

# Life Cycle Cost Analysis

50 Year Design Life

2011

Discount Rate			3%							
Design Year		Description	Full Rehabilitation Alternative	Present Value	Partial Rehabilitation Alternative	Present Value	High Profile Replacement Alternative	Present Value	Low Profile Replacement Alternative	Present Value
Year	0	Construction	\$23,278,223	\$23,278,223	\$17,783,264	\$17,783,264	\$21,400,000	\$21,400,000	\$30,836,690	\$30,836,690
Year	1	M & O of Movable Span	\$103,500	\$100,485	\$103,500	\$100,485	\$0	\$0	\$103,500	\$100,485
Year	2	"	\$103,500	\$97,559	\$103,500	\$97,559	\$0	\$0	\$103,500	\$97,559
Year	3	"	\$103,500	\$94,717	\$103,500	\$94,717	\$0	\$0	\$103,500	\$94,717
Year	4	"	\$103,500	\$91,958	\$103,500	\$91,958	\$0	\$0	\$103,500	\$91,958
Year	5	"	\$103,500	\$89,280	\$103,500	\$89,280	\$0	\$0	\$103,500	\$89,280
Year	6	"	\$103,500	\$86,680	\$103,500	\$86,680	\$0	\$0	\$103,500	\$86,680
Year	7	"	\$103,500	\$84,155	\$103,500	\$84,155	\$0	\$0	\$103,500	\$84,155
Year	8	"	\$103,500	\$81,704	\$103,500	\$81,704	\$0	\$0	\$103,500	\$81,704
Year	9	"	\$103,500	\$79,324	\$103,500	\$79,324	\$0	\$0	\$103,500	\$79,324
Year	10	"	\$103,500	\$77,014	\$103,500	\$77,014	\$0	\$0	\$103,500	\$77,014
Year	11	"	\$103,500	\$74,771	\$103,500	\$74,771	\$0	\$0	\$103,500	\$74,771
Year	12	"	\$103,500	\$72,593	\$103,500	\$72,593	\$0	\$0	\$103,500	\$72,593
Year	13	"	\$103,500	\$70,478	\$103,500	\$70,478	\$0	\$0	\$103,500	\$70,478
Year	14	"	\$103,500	\$68,426	\$103,500	\$68,426	\$0	\$0	\$103,500	\$68,426
Year	15	M & O of Movable Span	\$103,500	\$66,433	\$103,500	\$66,433	\$0	\$0	\$103,500	\$66,433
"	15	Deck Replacement	\$2,601,900	\$1,670,061	\$2,601,900	\$1,670,061	\$0	\$0	\$0	\$0
Year	16	M & O of Movable Span	\$103,500	\$64,498	\$103,500	\$64,498	\$0	\$0	\$103,500	\$64,498
Year	17	"	\$103,500	\$62,619	\$103,500	\$62,619	\$0	\$0	\$103,500	\$62,619
Year	18	"	\$103,500	\$60,795	\$103,500	\$60,795	\$0	\$0	\$103,500	\$60,795
Year	19	"	\$103,500	\$59,025	\$103,500	\$59,025	\$0	\$0	\$103,500	\$59,025
Year	20	"	\$103,500	\$57,305	\$103,500	\$57,305	\$0	\$0	\$103,500	\$57,305
Year	21	"	\$103,500	\$55,636	\$103,500	\$55,636	\$0	\$0	\$103,500	\$55,636
Year	22	"	\$103,500	\$54,016	\$103,500	\$54,016	\$0	\$0	\$103,500	\$54,016
Year	23	"	\$103,500	\$52,443	\$103,500	\$52,443	\$0	\$0	\$103,500	\$52,443
Year	24	"	\$103,500	\$50,915	\$103,500	\$50,915	\$0	\$0	\$103,500	\$50,915
Year	25	"	\$103,500	\$49,432	\$103,500	\$49,432	\$0	\$0	\$103,500	\$49,432
Year	26	"	\$103,500	\$47,992	\$103,500	\$47,992	\$0	\$0	\$103,500	\$47,992
Year	27	"	\$103,500	\$46,595	\$103,500	\$46,595	\$0	\$0	\$103,500	\$46,595
Year	28	"	\$103,500	\$45,237	\$103,500	\$45,237	\$0	\$0	\$103,500	\$45,237
Year	29	"	\$103,500	\$43,920	\$103,500	\$43,920	\$0	\$0	\$103,500	\$43,920
Year	30	M & O of Movable Span	\$103,500	\$42,641	\$103,500	\$42,641	\$0	\$0	\$103,500	\$42,641
"	30	Wearing Surface Rehabilitation	\$0	\$0	\$0	\$0	\$826,500	\$340,507	\$732,555	\$301,803
Year	31	M & O of Movable Span	\$103,500	\$41,399	\$103,500	\$41,399	\$0	\$0	\$103,500	\$41,399
Year	32	"	\$103,500	\$40,193	\$103,500	\$40,193	\$0	\$0	\$103,500	\$40,193
Year	33	"	\$103,500	\$39,022	\$103,500	\$39,022	\$0	\$0	\$103,500	\$39,022
Year	34	"	\$103,500	\$37,886	\$103,500	\$37,886	\$0	\$0	\$103,500	\$37,886
Year	35	"	\$103,500	\$36,782	\$103,500	\$36,782	\$0	\$0	\$103,500	\$36,782
Year	36	"	\$103,500	\$35,711	\$103,500	\$35,711	\$0	\$0	\$103,500	\$35,711
Year	37	"	\$103,500	\$34,671	\$103,500	\$34,671	\$0	\$0	\$103,500	\$34,671
Year	38	"	\$103,500	\$33,661	\$103,500	\$33,661	\$0	\$0	\$103,500	\$33,661
Year	39	"	\$103,500	\$32,680	\$103,500	\$32,680	\$0	\$0	\$103,500	\$32,680
Year	40	"	\$103,500	\$31,729	\$103,500	\$31,729	\$0	\$0	\$103,500	\$31,729
Year	41	"	\$103,500	\$30,804	\$103,500	\$30,804	\$0	\$0	\$103,500	\$30,804
Year	42	"	\$103,500	\$29,907	\$103,500	\$29,907	\$0	\$0	\$103,500	\$29,907
Year	43	"	\$103,500	\$29,036	\$103,500	\$29,036	\$0	\$0	\$103,500	\$29,036
Year	44	"	\$103,500	\$28,190	\$103,500	\$28,190	\$0	\$0	\$103,500	\$28,190
Year	45	M & O of Movable Span	\$103,500	\$27,369	\$103,500	\$27,369	\$0	\$0	\$103,500	\$27,369
"	45	Wearing Surface Rehabilitation	\$390,285	\$103,206	\$390,285	\$103,206	\$0	\$0	\$0	\$0
Year	46	M & O of Movable Span	\$103,500	\$26,572	\$103,500	\$26,572	\$0	\$0	\$103,500	\$26,572
Year	47	"	\$103,500	\$25,798	\$103,500	\$25,798	\$0	\$0	\$103,500	\$25,798
Year	48	"	\$103,500	\$25,047	\$103,500	\$25,047	\$0	\$0	\$103,500	\$25,047
Year	49	"	\$103,500	\$24,317	\$103,500	\$24,317	\$0	\$0	\$103,500	\$24,317
Year	50	"	\$103,500	\$23,609	\$103,500	\$23,609	\$1	\$0	\$103,500	\$23,609
Net Present Value				\$27,485,971		\$22,219,562		\$21,740,507		\$33,801,524
% Above Least Cost Alternative				26%		2%		-		55%