1288	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000	\$2,576	
2109 2110	0.1257 0.1226	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$2,513 \$2,452	
2111	0.1196	\$50,000	\$15,000	\$65,000	\$7,774	
2112 2113	0.1167 0.1138	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$2,334 \$2,277	
2114	0.1111	\$5,000	\$15,000	\$20,000	\$2,221	
2115	0.1084	\$5,000 \$50,000	\$15,000 \$15,000	\$20,000	\$2,167 \$6,871	
2116 2117	0.1057 0.1031	\$50,000 \$5,000	\$15,000 \$15,000	\$65,000 \$20,000	\$6,871 \$2,063	
2118	0.1006	\$5,000	\$15,000	\$20,000	\$2,012	
2119 2120	0.0982 0.0958	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$1,963 \$1,915	
2120	0.0934	\$5,000	\$15,000 \$15,000	\$20,000	\$6,073	
2122	0.0912	\$5,000	\$15,000	\$20,000	\$1,823	
2123 2124	0.0889 0.0868	\$5,000 \$5,000	\$15,000 \$15,000	\$20,000 \$20,000	\$1,779 \$1,735	
2125	0.0846	\$5,000	\$15,000	\$20,000	\$1,693	
2126 2127	0.0826	\$50,000 \$5,000	\$15,000 \$15,000	\$65,000 \$20,000	\$5,368 \$1,611	
2127	0.0806 0.0786	\$5,000	\$15,000 \$15,000	\$20,000	\$1,611 \$1,572	
2129	0.0767	\$5,000	\$15,000	\$20,000	\$1,534	
2130	0.0748	\$5,000	\$15,000	\$20,000	\$1,496	
2131	0.0730	\$50,000	\$15,000	\$65,000	\$4,744	

NSTM Inspection Routine Inspection Routine Inspection Routine Inspection Routine Inspection Routine Inspection In-Depth Inspection\*\* Inspection, Ultrasonic Pin Testing, & Full  ${\it Condition/Recommendation Report.}$ 

Repeating Cycle (New Bridge) \* In-Depth Inspection includes NSTM

4-Year

Repeating

Cycle (Exist.

Bridge)

until New

Bridge is

Constructed

5-Year

\*\* In-Depth Inspection includes Full Condition/Recommendation Report.

#### Notes:

- 1. Costs are based on the 2017 LCCA Report. They were inflated to 2024 dollar values.
- 2. The Subtotal Net Present Value was then inflated (by 33%) to match the initial and future cost estimate dollar  $values\ used\ for\ a\ 2030\ construction\ start$
- 3. Discount Rate (i) is assumed to be 2.50%.

Total Net Present Value = 33% (Inflation, 2030 begin construction) = Total Net Present Value = \$1,586,800 \$523,700 \$2,110,500

Pouting to	Present Value Cost	Total Cost	Routine Maint. Cost Calcle	Inspection Cost	Present Value Factor	Year
Routine Inspection NSTM Inspection		\$82,400 \$122,600	\$74,900 \$74,900	\$7,500 \$47,700	1.0000 0.9756	2025
Routine Inspection	\$78,430	\$82,400	\$74,900	\$7,500	0.9518	2027
In-Depth Inspection' Routine Inspection		\$160,600 \$82,400	\$74,900 \$74,900	\$85,700 \$7,500	0.9286 0.9060	2028
NSTM Inspection		\$122,600	\$74,900	\$47,700	0.8839	2030
Routine Inspection Routine Inspection		\$82,400 \$18,000	\$74,900 \$15,000	\$7,500 \$3,000	0.8623 0.8413	2031
Routine Inspection		\$18,000	\$15,000	\$3,000	0.8207	2032
Routine Inspection		\$18,000	\$15,000	\$3,000	0.8007	2034
Routine Inspection In-Depth Inspection <sup>3</sup>		\$18,000 \$45,000	\$15,000 \$15,000	\$3,000 \$30,000	0.7812 0.7621	2035
	\$13,384	\$18,000	\$15,000	\$3,000	0.7436	2037
* In-Depth Inspection, Ultras	\$13,058 \$12,739	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.7254 0.7077	2038
Condition/Recomi	\$12,428	\$18,000	\$15,000	\$3,000	0.6905	2040
** In-Depth Inspe	\$30,313 \$11,830	\$45,000 \$18,000	\$15,000 \$15,000	\$30,000 \$3,000	0.6736 0.6572	2041
Condition/Recomi	\$11,541	\$18,000	\$15,000	\$3,000	0.6412	2042
Matasi	\$11,259	\$18,000	\$15,000	\$3,000	0.6255	2044
<u>Notes:</u> 1. Costs are based	\$10,985 \$26,792	\$18,000 \$45,000	\$15,000 \$15,000	\$3,000 \$30,000	0.6103 0.5954	2045 2046
Report. They wer	\$10,456	\$18,000	\$15,000	\$3,000	0.5809	2047
dollar values. 2. The Subtotal Ne	\$10,201 \$9,952	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.5667 0.5529	2048
then inflated (by 3	\$9,709	\$18,000	\$15,000	\$3,000	0.5394	2050
initial and future of values used for a 2	\$23,681 \$9,241	\$45,000 \$18,000	\$15,000 \$15,000	\$30,000 \$3,000	0.5262 0.5134	2051 2052
date.	\$9,016	\$18,000	\$15,000	\$3,000	0.5009	2053
3. Discount Rate (	\$8,796	\$18,000	\$15,000	\$3,000	0.4887	2054
2.50%.	\$8,581 \$20,930	\$18,000 \$45,000	\$15,000 \$15,000	\$3,000 \$30,000	0.4767 0.4651	2055
	\$8,168	\$18,000	\$15,000	\$3,000	0.4538	2057
	\$7,969 \$7,774	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.4427 0.4319	2058
	\$7,585	\$18,000	\$15,000	\$3,000	0.4214	2060
	\$18,499 \$7,219	\$45,000 \$18,000	\$15,000 \$15,000	\$30,000 \$3,000	0.4111 0.4011	2061 2062
	\$7,219	\$18,000	\$15,000	\$3,000	0.3913	2063
	\$6,871	\$18,000	\$15,000	\$3,000	0.3817	2064
	\$6,704 \$16,351	\$18,000 \$45,000	\$15,000 \$15,000	\$3,000 \$30,000	0.3724 0.3633	2065 2066
	\$6,381	\$18,000	\$15,000	\$3,000	0.3545	2067
	\$6,225 \$6,073	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.3458 0.3374	2068
	\$5,925	\$18,000	\$15,000	\$3,000	0.3292	2070
	\$14,452 \$5,640	\$45,000 \$18,000	\$15,000 \$15,000	\$30,000 \$3,000	0.3211 0.3133	2071
	\$5,502	\$18,000	\$15,000	\$3,000	0.3057	2073
	\$5,368 \$5,368	\$18,000 \$18,000	\$15,000	\$3,000	0.2982	2074
	\$5,237 \$12,773	\$45,000	\$15,000 \$15,000	\$3,000 \$30,000	0.2909 0.2838	2075 2076
	\$4,985	\$18,000	\$15,000	\$3,000	0.2769	2077
	\$4,863 \$4,744	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.2702 0.2636	2078 2079
	\$4,629	\$18,000	\$15,000	\$3,000	0.2572	2080
	\$11,290 \$4,406	\$45,000 \$18,000	\$15,000 \$15,000	\$30,000 \$3,000	0.2509 0.2448	2081
	\$4,298	\$18,000	\$15,000	\$3,000	0.2388	2083
	\$4,193 \$4,091	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.2330 0.2273	2084
	\$9,978	\$45,000	\$15,000	\$30,000	0.2217	2086
	\$3,894 \$3,700	\$18,000	\$15,000 \$15,000	\$3,000	0.2163	2087
	\$3,799 \$3,706	\$18,000 \$18,000	\$15,000	\$3,000 \$3,000	0.2111 0.2059	2088
	\$3,616	\$18,000	\$15,000	\$3,000	0.2009	2090
	\$8,819 \$3,442	\$45,000 \$18,000	\$15,000 \$15,000	\$30,000 \$3,000	0.1960 0.1912	2091
	\$3,358	\$18,000	\$15,000	\$3,000	0.1865	2093
	\$3,276 \$3,196	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.1820 0.1776	2094
	\$7,795	\$45,000	\$15,000	\$30,000	0.1732	2096
	\$3,042 \$2,968	\$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.1690	2097
	\$2,968 \$2,895	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.1649 0.1609	2098 2099
	\$2,825	\$18,000	\$15,000	\$3,000	0.1569	2100
	\$6,890 \$2,689	\$45,000 \$18,000	\$15,000 \$15,000	\$30,000 \$3,000	0.1531 0.1494	2101 2102
	\$2,623	\$18,000	\$15,000	\$3,000	0.1457	2103
	\$2,559 \$2,497	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.1422 0.1387	2104 2105
	\$6,089	\$45,000	\$15,000	\$30,000	0.1353	2106
	\$2,376	\$18,000	\$15,000	\$3,000	0.1320	2107
	\$2,318 \$2,262	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.1288 0.1257	2108 2109
	\$2,207	\$18,000	\$15,000	\$3,000	0.1226	2110
	\$5,382 \$2,100	\$45,000 \$18,000	\$15,000 \$15,000	\$30,000 \$3,000	0.1196 0.1167	2111 2112
	\$2,049	\$18,000	\$15,000 \$15,000	\$3,000	0.1167	2112
	\$1,999	\$18,000	\$15,000	\$3,000	0.1111	2114
	\$1,950 \$4,757	\$18,000 \$45,000	\$15,000 \$15,000	\$3,000 \$30,000	0.1084 0.1057	2115 2116
	\$1,856	\$18,000	\$15,000	\$3,000	0.1031	2117
	\$1,811 \$1,767	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.1006 0.0982	2118 2119
	\$1,724	\$18,000	\$15,000	\$3,000	0.0982	2120
	\$4,205 \$1,641	\$45,000 \$18,000	\$15,000 \$15,000	\$30,000	0.0934	2121 2122
	\$1,641 \$1,601	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.0912 0.0889	2122
	\$1,562	\$18,000	\$15,000	\$3,000	0.0868	2124
	\$1,524 \$3,716	\$18,000 \$45,000	\$15,000 \$15,000	\$3,000 \$30,000	0.0846 0.0826	2125 2126
	\$1,450	\$18,000	\$15,000	\$3,000	0.0806	2127
	\$1,415 \$1,380	\$18,000 \$18,000	\$15,000 \$15,000	\$3,000 \$3,000	0.0786 0.0767	2128 2129
	\$1,380 \$1,347	\$18,000	\$15,000 \$15,000	\$3,000	0.0767	2129
	\$3,285	\$45,000	\$15,000	\$30,000	0.0730	2131
	\$1,282	\$18,000	\$15,000	\$3,000	0.0712	2132

Routine Inspection NSTM Inspection Routine Inspection Routine Inspection Routine Inspection Routine Inspection Routine Inspection In-Depth Inspection\*\*

Bridge) In-Depth Inspection\* until New Bridge is Constructed 5-Year Repeating Cycle (New Bridge)

4-Year

Repeating

Cycle (Exist.

- \* In-Depth Inspection includes NSTM Inspection, Ultrasonic Pin Testing, & Full  ${\it Condition/Recommendation Report.}$
- \*\* In-Depth Inspection includes Full Condition/Recommendation Report.

## Notes:

- 1. Costs are based on the 2017 LCCA Report. They were inflated to 2024 dollar values.
- 2. The Subtotal Net Present Value was then inflated (by 33%) to match the initial and future cost estimate dollar  $values\ used\ for\ a\ 2030\ construction\ start$
- 3. Discount Rate (i) is assumed to be 2.50%.

Total Net Present Value = 33% (Inflation, 2030 begin construction) = Total Net Present Value = \$1,415,400 \$467,100 \$1,882,500