APPENDIX A: COST ESTIMATE DETAILS

The San Francisco Bay Trail Project Gap Analysis Study

San Francisco County Cost Summary

Planned Projects	Construction, Design and Permitting Cost County Gap Length in Miles	$6,145,579 11.3
Greenway, Promenade or Park Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
Private Land Ownership Development Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
Transportation Capital Project	Construction, Design and Permitting Cost	$192,024,065
	Gap Length in Miles	3.3
County Total	Construction, Design and Permitting Cost	$198,169,644
	Gap Length in Miles	14.6

NOTES:

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Project Category Legend

1		**Planned Project:** Planned projects include those projects typically funded with public money. Lead agencies typically include cities, counties, park districts, and other land management agencies. Projects require the funding shown herein, including design, regulatory review and construction. Cost estimates for projects with either design or regulatory review completed are calculated appropriately.
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4		**Transportation Capital Project:** The Bay Trail project cost assumed to be incorporated in Caltrans or other agency transportation capital investment as a non-motorized project share providing for bicycle and pedestrian access with a State Highway corridor. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Class 1				Class 2				Class 3			Bridge		Boardwalk	Fencing and Barrier					Trail Furnishing	Design Cost	Environmental and Permitting		
					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$ 19.67	$ 14.50	$ 29.95	$ 49.62	$ -	2%				
4	1001.0	1900.5	$19,252	$24,065					1900.5															1900.5	$3,850	$963		
1	1002.0	2795.3	$146,366	$182,957	0.5					2795.3														2795.3	$29,273	$7,318		
1	1005.0	1795.7	$94,005	$117,506						1795.7														1795.7	$18,801	$4,700		
1	1006.0	1178.9	$49,585	$61,981	589.45				1178.9															1178.9	$9,917	$2,479		
1	1008.0	880.3	$37,025	$46,282	440.15				880.3															880.3	$7,405	$1,851		
4	1009.0	15327.2	$160,000,000	$192,000,000																				15327.2	$32,000,000			
1	1013.0	320.3	$484,921	$703,136													320.3							320.3	$96,984			$121,230
1	1020.0	3902.4	$584,775	$730,968		3902.4																		3902.4	$116,955	$29,239		
1	1024.0	9668.1	$51,821	$64,776										9668.1										9668.1	$10,364	$2,591		
1	1025.0	1093.1	$171,726	$223,244		1093.1														546.55				1093.1	$34,345		$17,173	
1	1026.0	4206	$691,256	$898,633		4206														4206				4206	$138,251		$69,126	
1	1027.0	23272.8	$1,486,666	$1,858,333	23272.8																			23272.8	$297,333	$74,333		
1	1028.0	5382	$54,520	$68,150					5382															5382	$10,904	$2,726		
1	1029.0	3934.3	$666,943	$833,678		3934.3													3934.3					3934.3	$133,389	$33,347		
1	1032.0	1280.8	$284,747	$355,934		640.4	640.4																	1280.8	$56,949	$14,237		

The San Francisco Bay Trail Project Gap Analysis Study

San Mateo County Cost Summary

Planned Projects	**Construction, Design and Permitting Cost** **County Gap Length in Miles**	**$13,935,967** **14.2**
Greenway, Promenade or Park Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
Private Land Ownership Development Project	Construction, Design and Permitting Cost	$2,827,037
	Gap Length in Miles	3.1
Transportation Capital Project	Construction, Design and Permitting Cost	$51,816,072
	Gap Length in Miles	6.2
County Total	Construction, Design and Permitting Cost	$68,579,077
	Gap Length in Miles	23.5

NOTES:

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Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Class 1				Class 2				Class 3			Bridge		Boardwalk	Fencing and Barrier					Trail Furnishing	Design Cost	Environmental and Permitting		
					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$19.67	$ 14.50	$ 29.95	$ 49.62	$ -	2%				
1	2000.0	450.4	$28,772	$35,964	450.4																			450.4	$5,754	$1,439		
3	2001.0	6584	$516,054	$645,067	6584															6584				6584	$103,211	$25,803		
3	2005.0	1833.2	$143,686	$179,608	1833.2															1833.2				1833.2	$28,737	$7,184		
3	2010.0	2868.7	$887,260	$1,153,438			2868.7													2868.7				2868.7	$177,452		$88,726	
3	2012.0	838.2	$65,698	$85,408	838.2															838.2				838.2	$13,140		$6,570	
1	2018.0	1928.6	$316,965	$412,055		1928.6														1928.6				1928.6	$63,393		$31,697	
1	2019.0	1486.7	$77,829	$97,286						1486.7														1486.7	$15,566	$3,891		
1	2020.0	1478.6	$62,190	$77,737	739.3				1478.6															1478.6	$12,438	$3,109		
1	2022.0	1210.9	$63,391	$79,238						1210.9														1210.9	$12,678	$3,170		
1	2023.0	2675.5	$251,042	$313,803	2675.5																2675.5			2675.5	$50,208	$12,552		
1	2024.0	3127.2	$199,711	$249,639	2397.2								730							3127.2				3127.2	$39,942	$9,986		
1	2025.0	1940.1	$101,564	$126,955						1940.1														1940.1	$20,313	$5,078		
1	2026.0	3770.6	$336,937	$421,171	3770.6											50				3770.6				3770.6	$67,387	$16,847		
1	2027.0	7469.7	$75,668	$94,585					7469.7															7469.7	$15,134	$3,783		
1	2028.0	5477.7	$55,489	$69,361					5477.7															5477.7	$11,098	$2,774		
4	2029.0	3832.7	$405,280	$486,336																				3832.7	$81,056			
1	2030.0	2292.2	$23,220	$29,025					2292.2															2292.2	$4,644	$1,161		
1	2031.0	2406.6	$188,629	$235,787	2406.6															2406.6				2406.6	$37,726	$9,431		
1	2034.0	653.4	$33,653	$43,749	326.7				326.7											653.4				653.4	$6,731		$3,365	
4	2035.0	2755.2	$948,918	$1,186,148			2755.2															2755.2		2755.2	$189,784	$47,446		
4	2036.0	3738.6	$405,280	$486,336																				3738.6	$81,056			
4	2038.0	22620.4	$34,246,381	$49,657,252													22620.4							22620.4	$6,849,276			$8,561,595
3	2039.0	519.9	$127,583	$165,858		519.9										60								519.9	$25,517		$12,758	

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					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$19.67	$ 14.50	$ 29.95	$ 49.62	$ -	2%				
3	2040.0	499	**$74,775**	**$97,208**		499												50						499	$14,955		$7,478	
3	2041.0	963.9	**$144,440**	**$180,551**		963.9																		963.9	$28,888	$7,222		
3	2042.0	875.6	**$55,933**	**$67,120**	875.6																			875.6	$11,187			
3	2047.0	625.3	**$39,944**	**$53,925**	625.3																			625.3	$7,989	$1,997	$3,994	
3	2048.0	326.2	**$95,248**	**$119,060**		326.2																		326.2	$19,050	$4,762		
1	2049.0	447	**$28,554**	**$35,693**	447																			447	$5,711	$1,428		
3	2051.0	426	**$63,836**	**$79,795**		426																		426	$12,767	$3,192		
1	2056.0	1007.6	**$150,989**	**$188,736**		1007.6																		1007.6	$30,198	$7,549		
1	2057.0	1009.2	**$373,329**	**$466,661**	1009.2																	6224.526		1009.2	$74,666	$18,666		
1	2058.0	670.2	**$42,812**	**$53,515**	670.2																			670.2	$8,562	$2,141		
1	2059.0	858.7	**$128,676**	**$160,845**		858.7																		858.7	$25,735	$6,434		
1	2060.0	748.7	**$47,827**	**$59,784**	748.7																			748.7	$9,565	$2,391		
1	2061.0	1064.7	**$159,545**	**$199,432**		1064.7																		1064.7	$31,909	$7,977		
1	2062.0	1655.6	**$105,760**	**$132,200**	1655.6																			1655.6	$21,152	$5,288		
1	2063.0	667.8	**$42,659**	**$53,324**	667.8																			667.8	$8,532	$2,133		
1	2079.0	4465.1	**$1,754,789**	**$2,544,444**			4215.1										250				4465.1			4465.1	$350,958			$438,697
1	2083.0	2466.7	**$157,573**	**$189,087**	2466.7																			2466.7	$31,515			
1	2085.0	1541.8	**$261,366**	**$326,707**		1541.8													1541.8					1541.8	$52,273	$13,068		
1	2087.0	2455	**$723,709**	**$1,049,379**			2455																	2455	$144,742			$180,927
1	2088.0	1929.7	**$19,548**	**$24,435**					1929.7															1929.7	$3,910	$977		
1	2089.0	10724.1	**$1,832,881**	**$2,657,677**		10724.1										85				10724.1				10724.1	$366,576			$458,220
1	2091.0	1863.1	**$250,000**	**$300,000**																					$50,000			
1	2092.0	3024.7	**$2,303,490**	**$2,764,188**																					$460,698			
1	2096.0	1804.3	**$305,865**	**$443,504**		1804.3													1804.3					1804.3	$61,173			$76,466

The San Francisco Bay Trail Project Gap Analysis Study

Santa Clara County Cost Summary

Planned Projects	Construction, Design and Permitting Cost County Gap Length in Miles	$19,025,621 15.5
Greenway, Promenade or Park Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
Private Land Ownership Development Project	Construction, Design and Permitting Cost	$1,946,945
	Gap Length in Miles	3.6
Transportation Capital Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
County Total	Construction, Design and Permitting Cost	$20,972,566
	Gap Length in Miles	19.1

NOTES:

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					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$19.67	$ 14.50	$ 29.95	$ 49.62	$ -	2%				
3	3000.1	19237.4	$1,557,556	$1,946,945	19237.4														9618.7	9618.7				19237.4	$0	$0		
1	3004.0	1225.3	$12,388	$15,485					1225.3																$2,478	$619		
1	3011.0	16380.4	$2,454,275	$3,558,699		16380.4																			$490,855			$613,569
1	3014.0	9431.1	$348,998	$453,697	4715.55				4715.55															9431.1	$69,800		$34,900	
1	3017.0	1636.8	$249,645	$324,538		1636.8						1636.8												1636.8	$49,929		$24,964	
1	3020.0	4277	$640,823	$833,070		4277																			$128,165		$64,082	
1	3021.0	3786.3	$241,793	$290,152	3786.3																				$48,359			
1	3021.1	2406.2	$153,708	$192,135	2406.2																			2406.2	$30,742	$7,685		
1	3023.0	3578.3	$187,324	$234,155						3578.3														3578.3	$37,465	$9,366		
1	3024.0	3727.9	$1,207,057	$1,508,821			3727.9													7455.8				3727.9	$241,411	$60,353		
1	3025.0	2252.3	$22,816	$29,661					2252.3															2252.3	$4,563		$2,282	
1	3026.0	2095.5	$678,502	$848,127			2095.5													4191				2095.5	$135,700	$33,925		
1	3027.0	1930.4	$625,044	$781,305			1930.4													3860.8				1930.4	$125,009	$31,252		
1	3028.0	3460.9	$221,013	$276,266	3460.9																				$44,203	$11,051		
1	3029.0	4464.7	$798,512	$998,139		4464.7														8929.4				4464.7	$159,702	$39,926		
1	3031.0	1835.4	$594,284	$742,855			1835.4													3670.8				1835.4	$118,857	$29,714		
1	3033.0	8365.2	$3,300,000	$4,290,000																					$660,000		$330,000	
1	3034.0	4287	$241,165	$313,515																				4287	$48,233		$24,117	
1	3035.0	6558.9	$2,300,000	$3,335,000																					$460,000			$575,000

The San Francisco Bay Trail Project Gap Analysis Study

Alameda County Cost Summary

Planned Projects	Construction, Design and Permitting Cost County Gap Length in Miles	$25,999,669 36.6
Greenway, Promenade or Park Project	Construction, Design and Permitting Cost	$12,521,254
	Gap Length in Miles	7.3
Private Land Ownership Development Project	Construction, Design and Permitting Cost	$3,090,859
	Gap Length in Miles	4.6
Transportation Capital Project	Construction, Design and Permitting Cost	$44,243,011
	Gap Length in Miles	5.9
County Total	Construction, Design and Permitting Cost	$85,854,793
	Gap Length in Miles	54.5

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					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$19.67	$ 14.50	$ 29.95	$ 49.62	$ -	2%				
3	4000.0	481.2	$728,518	$910,647													481.2							481.2	$145,704	$36,426		
3	4001.0	3631.9	$232,006	$290,007	3631.9																			3631.9	$46,401	$11,600		
1	4003.0	5967.7	$60,333	$75,417					5967.7																$12,067	$3,017		
3	4005.0	14166.6	$904,962	$1,131,203	14166.6																			14166.6	$180,992	$45,248		
1	4006.0	18532.8	$5,463,284	$7,102,269			18532.8																	18532.8	$1,092,657		$546,328	
1	4007.0	2632.1	$168,139	$210,173	2632.1																			2632.1	$33,628	$8,407		
1	4008.0	6118.4	$16,458	$20,573				6118.4																6118.4	$3,292	$823		
1	4011.0	15470.4	$4,560,519	$5,928,675			15470.4																	15470.4	$912,104		$456,052	
1	4012.0	5808	$58,835	$76,486					5808															5808	$11,767		$5,884	
1	4013.0	3590.4	$36,371	$47,282					3590.4															3590.4	$7,274		$3,637	
1	4015.0	3854.4	$39,045	$50,759					3854.4															3854.4	$7,809		$3,905	
1	4016.0	6019.2	$60,974	$76,218					6019.2															6019.2	$12,195	$3,049		
1	4022.0	11880	$20,077	$25,097									11880											11880	$4,015	$1,004		
1	4028.0	12988.8	$21,951	$27,439									12988.8											12988.8	$4,390	$1,098		
1	4029.0	23390.4	$1,494,179	$2,166,559	23390.4																			23390.4	$298,836			$373,545
4	4032.0	19008	$28,777,352	$41,727,160													19008							19008	$5,755,470			$7,194,338
1	4034.0	14216.3	$38,242	$47,802								14216.3												14216.3	$7,648	$1,912		
1	4044.0	2217.6	$22,464	$28,080					2217.6															2217.6	$4,493	$1,123		
1	4045.0	2640	$168,643	$210,804	2640																			2640	$33,729	$8,432		
1	4046.0	3220.8	$8,664	$10,830								3220.8												3220.8	$1,733	$433		
1	4049.0	897.6	$2,188,000	$2,188,000																								
4	4053.0	6758.4	$735,044	$918,804							6758.4													6758.4	$147,009	$36,752		
4	4057.0	3273.6	$965,025	$1,206,281			3273.6																	3273.6	$193,005	$48,251		
1	4062.0	2798.4	$419,340	$524,175		2798.4																		2798.4	$83,868	$20,967		
2	4063.0	1108.8	$70,808	$88,510	1108.8																			1108.8	$14,162	$3,540		
2	4069.0	739.2	$400,000	$500,000																				739.2	$80,000	$20,000		
2	4071.0	81.3	$292,703	$365,879																				81.3	$58,541	$14,635		
1	4072.0	3537.6	$185,669	$232,087	2787.6				750															3537.6	$37,134	$9,283		
2	4075.0	897.6	$264,586	$330,732			897.6																	897.6	$52,917	$13,229		
2	4077.0	475.2	$372,408	$465,510																				475.2	$74,482	$18,620		
2	4078.0	792	$48,380	$60,475																				792	$9,676	$2,419		
2	4080.0	7708.8	$12,999	$16,249					7708.8															7708.8	$2,600	$650		
2	4081.0	95.4	$284,506	$284,506																								

Project Category Legend

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3		**Private Land Ownership Development Project:** The Bay Trail project cost assumed to be condition of development or subject to the Bay Conservation and Development Commission (BCDC) regulatory permitting process, requiring shoreline public access. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.
4		**Transportation Capital Project:** The Bay Trail project cost assumed to be incorporated in Caltrans or other agency transportation capital investment as a non-motorized project share providing for bicycle and pedestrian access with a State Highway corridor. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.

2	4082.0	316.8	**$31,251**	**$39,064**																			316.8	$6,250	$1,563		
2	4083.0	83.6	**$847,216**	**$1,059,020**																			83.6	$169,443	$42,361		
2	4084.0	739.2	**$58,042**	**$72,553**																			739.2	$11,608	$2,902		
1	4085.0	792	**$8,023**	**$10,029**					792														792	$1,605	$401		
2	4086.0	413.7	**$125,467**	**$156,834**																				$25,093	$6,273		
2	4087.0	78.4	**$161,628**	**$202,035**																				$32,326	$8,081		
3	4089.0	950.4	**$280,168**	**$350,211**			950.4																950.4	$56,034	$14,008		
1	4090.0	2956.8	**$29,952**	**$37,440**					2956.8														2956.8	$5,990	$1,498		
1	4091.0	1584	**$101,186**	**$126,482**	1584																		1584	$20,237	$5,059		
2	4092.0	114.2	**$113,341**	**$141,677**																			114.2	$22,668	$5,667		
2	4093.0	99.3	**$302,240**	**$377,800**																			99.3	$60,448	$15,112		
2	4094.0	950.4	**$809,325**	**$1,011,656**																			950.4	$161,865	$40,466		
2	4096.0	739.2	**$469,999**	**$587,499**																			739.2	$94,000	$23,500		
2	4100.0	2798.4	**$6,178**	**$7,722**					2798.4														2798.4	$1,236	$309		
2	4104.0	528	**$221,365**	**$265,638**																			528	$44,273			
2	4105.0	4276.8	**$667,269**	**$834,086**	4276.8																		4276.8	$133,454	$33,363		
2	4106.0	475.2	**$30,650**	**$38,313**	475.2																		475.2	$6,130	$1,533		
2	4107.0	844.8	**$151,711**	**$182,053**																			844.8	$30,342			
2	4108.0	4329.6	**$374,676**	**$468,345**	4329.6																		4329.6	$74,935	$18,734		
2	4116.0	1267.2	**$445,473**	**$534,568**																			1267.2	$89,095			
1	4117.0	2217.6	**$116,091**	**$145,114**						2217.6													2217.6	$23,218	$5,805		
2	4118.0	297.7	**$226,552**	**$226,552**																			297.7				
1	4120.0	1108.8	**$70,830**	**$88,538**	1108.8																		1108.8	$14,166	$3,542		
2	4122.0	5596.8	**$2,000,000**	**$2,400,000**			5596.8																5596.8	$400,000			
2	4125.0	2798.4	**$1,503,317**	**$1,803,981**			2798.4																2798.4	$300,663			
1	4126.0	2323.2	**$6,249**	**$7,499**				2323.2															2323.2	$1,250			
1	4132.0	11510.4	**$1,173,715**	**$1,408,459**						11510.4													11510.4	$234,743			
1	4142.0	12302.4	**$1,254,476**	**$1,630,818**						12302.4													12302.4	$250,895		$125,448	
1	4143.0	897.6	**$9,093**	**$11,366**					897.6														897.6	$1,819	$455		
4	4146.0	1214.4	**$63,574**	**$79,467**						1214.4													1214.4	$12,715	$3,179		
4	4147.0	844.8	**$249,039**	**$311,298**			844.8																844.8	$49,808	$12,452		
1	4151.0	897.6	**$261,736**	**$314,083**																			897.6	$52,347			
1	4152.0	844.8	**$246,340**	**$295,608**																			844.8	$49,268			
1	4155.0	1636.8	**$477,283**	**$572,740**																			1636.8	$95,457			
1	4156.0	1214.4	**$354,113**	**$424,936**																			1214.4	$70,823			
1	4157.0	950.4	**$277,132**	**$332,559**																			950.4	$55,426			
1	4158.0	1742.4	**$508,076**	**$609,691**																			1742.4	$101,615			
1	4159.0	2164.8	**$631,246**	**$757,495**																			2164.8	$126,249			
3	4163.0	2006.4	**$128,169**	**$153,803**	2006.4																		2006.4	$25,634			
3	4164.0	3326.4	**$212,490**	**$254,989**	3326.4																		3326.4	$42,498			
1	4166.0	2323.2	**$148,406**	**$178,087**	2323.2																		2323.2	$29,681			

The San Francisco Bay Trail Project Gap Analysis Study

Contra Costa County Cost Summary

Planned Projects	Construction, Design and Permitting Cost County Gap Length in Miles	$31,906,191 37.6
Greenway, Promenade or Park Project	Construction, Design and Permitting Cost	$552,220
	Gap Length in Miles	0.2
Private Land Ownership Development Project	Construction, Design and Permitting Cost	$2,640,927
	Gap Length in Miles	3.0
Transportation Capital Project	Construction, Design and Permitting Cost	$19,472,675
	Gap Length in Miles	1.7
County Total	Construction, Design and Permitting Cost	$52,703,468
	Gap Length in Miles	42.2

NOTES:

Cost Classifications: See Appendix B for supporting information for all cost per lineal foot categories used in this cost estimate table. Explanation, sourcing and documentation for all Class I, II, III and other trail construction, design, and environmental review costs are presented. Explanation for A, B, C, and X level of implementation cost is also included in Appendix B.

County Identification: Summary tables are provided for each of the nine Bay Area Counties following the Regional Cost Summary. Series are as follows: 1000=San Francisco County, 2000=San Mateo County, 3000=Santa Clara County, 4000=Alameda County, 5000=Contra Costa County, 6000=Solano County, 7000=Napa County, 8000=Sonoma County, 9000=Marin County.

Project Category Legend

1		**Planned Project:** Planned projects include those projects typically funded with public money. Lead agencies typically include cities, counties, park districts, and other land management agencies. Projects require the funding shown herein, including design, regulatory review and construction. Cost estimates for projects with either design or regulatory review completed are calculated appropriately.
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4		**Transportation Capital Project:** The Bay Trail project cost assumed to be incorporated in Caltrans or other agency transportation capital investment as a non-motorized project share providing for bicycle and pedestrian access with a State Highway corridor. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Class 1				Class 2				Class 3			Bridge		Boardwalk	Fencing and Barrier					Trail Furnishing	Design Cost	Environmental and Permitting		
					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$19.67	$ 14.50	$ 29.95	$ 49.62	$ -	2%				
3	5006.0	3275	$209,207	$251,048	3275																			3275	$41,841			
2	5008.0	1108.8	$424,785	$552,220		776.16												332.64						1108.8	$84,957		42,478	
1	5012.0	7128	$714,621	$750,352																						$35,731		
3	5012.1	1378.3	$126,110	$132,415	1378.3																			1378.3		$6,305		
1	5017.0	1108.8	$177,364	$221,705		1108.8																		1108.8	$35,473	$8,868		
3	5022.0	4367	$654,395	$817,994		4367																		4367	$130,879	$32,720		
1	5030.0	3854.4	$317,217	$412,382						3854.4										3854.4				3854.4	$63,443		$31,722	
1	5031.0	2376	$3,450,000	$4,140,000																				2376	$690,000			
1	5032.0	1267.2	$3,450,000	$4,140,000																				1267.2	$690,000			
4	5034.0	8870.4	$13,429,431	$19,472,675													8870.4							8870.4	$2,685,886			$3,357,358
1	5036.0	6652.8	$740,334	$925,417	4390.848	2195.424													6652.8					6652.8	$148,067	$37,017		
3	5038.0	1425.6	$119,109	$148,886	1425.6														1425.6					1425.6	$23,822	$5,955		
1	5040.0	8078.4	$674,950	$843,688	8078.4														8078.4					8078.4	$134,990	$33,748		
1	5043.0	1056	$173,000	$224,900																				1056	$34,711		$17,355	
1	5045.0	1689.6	$173,000	$224,900																				1689.6	$54,913			
1	5046.0	5280	$495,422	$718,362	5280																5280			5280	$99,084			$123,856
1	5048.0	1425.6	$173,000	$224,900																				1425.6	$32,361			
1	5049.0	1478.4	$173,000	$224,900																				1478.4	$50,118		$25,059	
1	5052.0	1689.6	$341,603	$444,084		1689.6																		1689.6	$68,321		$34,160	
1	5053.0	3443.8	$583,793	$846,500		3443.8													3443.8					3443.8	$116,759			$145,948
1	5053.1	2702.5	$289,173	$375,925	1621.5	1081													1200.0					2702.5	$57,835		$28,917	
1	5054.0	5280	$1,480,513	$2,146,744	1200		4080									100				8160				5280	$296,103			$370,128
1	5055.0	5415.5	$9,152	$10,983									5415.5											5415.5	$1,830			
1	5057.0	6523.3	$11,024	$13,780									6523.3											6523.3	$2,205	$551		

Project Category Legend

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Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Class 1				Class 2				Class 3			Bridge		Boardwalk	Fencing and Barrier					Trail Furnishing	Design Cost	Environmental and Permitting		
					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$19.67	$ 14.50	$ 29.95	$ 49.62	$ -	2%				
1	5058.0	2827.6	**$443,903**	**$577,074**		820			1800								200							2827.6	$88,781		$44,390	
1	5059.0	11675.9	**$1,650,134**	**$1,980,161**																				11675.9	$330,027			
1	5060.0	3069.2	**$559,124**	**$670,949**																				3069.2	$111,825			
1	5062.0	9316.7	**$94,192**	**$117,740**					9316.7																$18,838	$4,710		
1	5067.0	2655.5	**$469,413**	**$610,237**		2655.5													2655.5	1327.8				2655.5	$93,883		$46,941	
1	5072.0	26391.3	**$44,601**	**$55,752**									26391.3											26391.3	$8,920	$2,230		
1	5076.0	3612.4	**$6,033**	**$7,541**									3612.4												$1,207	$302		
1	5078.2	1571.5	**$235,458**	**$235,458**		1571.5																						
1	5080.0	8852.1	**$3,200,000**	**$3,840,000**																					$640,000			
1	5081.2	2117.7	**$317,295**	**$396,619**		2117.7																			$63,459	$15,865		
1	5083.0	8985.2	**$3,200,000**	**$3,840,000**																					$640,000			
1	5085.0	4592.8	**$90,432**	**$113,040**															4592.8					4592.8	$18,086	$4,522		
1	5086.0	2564.2	**$434,683**	**$543,354**		2564.2													2564.2					2564.2	$86,937	$21,734		
1	5087.0	5020.7	**$8,385**	**$10,481**									5020.7												$1,677	$419		
1	5088.0	7927.8	**$415,020**	**$539,526**						7927.8														7927.8	$83,004		$41,502	
1	5089.0	2466.3	**$4,168**	**$5,210**									2466.3											2466.3	$834	$208		
1	5090.0	12298.6	**$20,785**	**$25,981**									12298.6											12298.6	$4,157	$1,039		
1	5092.0	5016.6	**$1,515,214**	**$1,969,778**			5016.6													2508.3				5016.6	$303,043		$151,521	
1	5093.0	4043.3	**$21,672**	**$27,090**										4043.3										4043.3	$4,334	$1,084		
1	5095.0	4418	**$23,680**	**$29,601**										4418										4418	$4,736	$1,184		
1	5096.0	7726.9	**$41,416**	**$51,770**										7726.9										7726.9	$8,283	$2,071		
1	5098.0	465	**$137,077**	**$171,347**			465																	465	$27,415	$6,854		

The San Francisco Bay Trail Project Gap Analysis Study

Solano County Cost Summary

Planned Projects	Construction, Design and Permitting Cost County Gap Length in Miles	$3,822,173 11.7
Greenway, Promenade or Park Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
Private Land Ownership Development Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
Transportation Capital Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
County Total	Construction, Design and Permitting Cost	$3,822,173
	Gap Length in Miles	11.7

NOTES:

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Solano County Cost Note: Costs shown in this table without quantities are obtained direclty from project feasibility studies and countywide trail study documents and are not calculated herein.

Project Category Legend

1		**Planned Project:** Planned projects include those projects typically funded by with public money. Lead agencies typically include cities, counties, park districts, and other land management agencies. Projects require the funding shown herein, including design, regulatory review and construction. Cost estimates for projects with either design or regulatory review completed are calculated appropriately.
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3		**Private Land Ownership Development Project:** The Bay Trail project cost assumed to be condition of development or subject to the Bay Conservation and Development Commission (BCDC) regulatory permitting process, requiring shoreline public access. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.
4		**Transportation Capital Project:** The Bay Trail project cost assumed to be incorporated in Caltrans or other agency transportation capital investment as a non-motorized project share providing for bicycle and pedestrian access with a State Highway corridor. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Class 1				Class 2				Class 3			Bridge		Boardwalk	Fencing and Barrier					Trail Furnishing	Design Cost	Environmental and Permitting		
					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$19.67	$ 14.50	$ 29.95	$ 49.62	$ -	2%				
1	6006.0	1692.5	$28,915	$36,144																					$5,783	$1,446		
1	6006.1	1130.4	$25,627	$32,034																					$5,125	$1,281		
1	6007.0	808.6	$127,924	$159,905																					$25,585	$6,396		
1	6008.0	1162.6	$118,084	$147,605																					$23,617	$5,904		
1	6008.1	413.3	$33,434	$41,793																					$6,687	$1,672		
1	6008.2	543.8	$7,091	$8,864																					$1,418	$355		
1	6008.3	765.9	$4,538	$5,673																					$908	$227		
1	6008.4	1563.9	$25,977	$32,471																					$5,195	$1,299		
1	6014.0	924.9	$19,054	$23,818																					$3,811	$953		
1	6015.1	1029.7	$37,207	$46,509																					$7,441	$1,860		
1	6015.2	300.5	$26,190	$32,738																					$5,238	$1,310		
1	6015.3	78.8	$24,024	$30,030																					$4,805	$1,201		
1	6015.4	532.2	$29,302	$36,628																					$5,860	$1,465		
1	6015.5	629.9	$33,168	$41,460																					$6,634	$1,658		
1	6015.6	238.4	$13,737	$17,171																					$2,747	$687		
1	6015.7	640.4	$13,852	$17,315																					$2,770	$693		
1	6015.8	373.9	$21,158	$26,448																					$4,232	$1,058		
1	6015.9	177.9	$6,052	$7,565																					$1,210	$303		
1	6016.0	1880	$49,466	$61,833																					$9,893	$2,473		
1	6016.1	980	$19,054	$23,818																					$3,811	$953		
1	6016.2	4772.4	$39,777	$49,721																					$7,955	$1,989		
1	6019.0	3191.5	$32,266	$38,719					3191.5																$6,453			
1	6020.0	4478.9	$1,320,245	$1,650,307			4478.9																		$264,049	$66,012		
1	6023.0	5432.2	$57,613	$69,136																					$11,523			
1	6023.1	3589.3	$3,994	$4,793																					$799			
1	6023.2	1129.4	$119,459	$143,351																					$23,892			
1	6031.0	3431.8	$97,270	$121,587																					$19,454	$4,863		
1	6032.0	7037.4	$229,209	$286,511																					$45,842	$11,460		

Project Category Legend

1		**Planned Project:** Planned projects include those projects typically funded by with public money. Lead agencies typically include cities, counties, park districts, and other land management agencies. Projects require the funding shown herein, including design, regulatory review and construction. Cost estimates for projects with either design or regulatory review completed are calculated appropriately.
2		**Greenway, Promenade or Park Project:** Greenway, promenade or park projects that incorporate a Bay Trail alignment as a portion of a larger-scale project. The Bay Trail component (trail facility) of larger estimated project budget assumed to be 20% of total project cost.
3		**Private Land Ownership Development Project:** The Bay Trail project cost assumed to be condition of development or subject to the Bay Conservation and Development Commission (BCDC) regulatory permitting process, requiring shoreline public access. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.
4		**Transportation Capital Project:** The Bay Trail project cost assumed to be incorporated in Caltrans or other agency transportation capital investment as a non-motorized project share providing for bicycle and pedestrian access with a State Highway corridor. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Class 1				Class 2				Class 3			Bridge		Boardwalk	Fencing and Barrier					Trail Furnishing	Design Cost	Environmental and Permitting		
					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	**$ 149.83**	**$ 294.77**	**$ 2.67**	**$ 10.11**	**$ 52.33**	**$ 108.74**	**$ 2.67**	**$ 1.67**	**$ 5.34**	**$ 51.31**	**$ 827.94**	**$ 1,513.94**	**$ 927.34**	**$19.67**	**$ 14.50**	**$ 29.95**	**$ 49.62**	**$ -**	**2%**				
1	6033.0	3001.3	**$449,685**	**$562,106**		3001.3																			$89,937	$22,484		
1	6034.0	746.7	**$42,175**	**$52,718**																					$8,435	$2,109		
1	6035.0	3921.4	**$4,679**	**$5,849**																					$936	$234		
1	6036.0	3821.3	**$4,319**	**$5,399**																					$864	$216		
1	6037.0	1364.9	**$1,727**	**$2,158**																					$345	$86		

The San Francisco Bay Trail Project Gap Analysis Study

Napa County Cost Summary

Planned Projects	Construction, Design and Permitting Cost County Gap Length in Miles	$13,664,401 33.1
Greenway, Promenade or Park Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
Private Land Ownership Development Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
Transportation Capital Project	Construction, Design and Permitting Cost	$52,000
	Gap Length in Miles	0.9
County Total	Construction, Design and Permitting Cost	$13,716,401
	Gap Length in Miles	34.0

NOTES:

Cost Classifications: See Appendix B for supporting information for all cost per lineal foot categories used in this cost estimate table. Explanation, sourcing and documentation for all Class I, II, III and other trail construction, design, and environmental review costs are presented. Explanation for A, B, C, and X level of implementation cost is also included in Appendix B.

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Project Category Legend

1		**Planned Project:** Planned projects include those projects typically funded with public money. Lead agencies typically include cities, counties, park districts, and other land management agencies. Projects require the funding shown herein, including design, regulatory review and construction. Cost estimates for projects with either design or regulatory review completed are calculated appropriately.
2		**Greenway, Promenade or Park Project:** Greenway, promenade or park projects that incorporate a Bay Trail alignment as a portion of a larger-scale project. The Bay Trail component (trail facility) of larger estimated project budget assumed to be 20% of total project cost.
3		**Private Land Ownership Development Project:** The Bay Trail project cost assumed to be condition of development or subject to the Bay Conservation and Development Commission (BCDC) regulatory permitting process, requiring shoreline public access. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.
4		**Transportation Capital Project:** The Bay Trail project cost assumed to be incorporated in Caltrans or other agency transportation capital investment as a non-motorized project share providing for bicycle and pedestrian access with a State Highway corridor. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Class 1				Class 2				Class 3			Bridge		Boardwalk	Fencing and Barrier					Trail Furnishin	Design Cost	Environmental and Permitting		
					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$19.67	$ 14.50	$ 29.95	$ 49.62	$ -	2%				
1	7004.0	740.1	$65,749	$82,186																					$13,150	$3,287		
1	7005.0	1642.8	$95,183	$118,978																					$19,037	$4,759		
1	7006.0	3756.2	$562,791	$703,489		3756.2																			$112,558	$28,140		
1	7007.0	3802.8	$38,446	$48,058					3802.8																$7,689	$1,922		
1	7008.0	120	$216,509	$270,636	1726.28			2589.42								120								120	$43,302	$10,825		
1	7011.0	12311.1	$644,240	$805,300						12311.1															$128,848	$32,212		
1	7012.0	14312.5	$2,144,442	$2,680,552		14312.5																			$428,888	$107,222		
1	7013.0	2223.4	$22,479	$29,222					2223.4																$4,496		$2,248	
1	7013.1	4529.5	$410,211	$533,275	1675.915	1494.735										60				2038.3					$82,042		$41,021	
1	7014.0	5515.2	$350,990	$350,990	5515.2																				$70,440	$17,610		
1	7015.0	10507.63	$330,336	$330,336						10507.63															$0	$0		
1	7015.1	11265.12	$255,705	$255,705						11265.12															$0	$0		
1	7017.0	13328.6	$460,341	$575,426						8796.876															$92,068	$23,017		
1	7019.0	5455.8	$9,111	$11,389									5455.8												$1,822	$456		
1	7021.0	15647.6	$158,197	$197,747					15647.6																$31,639	$7,910		
1	7021.1	5340.6	$53,993	$67,492					5340.6																$10,799	$2,700		
1	7022.0	10739.8	$685,844	$994,473	10739.8																				$137,169			$171,461
1	7023.0	7936.7	$1,231,720	$1,231,720						7396.7															$77,414	$19,353		
1	7025.0	6344	$331,982	$414,977						6344															$66,396	$16,599		
1	7026.0	5790.9	$58,546	$73,182					5790.9																$11,709	$2,927		
4	7026.1	4497.9	$52,000	$52,000		4497.9																			$134,784		$67,392	
1	7026.2	1658.5	$2,799	$2,799								1658.5													$886	$221		
1	7026.3	5558.2	$539,677	$539,677								5558.2													$2,968	$742		
1	7027.0	15010.1	$2,248,963	$2,811,204		15010.1																			$449,793	$112,448		
1	7029.0	3114.4	$162,977	$203,721						3114.4															$32,595	$8,149		
1	7031.0	2310.3	$23,357	$29,196					2310.3																$4,671	$1,168		
1	7031.1	1743.8	$17,630	$22,037					1743.8																$3,526	$881		
1	7032.0	4290.2	$224,506	$280,633						4290.2															$44,901	$11,225		

The San Francisco Bay Trail Project Gap Analysis Study

Sonoma County Cost Summary

Planned Projects	Construction, Design and Permitting Cost County Gap Length in Miles	$22,949,700 44.0
Greenway, Promenade or Park Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
Private Land Ownership Development Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
Transportation Capital Project	Construction, Design and Permitting Cost	$2,436,732
	Gap Length in Miles	0.3
County Total	Construction, Design and Permitting Cost	$25,386,432
	Gap Length in Miles	44.3

NOTES:

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Project Category Legend

1		**Planned Project:** Planned projects include those projects typically funded with public money. Lead agencies typically include cities, counties, park districts, and other land management agencies. Projects require the funding shown herein, including design, regulatory review and construction. Cost estimates for projects with either design or regulatory review completed are calculated appropriately.
2		**Greenway, Promenade or Park Project:** Greenway, promenade or park projects that incorporate a Bay Trail alignment as a portion of a larger-scale project. The Bay Trail component (trail facility) of larger estimated project budget assumed to be 20% of total project cost.
3		**Private Land Ownership Development Project:** The Bay Trail project cost assumed to be condition of development or subject to the Bay Conservation and Development Commission (BCDC) regulatory permitting process, requiring shoreline public access. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.
4		**Transportation Capital Project:** The Bay Trail project cost assumed to be incorporated in Caltrans or other agency transportation capital investment as a non-motorized project share providing for bicycle and pedestrian access with a State Highway corridor. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Class 1				Class 2				Class 3			Bridge		Boardwalk	Fencing and Barrier					Trail Furnishin	Design Cost	Environmental and Permitting		
					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$19.67	$ 14.50	$ 29.95	$ 49.62	$ -					
1	8000.0	15779.22	$825,727	$1,073,445						15779.22															$165,145		$82,573	
1	8001.0	16115.19	$843,308	$1,096,300						16115.19															$168,662		$84,331	
1	8002.0	1830.4	$55,000	$71,500																					$11,000		$5,500	
1	8002.1	8033.7	$1,025,000	$1,332,500																					$205,000		$102,500	
1	8003.1	3253.7	$2,500,000	$3,250,000																					$500,000		$250,000	
1	8003.2	1706.5	$1,000,000	$1,300,000																					$200,000		$100,000	
1	8004.0	29340.44	$1,535,385	$1,996,001						29340.44															$307,077		$153,539	
1	8005.0	10250	$27,368	$34,209								10250													$5,474	$1,368		
1	8005.1	3898.2	$10,000	$13,000																					$2,000		$1,000	
1	8005.2	2714	$5,000	$6,500																					$1,000		$500	
1	8005.3	2100	$5,000	$6,500																					$1,000		$500	
1	8005.8	6968.5	$800,000	$1,040,000																					$160,000		$80,000	
1	8006.0	7454.6	$75,366	$94,208					7454.6																$15,073	$3,768		
1	8006.2	4230.1	$185,000	$240,500																					$37,000		$18,500	
1	8006.3	4796.7	$30,000	$39,000															4796.7						$6,000		$3,000	
1	8007.0	30498.1	$2,005,000	$2,606,500																					$401,000		$200,500	
1	8007.1	472.6	$5,000	$6,500																					$1,000		$500	
1	8008.0	36754.63	$1,923,370	$2,500,381						36754.63															$384,674		$192,337	
1	8009.0	1356.2	$5,000	$6,500																					$1,000		$500	
1	8010.1	7515.9	$255,000	$331,500																					$51,000		$25,500	

Project Category Legend

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Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Class 1				Class 2				Class 3			Bridge		Boardwalk	Fencing and Barrier					Trail Furnishin	Design Cost	Environmental and Permitting		
					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
1	8010.2	2840.2	**$50,000**	**$65,000**																					$10,000		$5,000	
1	8011.1	707	**$650,000**	**$845,000**																					$130,000		$65,000	
1	8011.2	1143.3	**$10,000**	**$13,000**																					$2,000		$1,000	
4	8012.1	1238.1	**$1,874,409**	**$2,436,732**													1238.1								$374,882		$187,441	
1	8012.3	3291.5	**$1,005,000**	**$1,306,500**																					$201,000		$100,500	
1	8012.4	124.8	**$42,500**	**$55,250**																					$8,500		$4,250	
1	8012.5	632.3	**$10,000**	**$13,000**																					$2,000		$1,000	
1	8013.0	16702.3	**$565,000**	**$734,500**																					$113,000		$56,500	
1	8014.1	8008.5	**$2,005,000**	**$2,606,500**																					$401,000		$200,500	
1	8018.0	3908.73	**$204,544**	**$265,907**						3908.73															$40,909		$20,454	

The San Francisco Bay Trail Project Gap Analysis Study

Marin County Cost Summary

Planned Projects	Construction, Design and Permitting Cost County Gap Length in Miles	$37,274,852 50.3
Greenway, Promenade or Park Project	Construction, Design and Permitting Cost	$0
	Gap Length in Miles	0.0
Private Land Ownership Development Project	Construction, Design and Permitting Cost	$312,606
	Gap Length in Miles	0.6
Transportation Capital Project	Construction, Design and Permitting Cost	$38,879,114
	Gap Length in Miles	3.7
County Total	Construction, Design and Permitting Cost	$76,466,439
	Gap Length in Miles	121.3

NOTES:

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Project Category Legend

1		**Planned Project:** Planned projects include those projects typically funded with public money. Lead agencies typically include cities, counties, park districts, and other land management agencies. Projects require the funding shown herein, including design, regulatory review and construction. Cost estimates for projects with either design or regulatory review completed are calculated appropriately.
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Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Class 1				Class 2				Class 3			Bridge		Boardwalk	Fencing and Barrier					Trail Furnish	Design Cost	Environmental and Permitting		
					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$19.67	$ 14.50	$ 29.95	$ 49.62	$ -	2%				
4	9000.0	834.5	$1,263,383	$1,831,905													834.5								$252,677			$315,846
4	9001.0	811.7	$1,228,865	$1,781,854													811.7								$245,773			$307,216
1	9002.0	16851.8	$380,869	$457,042												460							811.7	811.7	$76,174			
1	9003.0	17141.7	$2,568,357	$3,338,864		17141.7																	811.7	811.7	$513,671		$256,836	
1	9005.0	3636	$331,891	$398,269	3636											120							17141.7	17141.7	$66,378			
1	9009.0	13038	$2,672,222	$3,473,889		13038											225			26076.0			0	0	$534,444		$267,222	
1	9011.0	961.4	$163,218	$236,666		961.4													961.4					13038	$32,644			$40,805
1	9013.0	5374.2	$1,662,079	$2,410,014			5374.2													5374.2			0	0	$332,416			$415,520
1	9015.0	9558.2	$3,397,554	$4,416,820			9558.2										200			19116.4			5374.2	5374.2	$679,511		$339,755	
1	9022.0	6008.7	$2,399,810	$3,119,753			6008.7										300			12017.4			9558.2	9558.2	$479,962		$239,981	
1	9023.0	10176.9	$936,741	$1,170,926		6106.14								4070.76									6008.7	6008.7	$187,348	$46,837		
1	9024.0	7769	$406,755	$528,782						7769													10176.9	10176.9	$81,351		$40,676	
1	9027.0	12790	$1,103,512	$1,434,565		4220.7								8569.3								8569.3	7769	7769	$220,702		$110,351	
1	9030.0	3335.7	$500,044	$625,055		3335.7																	12790	12790	$100,009	$25,002		
1	9032.0	5308.8	$339,087	$423,858	5308.8																		3335.7	3335.7	$67,817	$16,954		
1	9034.0	8790.2	$561,448	$701,810	8790.2																		5308.8	5308.8	$112,290	$28,072		
1	9035.0	6324.2	$10,737	$12,885									6324.2										8790.2	8790.2	$2,147			
1	9036.0	4074.7	$6,931	$8,317									4074.7										6324.2	6324.2	$1,386			
1	9037.0	2929	$4,973	$5,968									2929										4074.7	4074.7	$995			
1	9038.0	6948.3	$11,662	$14,578									6948.3										2929	2929	$2,332	$583		
1	9038.1	3483.4	$15,233	$19,041									9038.1										6948.3	6948.3	$3,047	$762		
1	9039.0	3202.8	$5,418	$6,773									3202.8										3483.4	3483.4	$1,084	$271		
1	9040.0	581.3	$5,941	$7,426					581.3														3202.8	3202.8	$1,188	$297		
1	9041.0	2690.6	$263,771	$329,714	2690.6														2690.6	2690.6			581.3	581.3	$52,754	$13,189		
1	9042.0	1305.5	$2,234	$2,681									1305.5										2690.6	2690.6	$447			
3	9043.0	1004.7	$83,949	$104,936	1004.7														1004.7				1305.5	1305.5	$16,790	$4,197		
3	9043.1	1988.7	$166,136	$207,670	1988.7														1988.7				1004.7	1004.7	$33,227	$8,307		

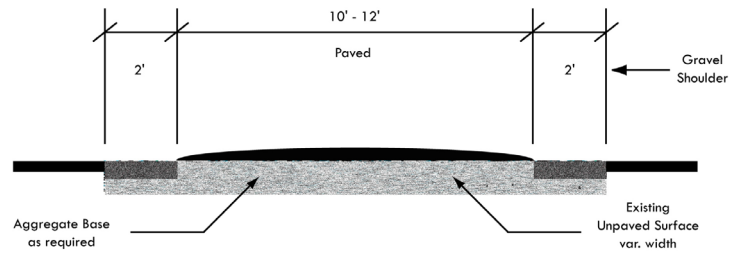
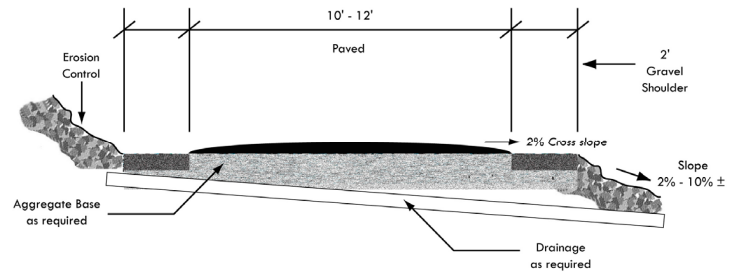
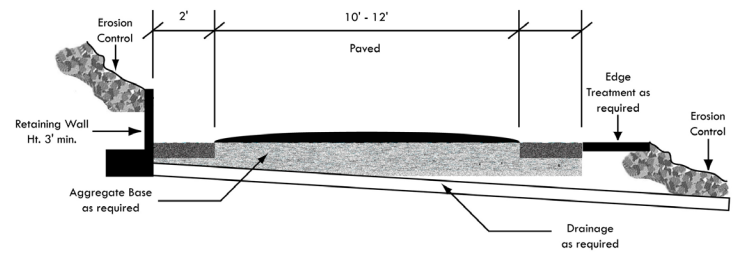
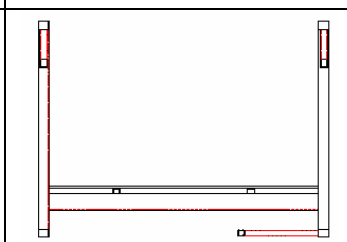
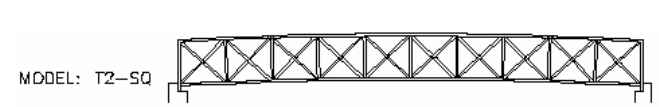
Project Category Legend

1		**Planned Project:** Planned projects include those projects typically funded with public money. Lead agencies typically include cities, counties, park districts, and other land management agencies. Projects require the funding shown herein, including design, regulatory review and construction. Cost estimates for projects with either design or regulatory review completed are calculated appropriately.
2		**Greenway, Promenade or Park Project:** Greenway, promenade or park projects that incorporate a Bay Trail alignment as a portion of a larger-scale project. The Bay Trail component (trail facility) of larger estimated project budget assumed to be 20% of total project cost.
3		**Private Land Ownership Development Project:** The Bay Trail project cost assumed to be condition of development or subject to the Bay Conservation and Development Commission (BCDC) regulatory permitting process, requiring shoreline public access. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.
4		**Transportation Capital Project:** The Bay Trail project cost assumed to be incorporated in Caltrans or other agency transportation capital investment as a non-motorized project share providing for bicycle and pedestrian access with a State Highway corridor. Such projects are not typically funded by the ABAG Bay Trail Project and are presented as a separate cost category.

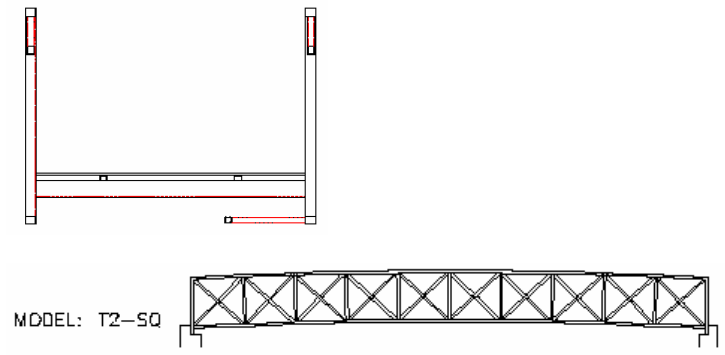
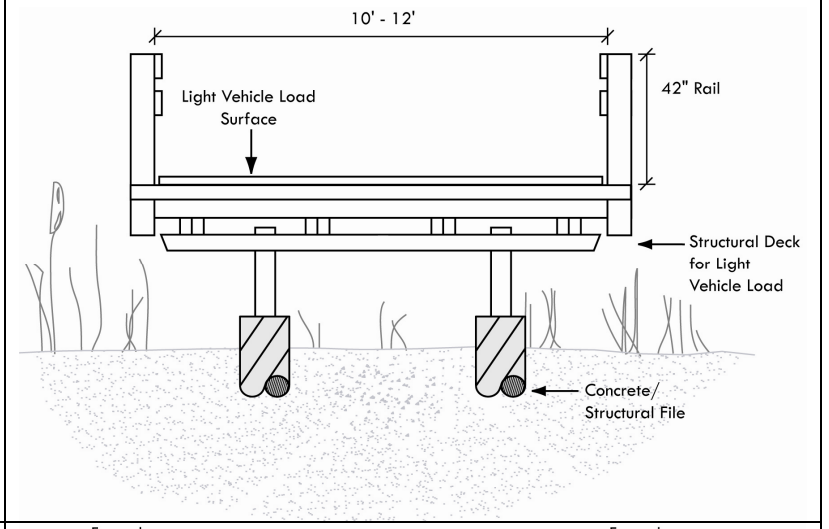
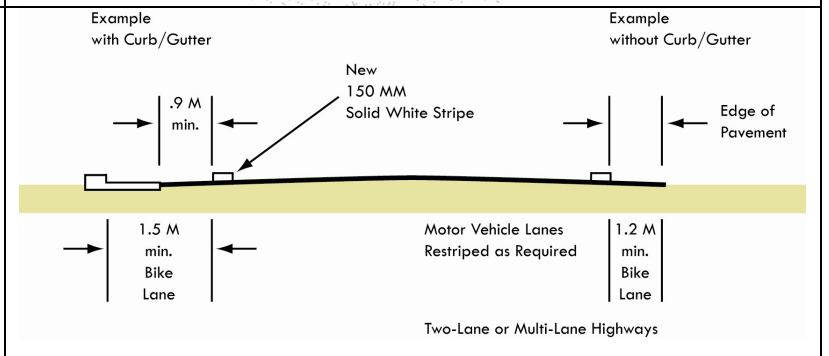
Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Class 1				Class 2				Class 3			Bridge		Boardwalk	Fencing and Barrier					Trail Furnish	Design Cost	Environmental and Permitting		
					A	B	C	X	A	B	C	X	A	B	C	A	B	A	A	B	C	D	No Fence	% Basis	% Basis	A	B	C
					LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	2%	20%	5%	10%	25%
					$ 63.86	$ 149.83	$ 294.77	$ 2.67	$ 10.11	$ 52.33	$ 108.74	$ 2.67	$ 1.67	$ 5.34	$ 51.31	$ 827.94	$ 1,513.94	$ 927.34	$19.67	$ 14.50	$ 29.95	$ 49.62	$ -	2%				
1	9043.2	7598.6	**$397,675**	**$516,977**						7598.6													1988.7	1988.7	$79,535		$39,767	
1	9044.0	1341.5	**$2,392**	**$2,871**									1341.5										7598.6	7598.6	$478			
1	9049.0	1621.4	**$158,973**	**$198,716**	1621.4														1621.4	1621.4			1341.5	1341.5	$31,795	$7,949		
1	9055.0	1325.5	**$103,899**	**$129,873**	1325.5															1325.5			1621.4	1621.4	$20,780	$5,195		
4	9057.0	5308.8	**$4,989,283**	**$7,234,460**			2500										2808.8						151	151	$997,857			$1,247,321
1	9058.0	151	**$228,711**	**$297,324**													151						5308.8	5308.8	$45,742		$22,871	
1	9061.0	1229.5	**$3,600,180**	**$4,320,216**																			151	151	$720,036			
1	9062.0	3182.1	**$634,694**	**$825,103**		3182.1																3182.1	1229.5	1229.5	$126,939		$63,469	
1	9063.0	6635.4	**$423,800**	**$529,750**	6635.4																		3182.1	3182.1	$84,760	$21,190		
1	9063.1	1754.4	**$154,241**	**$200,513**	1454.4						300								1454.4				6635.4	6635.4	$30,848		$15,424	
1	9064.0	2272.1	**$630,000**	**$756,000**																			1754.4	1754.4	$126,000			
1	9065.0	1306.2	**$161,022**	**$209,328**							1306.2									1306.2			2272.1	2272.1	$32,204		$16,102	
4	9066.0	12769.1	**$19,331,651**	**$28,030,894**													12769.1						0	0	$3,866,330			$4,832,913
1	9067.0	4099.3	**$342,670**	**$445,471**	4099.3														4099.3				12769.1	12769.1	$68,534		$34,267	
1	9069.0	1182.6	**$200,000**	**$260,000**																					$40,000		$20,000	
1	9070.0	2438.6	**$4,000**	**$5,200**																					$800		$400	
1	9071.0	1812.7	**$271,646**	**$353,139**		1812.7																	2438.6	2438.6	$54,329		$27,165	
1	9072.0	2241.5	**$660,763**	**$792,916**			2241.5																1812.7	1812.7	$132,153			
1	9073.0	9528.9	**$388,157**	**$504,604**										4764.45	4764.45							2382.2	2241.5	2241.5	$77,631		$38,816	
1	9074.0	3270.9	**$355,868**	**$427,042**							3270.9												9528.9	9528.9	$71,174			
1	9075.0	1648	**$16,727**	**$20,908**					1648														3270.9	3270.9	$3,345	$836		
1	9079.0	735.3	**$46,989**	**$58,737**	735.3																		1648	1648	$9,398	$2,349		
1	9080.0	2378.8	**$151,925**	**$189,906**	2378.8																		735.3	735.3	$30,385	$7,596		
1	9082.0	23905.8	**$973,731**	**$1,265,850**										11952.9	11952.9							5976.5	2378.8	2378.8	$194,746		$97,373	
1	9083.0	1085.8	**$2,291**	**$2,864**									1085.8										23905.8	23905.8	$458	$115		
1	9086.0	4699.6	**$7,870**	**$9,838**									4699.6										1085.8	1085.8	$1,574	$394		
1	9089.0	386.6	**$20,325**	**$26,422**						386.6													4699.6	4699.6	$4,065		$2,032	
1	9090.0	528.5	**$51,809**	**$64,761**	528.5														528.5	528.5			0	0	$10,362	$2,590		
1	9092.0	7079.7	**$931,715**	**$1,164,643**		6208.7							871										528.5	528.5	$186,343	$46,586		
1	9093.0	1659.1	**$2,912**	**$3,495**									1659.1										7079.7	7079.7	$582			
1	9095.0	2616.2	**$4,402**	**$5,503**									2616.2										1659.1	1659.1	$880	$220		
1	9102.0	1980.5	**$3,360**	**$4,200**									1980.5										2616.2	2616.2	$672	$168		
1	9103.0	2171.5	**$3,666**	**$4,583**									2171.5										1980.5	1980.5	$733	$183		
1	9104.0	3674.3	**$204,477**	**$255,596**	3112.3				562														2171.5	2171.5	$40,895	$10,224		
1	9105.0	2430.1	**$60,278**	**$75,348**	663				1767.1														3674.3	3674.3	$12,056	$3,014		
1	9107.0	1637.2	**$104,600**	**$130,750**	1637.2																		2430.1	2430.1	$20,920	$5,230		
1	9108.0	1385.3	**$58,168**	**$72,710**					692.65	692.65												300	1637.2	1637.2	$11,634	$2,908		

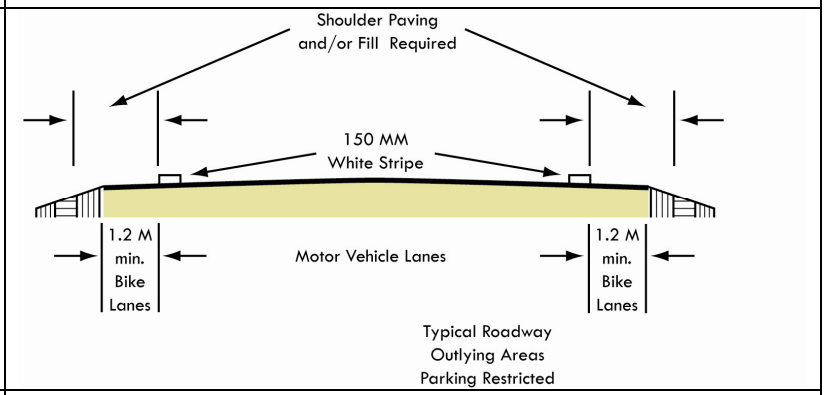
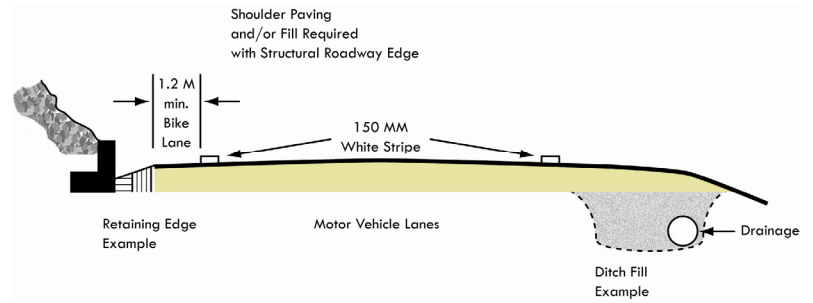
APPENDIX B: TRAIL COST DOCUMENTATION

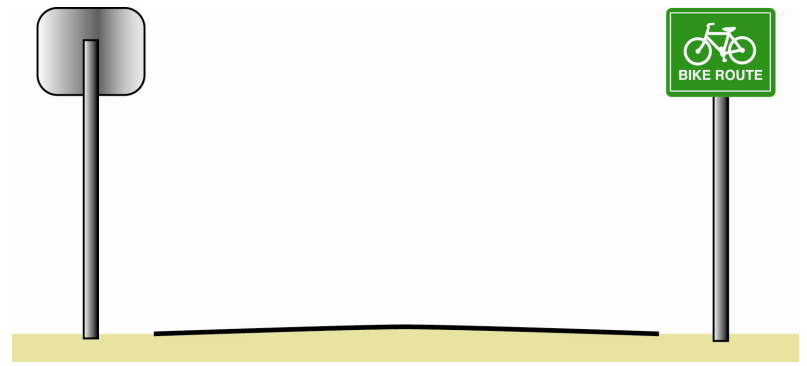
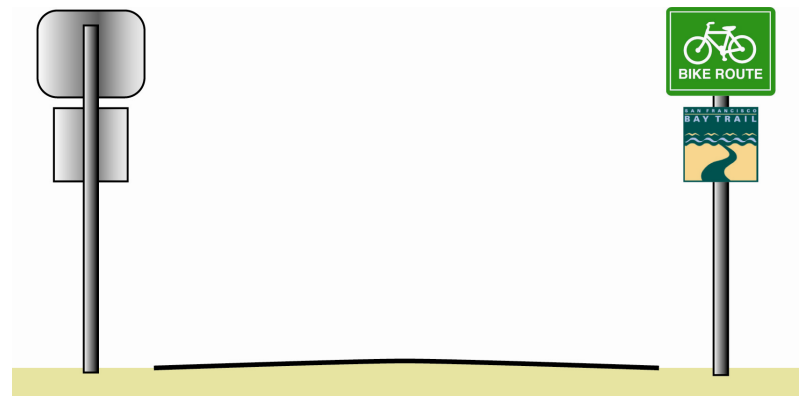
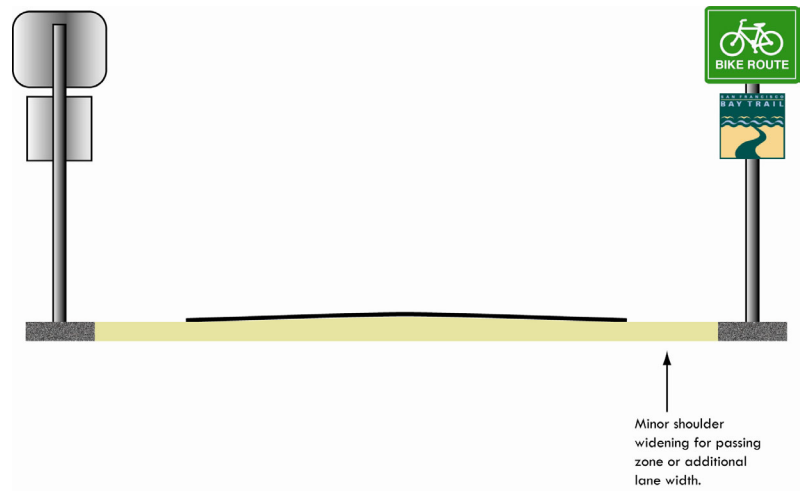
Appendix B: Trail Cost Documentation

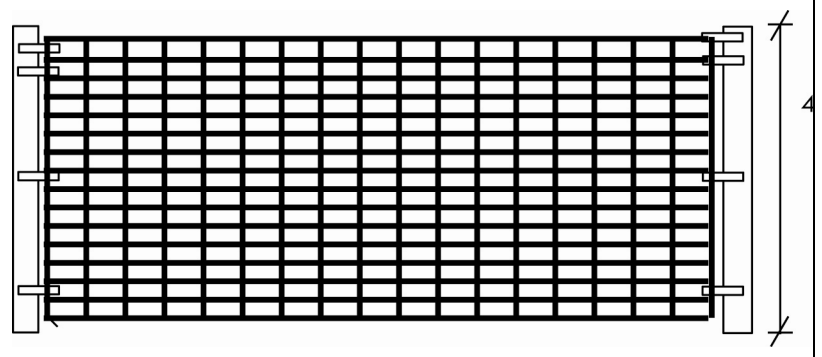
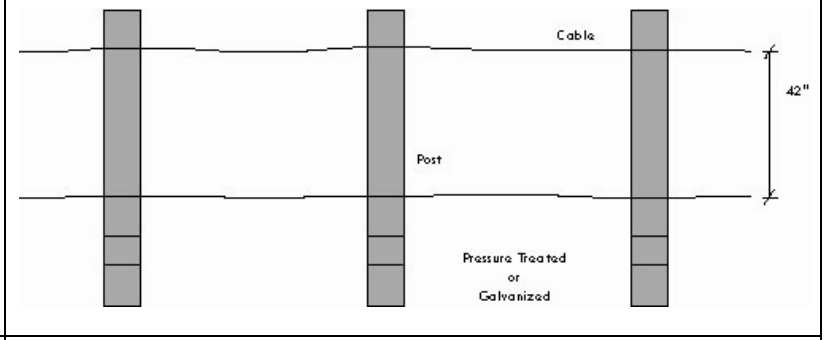
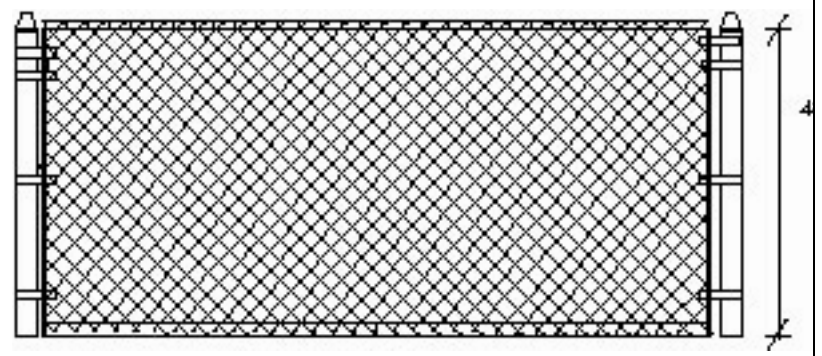
Facility Type	Rating	Construction Type	Construction Type General Requirements	Construction Components	Cost per Lineal Foot	Typical Section
Class I Multi-Use Trail	A	Trail – Level Paved Surface	1. Existing path, roadway or levee location requiring minor leveling/ grading 2. Aggregate Base and Paving for 12' trail width	a. Earthwork b. Asphalt pavement with Aggregate Base 12 ft. wide c. Pavement striping d. Traffic Sign e. Wayfinding Sign	$63.86	
Class I Multi-Use Trail	B	Trail – Moderate Hillside Location or Other Moderate Engineering Challenge for Implementation	1. Grading to create trail bench w/ minor cut/fill 2. Aggregate Base and Paving for 12' trail width 3. Drainage as required.	a. Earthwork b. Engineered Fill c. Asphalt pavement with Aggregate Base 12 ft. wide d. pavement striping e. 24" or less retaining wall f. Traffic Sign g. Wayfinding Sign	$149.83	
Class I Multi-Use Trail	C	Trail – Difficult Hillside Location or Other Complex Engineering Challenge for Implementation	1. Grading to create trail bench w/ substantial cut and/or cut/fill 2. Retaining walls, structure, or piles required 3. Aggregate Base and Paving for 12' trail width 4. Drainage as required. NOTES: Structural solutions cost minimum $50 per Sq. Ft. It is assumed that for any given segment, no greater than 50% of the total length classified as "C" will require structural solutions.	a. Earthwork b. Engineered Fill c.. Asphalt pavement with Aggregate Base 12 ft. wide d. Pavement striping e. 4 ft. Engineered retaining wall f. Traffic Sign g. Wayfinding Sign	$294.77	
Class I Multi-Use Trail	X	Existing multi-use trail requiring minimal improvement to upgrade to regional trail	1. Bay Trail identifying signage	a. signage installation b. trail inspection	$2.67	N/A
Trail Bridge	A	Bridge-Prefabricated Structure Pedestrian/Bicycle Load Only	1. Abutment engineering/ construction 2. Transport of structure to site 3. Bridge structure securing and surfacing	a. Earthwork b. Concrete bridge abutments/piers c. Preconstructed clearspan bridge, pedestrian rating d. Bridge Engineering design e. Traffic Sign f. Wayfinding Sign	$827.94	 Section  Elevation

Appendix B: Trail Cost Documentation

Facility Type	Rating	Construction Type	Construction Type General Requirements	Construction Components	Cost per Lineal Foot	Typical Section
Trail Bridge	B	Bridge – Prefabricated Structure Light Vehicle/Maintenance Load	1. Abutment engineering/ construction 2. Transport of structure to site 3. Bridge structure securing and surfacing	a. Earthwork b. Concrete bridge abutments/piers c. Preconstructed clearspan bridge, vehicle load rating d. Bridge Engineering design e. Traffic Sign f. Wayfinding Sign	$1513.94	
Trail Boardwalk	A	10 ft. wide Boardwalk- Structure Pedestrian/Bicycle Load Only	1. Boardwalk abutment engineering/ construction 2. Pile engineering and construction 3. Decking securing and surfacing	a. 10 ft. wide Boardwalk b. Drilled piles or piers c. Traffic Sign d. Wayfinding Sign	$927.34	
Class II Bicycle Lane	A	Vehicle travel lane narrowing through re-striping of existing roadway surface to accommodate Caltrans minimum or greater width Class II bicycle lanes , applicable to urban or suburban streets or outlying roadways with existing paved shoulder.	1. Existing stripe grinding/ removal 2. Lane striping both sides of roadway 3. Pavement markers (bike lane symbol and turn arrows as req'd) 4. Signage 5. Does not account for parking stall removal or replacement in urban or suburban setting.	a. Pavement striping b. Asphalt surface treatment existing road surface c. Pavement marking and lane signage d. Traffic Sign e. Wayfinding Sign	$10.11	

Facility Type	Rating	Construction Type	Construction Type General Requirements	Construction Components	Cost per Lineal Foot	Typical Section
Class II Bicycle Lane	B	Roadway widening of shoulder edge to create additional roadway width sufficient to accommodate Class II bicycle lanes	1. Roadway shoulder paving both sides of roadway, 4' minimum on each side of roadway assumed 2. Lane striping both sides of roadway to create shoulder bicycle lane 3. Pavement markers (bike lane symbol and turn arrows as req'd) 4. Signage	a. Asphalt pavement with Aggregate Base, 8 ft. wide b. Asphalt surface treatment existing road surface c. Pavement striping d. Pavement marking and lane signage e. Traffic Sign f. Wayfinding Sign	$52.33	
Class II Bicycle Lane	C	Roadway widening including drainage channel fill, retaining wall, or other structural to obtain additional width for Class II bicycle lanes.	1. Drainage or retaining wall construction as required. See NOTE. 2. Roadway shoulder paving both sides of roadway, 4' minimum on each side of roadway assumed 3. Lane striping both sides of roadway to create shoulder bicycle lane 4. Pavement markers (bike lane symbol and turn arrows as req'd) 5. Striping both shoulders NOTE: Structural roadway accommodations cost minimum of $50 per Sq. Ft. It is assumed that no more than 50% of given project distance defined as "C" will require structural treatment at the roadway edge.	a. Earthwork b. Asphalt pavement with Aggregate Base, 8 ft. wide b. Aphalt surface treatment c. Engineered fill d. Retaining wall up to 24" e. Pavement striping f. Pavement marking and lane signage g. Traffic Sign h. Wayfinding Sign	$108.74	
Class II Bicycle Lane	X	Existing multi-use trail requiring minimal improvement to upgrade to regional trail	1. Bay Trail identifying signage	a. signage installation b. trail inspection	$2.67	N/A

Facility Type	Rating	Construction Type	Construction Type General Requirements	Construction Components	Cost per Lineal Foot	Typical Section
Class III Bicycle Route	A	Caltrans Class III Signage Minimum	1. ID placement and install Class III Route signage	a. Traffic signs	$2.67	
Class III Bicycle Route	B	Bicycle Wayfinding Signage (e.g. San Francisco, Marin)	1. ID placement, content and install bicycle wayfinding signage with key destinations and distance 2. ID placement and install Bay Trail signage	a. Traffic Sign b. Wayfinding Sign	$5.34	
Class III Bicycle Route	C	Sliver fill on rural roadway with topographic or other constraints to create periodic bicycle pull outs, uphill shoulder segments, or other bicycle safety improvement strategy	1. Roadway structural treatment for short distances 2. Shoulder widening for short distances 3. ID placement, content and install bicycle wayfinding signage with key destinations and distance 4. ID placement and install Bay Trail signage 5. Stencil roadway with Shared Use Pavement Arrow NOTE: Structural roadway accommodations cost minimum of $50 per Sq. Ft. It is assumed that no more than 50% of given project distance defined as "C" will require structural treatment at the roadway edge.	a. Asphalt pavement with Aggregate Base, 8 ft. wide b. Asphalt Surface treatment c. Pavement striping or marking d. Lane/Route Stenciling e. Traffic Sign f. Wayfinding Sign	$51.31	

Facility Type	Rating	Construction Type	Construction Type General Requirements	Construction Components	Cost per Lineal Foot	Typical Section
Fencing	A	Habitat Protective Fencing	1. 4' wood post and grid wire construction	a. Construct 4 ft. wood and wire fence b. Emergency gate every 100 ft.	$19.67	
Fencing	B	Roadway Barrier/Separator	1. 3' bollard/post and cable	a. Construct 3 ft. bollard and cable fence	$14.50	
Fencing	C	Security Fencing	1. 6' Min. cyclone/ chainlink fencing 2. Support posts and gate as required	a. Construct 6 ft. chain link fence b. Emergency Access Gate every 1000 ft.	$29.95	
Trail Furnishings and Landscaping	A	Bench Trash Receptacle Bicycle Rack Picnic table Landscaping Irrigation Erosion Control	1. Install site furnishings	a. Furnish and install site furnishings	2% of Project Base Cost	N/A
Design Cost	A	Engineering design for all facilities associated with subject segment	1. 20% of total project cost of facilities	a. Engineering design b. Construction management and observation	20% project construction budget	N/A
Environmental Cost	A	Low Sensitivity - Environmental review and permitting/ clearances for	1. 5% of total project cost for Checklist/IS	a. CEQA Initial Study Checklist	5% project construction budget	N/A

Facility Type	Rating	Construction Type	Construction Type General Requirements	Construction Components	Cost per Lineal Foot	Typical Section
Environmental Cost	B	Moderate Sensitivity - Environmental review and permitting/ clearances	2. 10% of total project cost for IS/MND or focused EIR	a. CEQA Initial Study Checklist b. Focused analysis of some issues c. Permitting assistance d. Mitigated Negative Declaration/Focused EIR completion	10% project construction budget	N/A
Environmental Cost	C	High Sensitivity - Environmental review and permitting/ clearances	3. 15% of total project cost of facilities for complete EIR	a. CEQA Initial Study Checklist b. Focused analysis of major issues c. Agency coordination d. Complex permitting issues e. Mitigation and Monitoring Program f. Post Construction observation/monitoring	25% project construction budget	N/A

NOTES:

1. Project costs were calculated based on existing project studies, Mean's Construction Costs, CalTrans data, Ace, Bay Trail Feasibility studies, and recent trail installation projects. For lump sum items, a percentage cost was assigned relative to total project cost. Other cost items are based on an average of current costs for each construction component for the type of trail to be built. Individual project components such as structural walls, access ramps, concrete sidewalks and stairs, bank stabilization, wetland mitigation, culvert and drainage systems, urban design elements, lighting, play components, artwork and other unique project items are not included in this estimate and would be identified on an individual basis.

2. For cost determination using cost estimating handbooks and databases, engineers did not use average cost, but estimated probable cost based on geographic variables and Bay area construction experience.

3. Cost database references used: *RS Means Site Work and Landscape Cost Data 2005*, 24th annual edition; Architects Contractors Engineers *Guide to Construction Costs, 2004 Edition, Volume 35; and* http://www.dot.ca.gov/hq/esc/oe/awards/2004CCDB/2004ccdb.pdf *(State of California, Business, Transportation, and Housing Division, Department of Transportation Contract Cost Data 2004.*

4. Bay Trail costs are based on average of costs of projects identified in Bay Trail Feasibility Studies.

APPENDIX C: IMPLEMENTATION RANKING

OVERALL CRITERIA	SUB-CRITERION	POINTS	DEFINITION OF IMPLEMENTATION PRIORITY RANKING CRITERIA
Critical Bay Trail Link		**13**	
	Distance of Continuity	6	Gap closure that creates the greatest amount of continuous miles of Bay Trail receives highest points. • New segments closing gaps between existing longer segments receive highest points from 5 to 6 points. • New segments closing gaps between existing shorter segments or establishing new Bay Trail in an undeveloped geographic region of the Bay Trail system receives 3 to 4 points. • New segment that adds distance at one end of existing segment without closing gap, receives 1 to 3 points.
	Trail classification (I, II, III)	4	Priority given to completing all Class I segments prior to competitive funds spent on Class II and III. • Continuous Class I segment receives up to 4 points; • Gap segments with mixed Class I and Class II opportunities receives 4 points; • Class II receives up to 2 points if no feasible Class I exists, and, • Class III receives a maximum of 1 point if adequate lane width exists.
	Shoreline experience/Proximity to Bay	3	Segments providing trail users with the greatest opportunity for shoreline exposure and experience receive greatest points. • Segment providing an trail experience adjacent to shoreline with appealing natural or urban views receives 3 points; • Segment providing views of shoreline or Bay environment but no direct, adjacent experience receives 1 to 2 points • Segment that does not provide shoreline experience or views receives no points under this criterion.
Regional Need/Connections		**2**	
	Support in local general or master plans	2	Segments already supported by local general or master plans, or by existing agency plans (such as BCDC plans for shoreline access), will rank more favorably. • Segments with known plan support receive 1 to 2 points, depending on force of document; legislatively approved documents receive greater points. • Segments with no known adopted plan support receive no points under this criterion.

Project Readiness		**12**	
	Degree of environmental impact/regulatory context	4	• Highest points awarded to projects that have certified, completed environmental review, and have permits completed and/or identified with preliminary agency consultations completed receive 4 points. • • Projects with limited permitting requirements and environmental review in process with limited environmental consequences receive 3 points. • Projects with substantial permitting and environmental review requirements but with clear beneficial mitigation opportunities receive 2 points • Projects with substantial permitting and environmental review requirements and high cost or offsite mitigation only receive 1 point.
	Status of property control/ownership	4	Segments with property ownership or control that has been previously identified as amenable to Bay Trail alignment and construction across the property shall be given preferential ranking. • Segments located on publicly owned land designated for recreational access such as park, open space, etc. or and publicly owned easement on private land receives 4 points • Segments located on publicly owned land designated for wildlife habitat or other protected purpose receives 3 points if balancing of management goals is required • Segments located on private property with identified but not publicly-owned easement receives 2 points • Segments on known restricted private or public lands where feasibility of access is unknown but believed possible receive 1 point.
	Preliminary design/needs identified	4	Overall construction type is identified and documented as feasible from an engineering and cost standpoint for the subject area. • Feasibility study documented construction strategy and documented costs receives 4 points • Feasibility study documented construction type with no cost estimates receives 3 points • Assumed ease of construction/ feasible construction type receives 2 points • Assumed difficulty of construction including engineering and potential unknown construction obstacles receives 1 point.
Cost		**13**	
	Cost effectiveness of project	13	• Projects with low average cost per lineal foot and significant overall benefit receive highest points, 10 to 13. • Projects with mid-level average cost per lineal foot or high cost and significant overall benefit receive medium points, 6 to 9. • Projects with mid-level average cost per lineal and fewer defined project benefits, receives lower points, 3 to 5. • Projects with high average cost per lineal foot and fewer defined project benefits, receives lowest points, 0 to 2.
	TOTAL POINTS	**40**	

The San Francisco Bay Trail Project Gap Analysis Study

San Francisco County Implementation Ranking

NOTES: Implementation criteria definitions are provided on page one of this appendix. See Appendix A for cost estimate details and project category definitions.

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plan	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
3	2	3	2	3	4	4	10	31	**3**
3	2	0	1	2	3	2	10	23	**7**
6	2	2	2	3	4	1	10	30	**3**
5	3	2	2	3	4	4	12	35	**1**
4	3	0	2	3	4	4	12	32	**2**
3	2	2	1	1	1	1	2	13	**13**
2	1	0	1	2	1	1	2	10	**14**
4	3	3	1	3	3	2	8	27	**5**
0	1	3	2	3	2	1	4	16	**11**
3	4	1	1	2	2	1	7	21	**8**
1	4	3	2	3	3	3	6	25	**5**
3	4	1	1	1	1	1	8	20	**9**
0	2	0	1	3	2	1	7	16	**11**
2	4	3	2	3	3	3	4	24	**6**
2	4	0	1	3	2	1	5	18	**10**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design &
4	1001.0	1900.5	**$19,252**	**$24,065**	**$66,858**
1	1002.0	2795.3	**$146,366**	**$182,957**	**$345,585**
1	1005.0	1795.7	**$94,005**	**$117,506**	**$345,510**
1	1006.0	1178.9	**$49,585**	**$61,981**	**$277,596**
1	1008.0	880.3	**$37,025**	**$46,282**	**$277,596**
4	1009.0	15327.2	**$160,000,000**	**$192,000,000**	**$66,141,239**
1	1013.0	320.3	**$484,921**	**$703,136**	**$11,590,878**
1	1020.0	3902.4	**$584,775**	**$730,968**	**$989,010**
1	1024.0	9668.1	**$51,821**	**$64,776**	**$35,376**
4	1025.0	1093.1	**$171,726**	**$223,244**	**$1,078,334**
1	1026.0	4206	**$691,256**	**$898,633**	**$1,128,098**
3	1027.0	23272.8	**$1,486,666**	**$1,858,333**	**$421,608**
1	1028.0	5382	**$54,520**	**$68,150**	**$66,858**
1	1029.0	3934.3	**$666,943**	**$833,678**	**$1,118,832**
1	1032.0	1280.8	**$284,747**	**$355,934**	**$1,467,312**

The San Francisco Bay Trail Project Gap Analysis Study

San Mateo County Implementation Ranking

NOTES: Implementation criteria definitions are provided on page one of this appendix. See Appendix A for cost estimate details and project category definitions.

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
5	4	2	2	3	4	2	6	28	**1**
4	4	1	1	2	1	1	8	22	**17**
5	3	3	1	2	1	1	8	24	**13**
4	4	3	2	2	2	2	4	23	**16**
4	3	3	1	2	1	1	7	22	**17**
5	4	3	1	1	2	1	2	19	**22**
2	2	0	1	2	2	2	3	14	**39**
1	2	2	1	2	2	2	3	15	**36**
1	2	0	1	2	2	2	3	13	**45**
1	4	0	1	1	2	1	5	15	**36**
1	4	0	1	1	1	1	8	17	**27**
1	2	0	1	1	2	2	9	18	**25**
1	4	0	1	1	1	1	5	14	**39**
1	2	0	1	2	2	1	5	14	**39**
1	2	0	1	2	2	1	5	14	**39**
1	2	0	2	2	3	3	4	17	**27**
1	2	0	1	2	2	1	5	14	**39**
1	4	0	1	1	1	1	7	16	**32**
1	3	0	1	1	1	2	10	19	**22**
3	4	0	1	3	3	2	1	17	**27**
1	2	0	2	3	3	3	2	16	**32**
3	4	2	1	2	1	1	1	15	**36**
3	4	3	1	2	1	1	2	17	**27**
1	4	3	1	2	1	1	3	16	**32**
1	4	3	1	2	1	1	8	21	**20**
1	3	3	1	2	1	1	5	17	**27**
4	2	3	1	2	1	1	5	19	**22**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
1	2000.0	450.4	**$28,772**	**$35,964**	**$421,608**
3	2001.0	6584	**$516,054**	**$645,067**	**$517,308**
3	2005.0	1833.2	**$143,686**	**$179,608**	**$517,308**
3	2010.0	2868.7	**$887,260**	**$1,153,438**	**$2,122,967**
3	2012.0	838.2	**$65,698**	**$85,408**	**$538,000**
1	2018.0	1928.6	**$316,965**	**$412,055**	**$1,128,098**
1	2019.0	1486.7	**$77,829**	**$97,286**	**$345,510**
1	2020.0	1478.6	**$62,190**	**$77,737**	**$277,596**
1	2022.0	1210.9	**$63,391**	**$79,238**	**$345,510**
1	2023.0	2675.5	**$251,042**	**$313,803**	**$619,278**
1	2024.0	3127.2	**$199,711**	**$249,639**	**$421,493**
1	2025.0	1940.1	**$101,564**	**$126,955**	**$345,510**
1	2026.0	3770.6	**$336,937**	**$421,171**	**$589,769**
1	2027.0	7469.7	**$75,668**	**$94,585**	**$66,858**
1	2028.0	5477.7	**$55,489**	**$69,361**	**$66,858**
4	2029.0	3832.7	**$405,280**	**$486,336**	**$669,986**
1	2030.0	2292.2	**$23,220**	**$29,025**	**$66,858**
1	2031.0	2406.6	**$188,629**	**$235,787**	**$517,308**
1	2034.0	653.4	**$33,653**	**$43,749**	**$353,530**
4	2035.0	2755.2	**$948,918**	**$1,186,148**	**$2,273,106**
4	2036.0	3738.6	**$405,280**	**$486,336**	**$686,849**
4	2038.0	22620.4	**$34,246,381**	**$49,657,252**	**$11,590,878**
3	2039.0	519.9	**$127,583**	**$165,858**	**$1,684,425**
3	2040.0	499	**$74,775**	**$97,208**	**$1,028,570**
3	2041.0	963.9	**$144,440**	**$180,551**	**$989,010**
3	2042.0	875.6	**$55,933**	**$67,120**	**$404,744**
3	2047.0	625.3	**$39,944**	**$53,925**	**$455,337**

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
2	4	3	1	1	1	1	1	14	**39**
3	4	3	2	2	4	3	9	30	**4**
3	4	3	1	2	1	1	3	18	**25**
1	4	0	2	2	4	4	7	24	**13**
5	4	1	1	2	4	3	7	27	**9**
1	4	2	2	3	4	4	12	32	**2**
1	4	0	2	3	4	4	12	30	**4**
2	4	3	2	3	4	4	12	34	**1**
1	4	0	2	3	4	4	10	28	**8**
1	4	0	2	3	4	4	12	30	**4**
3	4	0	2	3	4	4	12	32	**2**
6	4	3	0	3	3	4	3	26	**10**
2	4	3	1	1	2	4	5	22	**17**
1	4	3	1	3	2	2	5	21	**20**
1	4	2	0	2	2	1	4	16	**32**
2	2	0	0	2	2	1	4	13	**45**
5	4	3	1	1	2	1	7	24	**13**
3	3	2	2	3	4	4	8	29	**7**
2	4	2	2	3	4	4	4	25	**12**
3	4	2	2	2	3	4	6	26	**10**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
3	2048.0	326.2	**$95,248**	**$119,060**	**$1,927,153**
1	2049.0	447	**$28,554**	**$35,693**	**$421,608**
3	2051.0	426	**$63,836**	**$79,795**	**$989,010**
1	2056.0	1007.6	**$150,989**	**$188,736**	**$989,010**
1	2057.0	1009.2	**$373,329**	**$466,661**	**$2,441,507**
1	2058.0	670.2	**$42,812**	**$53,515**	**$421,608**
1	2059.0	858.7	**$128,676**	**$160,845**	**$989,010**
1	2060.0	748.7	**$47,827**	**$59,784**	**$421,608**
1	2061.0	1064.7	**$159,545**	**$199,432**	**$989,010**
1	2062.0	1655.6	**$105,760**	**$132,200**	**$421,608**
1	2063.0	667.8	**$42,659**	**$53,324**	**$421,608**
1	2079.0	4465.1	**$1,754,789**	**$2,544,444**	**$3,008,816**
1	2083.0	2466.7	**$157,573**	**$189,087**	**$404,744**
1	2085.0	1541.8	**$261,366**	**$326,707**	**$1,118,832**
1	2087.0	2455	**$723,709**	**$1,049,379**	**$2,256,912**
1	2088.0	1929.7	**$19,548**	**$24,435**	**$66,858**
1	2089.0	10724.1	**$1,832,881**	**$2,657,677**	**$1,308,505**
1	2091.0	1863.1	**$250,000**	**$300,000**	**$850,196**
1	2092.0	3024.7	**$2,303,490**	**$2,764,188**	**$4,825,243**
1	2096.0	1804.3	**$305,865**	**$443,504**	**$1,297,845**

The San Francisco Bay Trail Project Gap Analysis Study

Santa Clara County Implementation Ranking

NOTES: Implementation criteria definitions are provided on page one of this appendix. See Appendix A for cost estimate details and project category definitions.

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
1	4	3	1	1	1	1	5	17	**13**
3	2	0	1	3	3	2	7	21	**10**
1	4	2	1	2	2	2	5	19	**12**
1	3	0	2	3	3	4	8	24	**4**
1	4	2	2	3	3	4	5	24	**4**
1	4	1	2	2	2	4	5	21	**10**
3	4	0	2	2	3	4	7	25	**3**
3	4	0	1	3	3	1	8	23	**7**
1	2	0	1	3	3	1	4	15	**16**
1	4	0	2	2	2	2	1	14	**18**
3	2	1	2	3	3	4	10	28	**1**
1	4	2	2	2	2	2	1	16	**14**
3	4	0	2	2	2	2	1	16	**14**
1	4	0	2	3	3	4	10	27	**2**
3	4	3	2	2	2	2	6	24	**4**
1	4	0	2	2	1	2	1	13	**19**
5	4	1	2	3	3	4	1	23	**7**
2	4	1	2	1	3	4	6	23	**7**
5	2	1	1	2	2	1	1	15	**16**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
3	3000.1	19237.4	**$1,557,556**	**$1,946,945**	**$534,369**
1	3004.0	1225.3	**$12,388**	**$15,485**	**$66,726**
1	3011.0	16380.4	**$2,454,275**	**$3,558,699**	**$1,147,098**
1	3014.0	9431.1	**$348,998**	**$453,697**	**$254,002**
1	3017.0	1636.8	**$249,645**	**$324,538**	**$1,046,897**
1	3020.0	4277	**$640,823**	**$833,070**	**$1,028,433**
1	3021.0	3786.3	**$241,793**	**$290,152**	**$404,617**
1	3021.1	2406.2	**$153,708**	**$192,135**	**$421,608**
1	3023.0	3578.3	**$187,324**	**$234,155**	**$345,510**
1	3024.0	3727.9	**$1,207,057**	**$1,508,821**	**$2,137,014**
1	3025.0	2252.3	**$22,816**	**$29,661**	**$69,532**
1	3026.0	2095.5	**$678,502**	**$848,127**	**$2,137,014**
1	3027.0	1930.4	**$625,044**	**$781,305**	**$2,137,014**
1	3028.0	3460.9	**$221,013**	**$276,266**	**$421,476**
1	3029.0	4464.7	**$798,512**	**$998,139**	**$1,180,410**
1	3031.0	1835.4	**$594,284**	**$742,855**	**$2,137,014**
1	3033.0	8365.2	**$3,300,000**	**$4,290,000**	**$2,707,789**
1	3034.0	4287	**$241,165**	**$313,515**	**$386,134**
1	3035.0	6558.9	**$2,300,000**	**$3,335,000**	**$2,684,718**

The San Francisco Bay Trail Project Gap Analysis Study

Alameda County Implementation Ranking

NOTES: Implementation criteria definitions are provided on page one of this appendix. See Appendix A for cost estimate details and project category definitions.

Point Range								TOTAL	RANK	Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
6	4	3	2	4	4	4	13	40							
Criteria															
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness								
1	3	0	2	3	2	2	2	15	**69**	3	4000.0	481.2	**$728,518**	**$910,647**	**$9,992,136**
3	3	1	2	3	2	2	5	21	**53**	3	4001.0	3631.9	**$232,006**	**$290,007**	**$421,608**
3	2	0	1	2	3	2	6	19	**61**	1	4003.0	5967.7	**$60,333**	**$75,417**	**$66,726**
1	4	0	1	3	2	2	5	18	**64**	3	4005.0	14166.6	**$904,962**	**$1,131,203**	**$421,608**
1	4	0	1	1	2	1	4	14	**70**	1	4006.0	18532.8	**$5,463,284**	**$7,102,269**	**$2,023,439**
1	4	0	1	2	2	1	7	18	**64**	1	4007.0	2632.1	**$168,139**	**$210,173**	**$421,608**
3	4	0	1	2	4	2	11	27	**17**	1	4008.0	6118.4	**$16,458**	**$20,573**	**$17,754**
1	4	1	1	1	1	2	2	13	**71**	1	4011.0	15470.4	**$4,560,519**	**$5,928,675**	**$2,023,439**
1	2	0	1	1	1	2	5	13	**71**	1	4012.0	5808	**$58,835**	**$76,486**	**$69,532**
1	2	0	1	1	1	2	5	13	**71**	1	4013.0	3590.4	**$36,371**	**$47,282**	**$69,532**
1	2	0	1	2	3	2	5	16	**68**	1	4015.0	3854.4	**$39,045**	**$50,759**	**$69,532**
2	2	0	1	2	3	2	5	17	**66**	1	4016.0	6019.2	**$60,974**	**$76,218**	**$66,858**
6	1	0	1	3	4	3	13	31	**5**	1	4022.0	11880	**$20,077**	**$25,097**	**$11,154**
6	1	0	1	1	4	2	13	28	**13**	1	4028.0	12988.8	**$21,951**	**$27,439**	**$11,154**
3	4	2	2	2	3	2	5	23	**36**	1	4029.0	23390.4	**$1,494,179**	**$2,166,559**	**$489,065**
3	2	2	1	1	1	1	2	13	**71**	4	4032.0	19008	**$28,777,352**	**$41,727,160**	**$11,590,878**
3	2	0	1	2	3	2	10	23	**36**	1	4034.0	14216.3	**$38,242**	**$47,802**	**$17,754**
3	2	1	1	2	3	3	8	23	**36**	1	4044.0	2217.6	**$22,464**	**$28,080**	**$66,858**
1	4	3	1	2	3	3	6	23	**36**	1	4045.0	2640	**$168,643**	**$210,804**	**$421,608**
1	2	0	1	2	4	3	9	22	**47**	1	4046.0	3220.8	**$8,664**	**$10,830**	**$17,754**
6	4	3	2	4	3	4	13	39	**1**	1	4049.0	897.6	**$2,188,000**	**$2,188,000**	**$12,870,588**
5	3	2	1	2	1	1	8	23	**36**	4	4053.0	6758.4	**$735,044**	**$918,804**	**$717,816**
5	3	3	1	2	1	1	6	22	**47**	4	4057.0	3273.6	**$965,025**	**$1,206,281**	**$1,945,614**
6	4	3	1	2	2	2	12	32	**4**	1	4062.0	2798.4	**$419,340**	**$524,175**	**$989,010**
6	3	0	1	2	3	4	7	26	**22**	2	4063.0	1108.8	**$70,808**	**$88,510**	**$421,476**
5	4	3	2	2	3	4	4	27	**17**	2	4069.0	739.2	**$400,000**	**$500,000**	**$3,571,429**

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
2	4	0	2	2	3	4	2	19	**61**
1	3	3	1	3	3	2	8	24	**30**
1	4	3	2	2	2	4	3	21	**53**
1	4	3	2	1	3	4	5	23	**36**
3	4	3	2	2	3	4	6	27	**17**
5	3	0	2	2	3	4	10	29	**9**
2	4	1	2	2	3	4	1	19	**61**
2	4	3	2	2	3	4	3	23	**36**
1	4	3	2	2	3	4	1	20	**56**
1	4	3	1	3	3	4	5	24	**30**
1	2	1	1	3	3	2	10	23	**36**
1	4	3	2	2	3	4	4	23	**36**
1	4	3	2	2	3	4	1	20	**56**
1	4	3	1	2	2	2	2	17	**66**
6	2	0	2	3	4	3	13	33	**2**
2	4	1	2	3	4	3	5	24	**30**
1	4	3	2	2	3	4	3	22	**47**
1	4	3	2	2	3	4	1	20	**56**
1	4	3	2	2	3	4	2	21	**53**
2	4	3	2	2	3	4	4	24	**30**
6	4	0	2	2	3	4	12	33	**2**
2	4	3	2	3	3	4	3	24	**30**
1	4	0	2	3	4	4	4	22	**47**
1	4	0	2	3	4	4	4	22	**47**
4	4	3	2	3	3	4	3	26	**22**
5	4	0	2	2	4	4	5	26	**22**
5	4	3	2	3	3	4	5	29	**9**
3	4	0	1	3	4	2	6	23	**36**
2	4	3	2	2	3	4	2	22	**47**
5	4	0	1	3	4	1	9	27	**17**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
2	4071.0	81.3	**$292,703**	**$365,879**	**$23,761,867**
1	4072.0	3537.6	**$185,669**	**$232,087**	**$346,398**
2	4075.0	897.6	**$264,586**	**$330,732**	**$1,945,482**
2	4077.0	475.2	**$372,408**	**$465,510**	**$5,172,333**
2	4078.0	792	**$48,380**	**$60,475**	**$403,167**
2	4080.0	7708.8	**$12,999**	**$16,249**	**$11,129**
2	4081.0	95.4	**$284,506**	**$284,506**	**$15,746,266**
2	4082.0	316.8	**$31,251**	**$39,064**	**$651,058**
2	4083.0	83.6	**$847,216**	**$1,059,020**	**$66,885,474**
2	4084.0	739.2	**$58,042**	**$72,553**	**$518,232**
1	4085.0	792	**$8,023**	**$10,029**	**$66,858**
2	4086.0	413.7	**$125,467**	**$156,834**	**$2,001,646**
2	4087.0	78.4	**$161,628**	**$202,035**	**$13,606,456**
3	4089.0	950.4	**$280,168**	**$350,211**	**$1,945,614**
1	4090.0	2956.8	**$29,952**	**$37,440**	**$66,858**
1	4091.0	1584	**$101,186**	**$126,482**	**$421,608**
2	4092.0	114.2	**$113,341**	**$141,677**	**$6,550,379**
2	4093.0	99.3	**$302,240**	**$377,800**	**$20,088,459**
2	4094.0	950.4	**$809,325**	**$1,011,656**	**$5,620,310**
2	4096.0	739.2	**$469,999**	**$587,499**	**$4,196,421**
2	4100.0	2798.4	**$6,178**	**$7,722**	**$14,570**
2	4104.0	528	**$221,365**	**$265,638**	**$2,656,382**
2	4105.0	4276.8	**$667,269**	**$834,086**	**$1,029,736**
2	4106.0	475.2	**$30,650**	**$38,313**	**$425,694**
2	4107.0	844.8	**$151,711**	**$182,053**	**$1,137,833**
2	4108.0	4329.6	**$374,676**	**$468,345**	**$571,152**
2	4116.0	1267.2	**$445,473**	**$534,568**	**$2,227,366**
1	4117.0	2217.6	**$116,091**	**$145,114**	**$345,510**
2	4118.0	297.7	**$226,552**	**$226,552**	**$4,018,117**
1	4120.0	1108.8	**$70,830**	**$88,538**	**$421,608**

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
1	4	3	2	2	3	4	4	23	**36**
3	4	3	2	2	3	4	3	24	**30**
3	4	2	1	1	2	1	12	26	**22**
6	2	0	1	1	2	1	12	25	**26**
6	2	0	1	1	2	1	12	25	**26**
6	2	0	1	2	2	1	13	27	**17**
5	3	0	1	2	1	1	7	20	**56**
5	3	0	1	2	2	1	6	20	**56**
2	4	3	2	3	4	4	7	29	**9**
1	4	3	2	3	4	4	7	28	**13**
1	4	3	2	3	4	4	7	28	**13**
1	4	3	2	3	4	4	7	28	**13**
1	4	3	3	3	4	4	7	29	**9**
3	4	3	2	3	4	4	7	30	**7**
3	4	3	2	3	4	4	7	30	**7**
3	4	3	2	2	1	2	8	25	**26**
3	4	3	2	2	1	2	8	25	**26**
3	4	3	2	3	4	2	10	31	**5**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
2	4122.0	5596.8	**$2,000,000**	**$2,400,000**	**$2,264,151**
2	4125.0	2798.4	**$1,503,317**	**$1,803,981**	**$3,403,737**
1	4126.0	2323.2	**$6,249**	**$7,499**	**$17,044**
1	4132.0	11510.4	**$1,173,715**	**$1,408,459**	**$646,082**
1	4142.0	12302.4	**$1,254,476**	**$1,630,818**	**$699,922**
1	4143.0	897.6	**$9,093**	**$11,366**	**$66,858**
4	4146.0	1214.4	**$63,574**	**$79,467**	**$345,510**
4	4147.0	844.8	**$249,039**	**$311,298**	**$1,945,614**
1	4151.0	897.6	**$261,736**	**$314,083**	**$1,847,548**
1	4152.0	844.8	**$246,340**	**$295,608**	**$1,847,548**
1	4155.0	1636.8	**$477,283**	**$572,740**	**$1,847,548**
1	4156.0	1214.4	**$354,113**	**$424,936**	**$1,847,548**
1	4157.0	950.4	**$277,132**	**$332,559**	**$1,847,548**
1	4158.0	1742.4	**$508,076**	**$609,691**	**$1,847,548**
1	4159.0	2164.8	**$631,246**	**$757,495**	**$1,847,548**
3	4163.0	2006.4	**$128,169**	**$153,803**	**$404,744**
3	4164.0	3326.4	**$212,490**	**$254,989**	**$404,744**
1	4166.0	2323.2	**$148,406**	**$178,087**	**$404,744**

The San Francisco Bay Trail Project Gap Analysis Study

Contra Costa County Implementation Ranking

NOTES: Implementation criteria definitions are provided on page one of this appendix. See Appendix A for cost estimate details and project category definitions.

Point Range								TOTAL	RANK	Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
6	4	3	2	4	4	4	13	40							
Criteria															
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact / Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness								
6	4	3	1	2	2	1	8	27	**4**	3	5006.0	3275	**$209,207**	**$251,048**	**$404,744**
3	2	3	1	1	2	2	1	15	**37**	2	5008.0	1108.8	**$424,785**	**$552,220**	**$2,629,619**
3	4	1	2	2	3	4	9	28	**2**	1	5012.0	7128	**$714,621**	**$750,352**	**$555,816**
3	4	3	2	2	3	4	9	30	**1**	3	5012.1	1378.3	**$126,110**	**$151,331**	**$579,720**
3	4	0	1	1	2	1	8	20	**20**	1	5017.0	1108.8	**$177,364**	**$221,705**	**$1,055,736**
3	4	0	1	1	2	1	7	19	**25**	3	5022.0	4367	**$654,395**	**$817,994**	**$989,010**
3	4	0	2	2	2	2	5	20	**20**	1	5030.0	3854.4	**$317,217**	**$412,382**	**$564,907**
1	3	0	2	2	2	1	1	12	**42**	1	5031.0	2376	**$3,450,000**	**$4,140,000**	**$9,200,000**
2	3	3	2	2	2	1	1	16	**31**	1	5032.0	1267.2	**$3,450,000**	**$4,140,000**	**$17,250,000**
1	2	2	1	0	1	1	1	9	**45**	4	5034.0	8870.4	**$13,429,431**	**$19,472,675**	**$11,590,878**
1	2	3	1	2	2	1	8	20	**20**	1	5036.0	6652.8	**$740,334**	**$925,417**	**$734,458**
1	2	3	1	2	2	1	9	21	**15**	3	5038.0	1425.6	**$119,109**	**$148,886**	**$551,430**
1	2	3	1	2	2	1	9	21	**15**	1	5040.0	8078.4	**$674,950**	**$843,688**	**$551,430**
3	4	1	1	2	2	3	5	21	**15**	1	5043.0	1056	**$173,000**	**$224,900**	**$1,124,500**
1	4	1	2	2	2	4	7	23	**8**	1	5045.0	1689.6	**$173,000**	**$224,900**	**$702,813**
1	4	3	1	3	1	2	7	22	**12**	1	5046.0	5280	**$495,422**	**$718,362**	**$718,362**
3	4	2	2	2	2	2	9	26	**5**	1	5048.0	1425.6	**$173,000**	**$224,900**	**$832,963**
1	4	3	1	2	2	4	6	23	**8**	1	5049.0	1478.4	**$173,000**	**$224,900**	**$1,478**
3	1	0	1	3	2	2	3	15	**37**	1	5052.0	1689.6	**$341,603**	**$444,084**	**$1,387,764**
1	4	3	1	2	1	2	4	18	**27**	1	5053.0	3443.8	**$583,793**	**$846,500**	**$1,297,845**
3	4	1	1	2	1	1	7	20	**20**	3	5053.1	2702.5	**$289,173**	**$375,925**	**$734,463**
1	4	0	1	1	1	2	2	12	**42**	1	5054.0	5280	**$1,480,513**	**$2,146,744**	**$2,146,744**
3	4	0	1	3	3	1	8	23	**8**	1	5055.0	5415.5	**$9,152**	**$10,983**	**$10,708**
1	1	0	1	3	3	1	6	16	**31**	1	5057.0	6523.3	**$11,024**	**$13,780**	**$11,154**
3	3	0	1	3	4	2	8	24	**7**	1	5058.0	2827.6	**$443,903**	**$577,074**	**$1,077,575**
1	4	0	2	2	2	4	7	22	**12**	1	5059.0	11675.9	**$1,650,134**	**$1,980,161**	**$895,456**
1	4	3	2	2	2	4	7	25	**6**	1	5060.0	3069.2	**$559,124**	**$670,949**	**$1,154,245**
1	1	0	1	3	3	1	8	18	**27**	1	5062.0	9316.7	**$94,192**	**$117,740**	**$66,726**
5	4	3	2	0	1	1	5	21	**15**	1	5067.0	2655.5	**$469,413**	**$610,237**	**$1,213,349**
1	1	0	1	3	3	1	6	16	**31**	1	5072.0	26391.3	**$44,601**	**$55,752**	**$11,154**

Point Range								TOTAL	RANK	Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
6	4	3	2	4	4	4	13	40							
Criteria															
Distance of Continuity	Trail Classification (I, II, III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness								
3	1	0	2	3	4	2	6	21	**15**	1	5076.0	3612.4	**$6,033**	**$7,541**	**$11,022**
2	4	0	2	4	4	4	7	27	**4**	1	5078.2	1571.5	**$235,458**	**$235,458**	**$791,102**
1	4	2	2	3	4	2	2	20	**20**	1	5080.0	8852.1	**$3,200,000**	**$3,840,000**	**$2,290,440**
5	4	3	2	3	4	3	4	28	**2**	1	5081.2	2117.7	**$317,295**	**$396,619**	**$988,878**
1	4	2	1	2	3	2	4	19	**25**	1	5083.0	8985.2	**$3,200,000**	**$3,840,000**	**$2,256,511**
1	1	0	1	3	3	2	2	13	**41**	1	5085.0	4592.8	**$90,432**	**$113,040**	**$129,954**
1	4	2	2	3	4	2	5	23	**8**	1	5086.0	2564.2	**$434,683**	**$543,354**	**$1,118,832**
1	1	0	0	3	3	2	6	16	**31**	1	5087.0	5020.7	**$8,385**	**$10,481**	**$11,022**
1	2	0	1	3	4	1	3	15	**37**	1	5088.0	7927.8	**$415,020**	**$539,526**	**$359,330**
1	1	0	1	3	4	1	6	17	**29**	1	5089.0	2466.3	**$4,168**	**$5,210**	**$11,154**
1	1	0	1	3	4	1	6	17	**29**	1	5090.0	12298.6	**$20,785**	**$25,981**	**$11,154**
1	4	3	2	2	4	2	4	22	**12**	1	5092.0	5016.6	**$1,515,214**	**$1,969,778**	**$2,073,203**
1	1	0	1	3	4	2	3	15	**37**	1	5093.0	4043.3	**$21,672**	**$27,090**	**$35,376**
2	1	1	1	3	4	1	3	16	**31**	1	5095.0	4418	**$23,680**	**$29,601**	**$35,376**
2	1	0	1	3	4	2	3	16	**31**	1	5096.0	7726.9	**$41,416**	**$51,770**	**$35,376**

The San Francisco Bay Trail Project Gap Analysis Study

Solano County Implementation Ranking

NOTES: Implementation criteria definitions are provided on page one of this appendix. See Appendix A for cost estimate details and project category definitions.

Point Range							TOTAL	RANK	Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
6	4	3	2	4	4	4	13	40						
Criteria														
Distance of Continuity	Trail Classification (I,II,II)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness							
1	4	0	2	3	4	4	6	24	**24**	1	6006.0	1692.5	**$28,915**	**$36,144**	**$112,756**
2	4	0	2	3	4	4	10	29	**4**	1	6006.1	1130.4	**$25,627**	**$32,034**	**$149,627**
1	4	0	2	3	4	4	3	21	**30**	1	6007.0	808.6	**$127,924**	**$159,905**	**$1,044,148**
3	4	0	2	3	4	4	9	29	**4**	1	6008.0	1162.6	**$118,084**	**$147,605**	**$670,355**
1	4	0	2	3	4	4	6	24	**24**	1	6008.1	413.3	**$33,434**	**$41,793**	**$533,909**
1	4	0	2	3	4	4	11	29	**4**	1	6008.2	543.8	**$7,091**	**$8,864**	**$86,062**
1	4	0	2	3	4	4	11	29	**4**	1	6008.3	765.9	**$4,538**	**$5,673**	**$39,105**
1	4	0	2	3	4	4	8	26	**16**	1	6008.4	1563.9	**$25,977**	**$32,471**	**$109,629**
1	4	1	2	3	4	4	8	27	**11**	1	6014.0	924.9	**$19,054**	**$23,818**	**$135,968**
3	4	3	2	3	4	4	10	33	**2**	1	6015.1	1029.7	**$37,207**	**$46,509**	**$238,483**
1	4	2	2	3	4	4	7	27	**11**	1	6015.2	300.5	**$26,190**	**$32,738**	**$575,221**
1	4	2	2	3	4	4	2	22	**29**	1	6015.3	78.8	**$24,024**	**$30,030**	**$2,012,162**
1	4	2	2	3	4	4	5	25	**19**	1	6015.4	532.2	**$29,302**	**$36,628**	**$363,384**
1	4	1	2	3	4	4	5	24	**24**	1	6015.5	629.9	**$33,168**	**$41,460**	**$347,529**
1	4	1	2	3	4	4	5	24	**24**	1	6015.6	238.4	**$13,737**	**$17,171**	**$380,303**
1	4	1	2	3	4	4	9	28	**9**	1	6015.7	640.4	**$13,852**	**$17,315**	**$142,760**
1	4	1	2	3	4	4	6	25	**19**	1	6015.8	373.9	**$21,158**	**$26,448**	**$373,476**
1	4	0	2	3	4	4	7	25	**19**	1	6015.9	177.9	**$6,052**	**$7,565**	**$224,526**
3	4	3	2	3	4	4	11	34	**1**	1	6016.0	1880	**$49,466**	**$61,833**	**$173,657**
1	4	2	2	3	4	4	7	27	**11**	1	6016.1	980	**$19,054**	**$23,818**	**$128,323**
1	2	0	2	3	4	4	8	24	**24**	1	6016.2	4772.4	**$39,777**	**$49,721**	**$55,010**
2	2	0	0	2	2	3	10	21	**30**	1	6019.0	3191.5	**$32,266**	**$38,719**	**$64,057**
1	4	0	2	2	4	3	4	20	**32**	1	6020.0	4478.9	**$1,320,245**	**$1,650,307**	**$1,945,482**
1	4	0	2	3	4	4	10	28	**9**	1	6023.0	5432.2	**$57,613**	**$69,136**	**$67,199**

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I, II, III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
1	4	0	2	3	4	4	13	31	**3**
2	4	0	2	3	4	4	8	27	**11**
1	4	0	2	3	4	4	7	25	**19**
1	4	0	2	3	4	4	9	27	**11**
1	4	0	0	2	4	3	3	17	**33**
1	4	0	2	3	3	4	8	25	**19**
1	4	0	2	3	3	4	9	26	**16**
1	4	0	2	3	3	4	9	26	**16**
1	4	3	2	3	3	4	9	29	**4**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
1	6023.1	3589.3	**$3,994**	**$4,793**	**$7,050**
1	6023.2	1129.4	**$119,459**	**$143,351**	**$670,172**
1	6031.0	3431.8	**$97,270**	**$121,587**	**$187,069**
1	6032.0	7037.4	**$229,209**	**$286,511**	**$214,963**
1	6033.0	3001.3	**$449,685**	**$562,106**	**$988,878**
1	6034.0	746.7	**$42,175**	**$52,718**	**$372,777**
1	6035.0	3921.4	**$4,679**	**$5,849**	**$7,876**
1	6036.0	3821.3	**$4,319**	**$5,399**	**$7,460**
1	6037.0	1364.9	**$1,727**	**$2,158**	**$8,350**

The San Francisco Bay Trail Project Gap Analysis Study

Napa County Implementation Ranking

NOTES: Implementation criteria definitions are provided on page one of this appendix. See Appendix A for cost estimate details and project category definitions.

Point Range								TOTAL	RANK	Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
6	4	3	2	4	4	4	13	40							
Criteria															
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness								
1	4	2	2	3	3	4	10	29	**1**	1	7004.0	740.1	**$65,749**	**$82,186**	**$586,329**
1	4	0	2	3	3	4	12	29	**1**	1	7005.0	1642.8	**$95,183**	**$118,978**	**$382,400**
2	4	0	0	3	1	2	6	18	**16**	1	7006.0	3756.2	**$562,791**	**$703,489**	**$988,878**
1	2	0	1	3	3	2	8	20	**11**	1	7007.0	3802.8	**$38,446**	**$48,058**	**$66,726**
3	4	1	1	3	1	2	2	17	**21**	1	7008.0	120	**$216,509**	**$270,636**	**$1,726**
1	2	0	0	3	1	1	2	10	**28**	1	7011.0	12311.1	**$644,240**	**$805,300**	**$345,378**
1	4	0	0	3	2	1	6	17	**21**	1	7012.0	14312.5	**$2,144,442**	**$2,680,552**	**$988,878**
1	2	0	0	2	3	3	9	20	**11**	1	7013.0	2223.4	**$22,479**	**$29,222**	**$69,395**
2	4	0	0	2	3	3	7	21	**8**	1	7013.1	4529.5	**$410,211**	**$533,275**	**$621,634**
2	4	0	1	3	2	3	10	25	**3**	1	7014.0	5515.2	**$350,990**	**$350,990**	**$336,022**
1	2	0	1	3	3	2	4	16	**26**	1	7015.0	21909.5	**$330,336**	**$330,336**	**$79,608**
1	2	1	1	3	2	1	7	18	**5**	1	7015.1	11265.12	**$255,705**	**$255,705**	**$119,850**
2	2	0	1	3	3	1	5	17	**21**	1	7017.0	13328.6	**$460,341**	**$575,426**	**$227,949**
2	1	0	1	3	1	1	13	22	**6**	1	7019.0	5455.8	**$9,111**	**$11,389**	**$11,022**
1	2	0	1	3	3	1	9	20	**11**	1	7021.0	15647.6	**$158,197**	**$197,747**	**$66,726**
2	2	0	1	3	3	1	9	21	**8**	1	7021.1	5340.6	**$53,993**	**$67,492**	**$66,726**
1	4	0	1	0	3	1	8	18	**16**	1	7022.0	10739.8	**$685,844**	**$994,473**	**$488,912**
2	2	0	2	3	4	2	8	23	**4**	1	7023.0	7936.7	**$1,231,720**	**$1,231,720**	**$819,419**

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,II)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
1	2	0	1	3	4	1	5	17	**21**
4	2	0	2	3	4	2		17	**21**
2	4	0	2	1	1	2	4	16	**26**
2	2	0	2	3	4	2	8	23	**4**
1	2	0	2	3	4	2	8	22	**6**
1	4	0	1	3	4	2	6	21	**8**
1	2	0	1	3	4	2	5	18	**16**
1	2	0	1	3	4	2	5	18	**16**
2	2	0	1	3	4	2	5	19	**15**
2	2	0	1	3	4	2	6	20	**11**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
1	7025.0	6344	**$331,982**	**$414,977**	**$345,378**
1	7026.0	5790.9	**$58,546**	**$73,182**	**$66,726**
4	7026.1	4497.9	**$52,000**	**$52,000**	**$61,042**
1	7026.2	1658.5	**$2,799**	**$2,799**	**$8,911**
1	7026.3	5558.2	**$14,840**	**$539,677**	**$512,665**
1	7027.0	15010.1	**$2,248,963**	**$2,811,204**	**$988,878**
1	7029.0	3114.4	**$162,977**	**$203,721**	**$345,378**
1	7031.0	2310.3	**$23,357**	**$29,196**	**$66,726**
1	7031.1	1743.8	**$17,630**	**$22,037**	**$66,726**
1	7032.0	4290.2	**$224,506**	**$280,633**	**$345,378**

The San Francisco Bay Trail Project Gap Analysis Study

Sonoma County Implementation Ranking

NOTES: Implementation criteria definitions are provided on page one of this appendix. See Appendix A for cost estimate details and project category definitions.

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
1	2	1	1	3	3	2	2	15	**7**
1	2	1	1	3	4	2	2	16	**6**
3	4	0	2	2	1	3	12	27	**2**
2	4	0	2	2	1	1	8	20	**17**
1	4	0	2	2	1	2	6	18	**23**
2	4	0	2	2	1	2	5	18	**23**
1	2	1	1	3	4	2	5	19	**2**
2	2	0	1	4	4	1	12	26	**3**
2	1	0	2	2	0	1	12	20	**17**
1	1	0	2	2	4	2	10	22	**12**
1	1	0	2	3	4	2	9	22	**12**
1	2	0	2	2	1	2	5	15	**27**
1	4	0	1	3	4	2	6	21	**15**
2	4	1	2	2	1	4	8	24	**7**
1	4	1	2	2	4	4	8	26	**3**
1	4	2	2	2	3	4	6	24	**7**
1	1	2	2	2	4	4	4	20	**17**
1	2	1	1	3	4	2	5	19	**2**
1	1	1	2	2	4	4	7	22	**12**
1	4	2	2	2	1	4	8	24	**7**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
1	8000.0	15779.22	**$3,189,927**	**$4,146,905**	**$1,387,626**
1	8001.0	16115.19	**$3,257,847**	**$4,235,201**	**$1,387,626**
1	8002.0	1830.4	**$55,000**	**$71,500**	**$206,250**
1	8002.1	8033.7	**$1,025,000**	**$1,332,500**	**$875,761**
1	8003.1	3253.7	**$2,500,000**	**$3,250,000**	**$5,273,996**
1	8003.2	1706.5	**$1,000,000**	**$1,300,000**	**$4,022,268**
1	8004.0	29340.44	**$1,535,385**	**$1,996,001**	**$359,193**
1	8005.0	10250	**$27,368**	**$34,209**	**$17,622**
1	8005.1	3898.2	**$10,000**	**$13,000**	**$17,608**
1	8005.2	2714	**$5,000**	**$6,500**	**$12,646**
1	8005.3	2100	**$5,000**	**$6,500**	**$16,343**
1	8005.8	6968.5	**$800,000**	**$1,040,000**	**$788,003**
1	8006.0	7454.6	**$75,366**	**$94,208**	**$66,726**
1	8006.2	4230.1	**$185,000**	**$240,500**	**$300,191**
1	8006.3	4796.7	**$30,000**	**$39,000**	**$42,930**
1	8007.0	30498.1	**$2,005,000**	**$2,606,500**	**$451,252**
1	8007.1	472.6	**$5,000**	**$6,500**	**$72,620**
1	8008.0	36754.63	**$1,923,370**	**$2,500,381**	**$359,193**
1	8009.0	1356.2	**$5,000**	**$6,500**	**$25,306**
1	8010.1	7515.9	**$255,000**	**$331,500**	**$232,882**

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/ Regulatory Context	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
1	4	2	2	2	1	4	9	25	**6**
1	2	3	2	2	0	4	1	15	**27**
1	4	0	2	2	4	4	7	24	**7**
1	1	0	1	1	2	1	1	8	**30**
3	4	2	2	3	1	4	7	26	**3**
1	4	0	2	3	2	4	2	18	**23**
1	4	0	2	3	3	4	7	24	**7**
3	4	2	2	3	1	4	12	31	**1**
2	4	0	2	3	3	4	3	21	**15**
1	2	1	1	3	4	2	5	19	**2**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
1	8010.2	2840.2	**$50,000**	**$65,000**	**$120,837**
1	8011.1	707	**$650,000**	**$845,000**	**$6,310,608**
1	8011.2	1143.3	**$10,000**	**$13,000**	**$60,037**
4	8012.1	1238.1	**$1,874,409**	**$2,436,732**	**$10,391,684**
1	8012.3	3291.5	**$1,005,000**	**$1,306,500**	**$2,095,798**
1	8012.4	124.8	**$42,500**	**$55,250**	**$2,337,500**
1	8012.5	632.3	**$10,000**	**$13,000**	**$108,556**
1	8013.0	16702.3	**$565,000**	**$734,500**	**$232,193**
1	8014.1	8008.5	**$2,005,000**	**$2,606,500**	**$1,718,464**
1	8018.0	3908.73	**$204,544**	**$265,907**	**$359,193**

The San Francisco Bay Trail Project Gap Analysis Study

Marin County Implementation Ranking

NOTES: Implementation criteria definitions are provided on page one of this appendix. See Appendix A for cost estimate details and project category definitions.

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,II)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
0	1	2	1	4	4	1	1	14	**53**
0	4	0	0	2	1	1	1	9	**62**
2	1	0	1	2	1	1	8	16	**45**
2	4	0	1	2	1	1	8	19	**35**
4	4	1	2	1	1	1	10	24	**16**
0	4	1	2	2	1	1	5	16	**45**
5	4	2	2	2	2	2	12	31	**3**
5	4	2	2	2	2	2	12	31	**3**
0	4	1	2	1	1	1	4	14	**53**
1	4	1	2	1	1	1	4	15	**49**
1	2	1	0	1	2	1	4	12	**58**
0	4	2	0	2	3	1	4	16	**45**
1	4	0	0	2	3	2	3	15	**49**
3	4	2	0	2	3	2	6	22	**23**
3	1	3	1	2	2	1	4	17	**44**
3	1	2	1	3	4	3	5	22	**23**
0	1	1	1	3	4	3	5	18	**40**
0	1	1	1	3	4	3	5	18	**40**
0	1	0	1	2	3	3	5	15	**49**
0	1	0	1	2	3	3	8	18	**40**
0	1	0	1	2	3	3	10	20	**29**
0	2	1	0	2	2	2	10	19	**35**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
4	9000.0	834.5	**$1,831,905**	**$1,831,905**	**$11,590,725**
4	9001.0	811.7	**$1,228,865**	**$1,781,854**	**$11,590,725**
1	9002.0	16851.8	**$380,869**	**$457,042**	**$143,200**
1	9003.0	17141.7	**$2,568,357**	**$3,338,864**	**$1,028,440**
1	9005.0	3636	**$331,891**	**$398,269**	**$578,344**
1	9009.0	13038	**$2,672,222**	**$3,473,889**	**$1,406,821**
1	9011.0	961.4	**$163,218**	**$236,666**	**$1,299,769**
1	9013.0	5374.2	**$1,662,079**	**$2,410,014**	**$2,367,771**
1	9015.0	9558.2	**$3,397,554**	**$4,416,820**	**$2,439,875**
1	9022.0	6008.7	**$2,399,810**	**$3,119,753**	**$2,741,408**
1	9024.0	7769	**$406,755**	**$528,782**	**$359,373**
1	9027.0	12790	**$1,103,512**	**$1,434,565**	**$592,221**
1	9030.0	3335.7	**$500,044**	**$625,055**	**$989,384**
1	9032.0	5308.8	**$339,087**	**$423,858**	**$421,559**
1	9034.0	8790.2	**$561,448**	**$701,810**	**$421,556**
1	9035.0	6324.2	**$10,737**	**$12,885**	**$10,757**
1	9036.0	4074.7	**$6,931**	**$8,317**	**$10,778**
1	9037.0	2929	**$4,973**	**$5,968**	**$10,757**
1	9038.0	6948.3	**$11,662**	**$14,578**	**$11,078**
1	9038.1	3483.4	**$15,233**	**$19,041**	**$28,861**
1	9039.0	3202.8	**$5,418**	**$6,773**	**$11,166**
1	9040.0	581.3	**$5,941**	**$7,426**	**$67,453**

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
3	4	3	1	4	2	2	9	28	**6**
0	3	1	1	3	3	3	5	19	**35**
0	4	1	0	1	1	2	6	15	**49**
0	1	0	1	2	3	1	5	13	**56**
0	1	1	0	2	3	3	10	20	**29**
6	4	3	0	2	1	2	9	27	**9**
3	4	3	2	2	1	2	8	25	**14**
3	4	0	1	2	1	1	1	13	**56**
3	4	0	2	1	2	1	1	14	**53**
3	4	2	2	2	1	1	1	16	**45**
6	4	1	1	2	2	2	10	28	**6**
3	4	3	1	3	2	2	6	24	**16**
0	3	2	0	3	1	2	7	18	**40**
3	4	3	2	2	2	2	5	23	**20**
5	2	0	1	2	2	2	6	20	**29**
0	4	0	1	2	1	1	1	10	**60**
3	4	3	2	2	3	3	12	32	**1**
0	0	2	2	3	4	4	6	21	**26**
0	0	2	2	3	4	4	6	21	**26**
0	4	1	2	2	4	4	3	20	**29**
3	4	0	2	2	4	4	7	26	**12**
2	1	0	1	1	1	1	5	12	**58**
2	4	1	2	2	4	4	8	27	**9**
3	2	1	2	2	2	2	5	19	**35**
2	3	2	2	3	3	2	4	21	**26**
3	1	2	2	3	4	3	4	22	**23**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
1	9041.0	2690.6	**$263,771**	**$329,714**	**$647,027**
1	9042.0	1305.5	**$2,234**	**$2,681**	**$10,842**
3	9043.1	1988.7	**$166,136**	**$207,670**	**$551,365**
1	9043.2	7598.6	**$397,675**	**$516,977**	**$359,229**
1	9044.0	1341.5	**$2,392**	**$2,871**	**$11,299**
1	9049.0	1621.4	**$158,973**	**$198,716**	**$647,107**
1	9055.0	1325.5	**$103,899**	**$129,873**	**$517,337**
4	9057.0	5308.8	**$4,989,283**	**$7,234,460**	**$7,195,213**
1	9058.0	151	**$228,711**	**$297,324**	**$10,396,511**
1	9061.0	1229.5	**$3,600,180**	**$4,320,216**	**$18,552,859**
1	9062.0	3182.1	**$634,694**	**$825,103**	**$1,369,078**
1	9063.0	6635.4	**$423,800**	**$529,750**	**$421,539**
1	9063.1	1754.4	**$154,241**	**$200,513**	**$603,459**
1	9064.0	2272.1	**$630,000**	**$756,000**	**$1,756,824**
1	9065.0	1306.2	**$161,022**	**$209,328**	**$846,158**
4	9066.0	12769.1	**$19,331,651**	**$28,030,894**	**$11,590,725**
1	9067.0	4099.3	**$342,670**	**$445,471**	**$573,778**
1	9069.0	1182.6	**$200,000**	**$260,000**	**$1,160,832**
1	9070.0	2438.6	**$4,000**	**$5,200**	**$11,259**
1	9071.0	1812.7	**$271,646**	**$353,139**	**$1,028,618**
1	9072.0	2241.5	**$660,763**	**$792,916**	**$1,867,765**
1	9073.0	9528.9	**$388,157**	**$504,604**	**$279,603**
1	9074.0	3270	**$427,042**	**$427,042**	**$689,536**
1	9075.0	1648	**$16,727**	**$20,908**	**$66,988**
1	9079.0	735.3	**$46,989**	**$58,737**	**$421,772**
1	9080.0	2378.8	**$151,925**	**$189,906**	**$421,517**

Point Range								TOTAL	RANK
6	4	3	2	4	4	4	13	40	
Criteria									
Distance of Continuity	Trail Classification (I,II,III)	Shoreline Experience	Support in Local Plans	Degree of Environmental Impact/	Status of Property Control/ Ownership	Preliminary Design Identified	Cost Effectiveness		
0	1	2	1	2	1	1	2	10	**60**
5	1	2	1	4	3	3	11	30	**5**
0	2	2	1	4	4	3	10	26	**12**
4	2	1	1	3	3	3	7	24	**16**
4	4	1	1	3	4	4	6	27	**9**
3	4	2	1	3	3	2	5	23	**20**
3	1	2	1	3	3	3	12	28	**6**
3	1	3	0	2	1	1	12	23	**20**
3	1	3	2	3	4	4	12	32	**1**
0	1	2	1	3	4	3	10	24	**16**
0	3	2	1	2	2	2	7	19	**35**
0	3	2	1	2	2	2	8	20	**29**
3	4	3	1	3	3	2	6	25	**14**
3	2	3	1	3	2	3	3	20	**29**

Project Category	Gap Segment Number	Gap Segment Length (ft.)	Construction Cost	Construction, Design & Permitting	Cost per Mile Construction, Design & Permitting
1	9082.0	23905.8	**$973,731**	**$1,265,850**	**$279,584**
1	9083.0	1085.8	**$2,291**	**$2,864**	**$13,928**
1	9086.0	4699.6	**$7,870**	**$9,838**	**$11,052**
1	9089.0	386.6	**$20,325**	**$26,422**	**$360,862**
1	9090.0	528.5	**$51,809**	**$64,761**	**$646,998**
1	9092.0	7079.7	**$931,715**	**$1,164,643**	**$868,584**
1	9093.0	1659.1	**$2,912**	**$3,495**	**$11,122**
1	9095.0	2616.2	**$4,402**	**$5,503**	**$11,106**
1	9102.0	1980.5	**$3,360**	**$4,200**	**$11,196**
1	9103.0	2171.5	**$3,666**	**$4,583**	**$11,142**
1	9104.0	3674.3	**$204,477**	**$255,596**	**$367,293**
1	9105.0	2430.1	**$60,278**	**$75,348**	**$163,711**
1	9107.0	1637.2	**$104,600**	**$130,750**	**$421,672**
1	9108.0	1385.3	**$58,168**	**$72,710**	**$277,130**

APPENDIX D: SURVEY

BAY TRAIL GAP SURVEY

For Map Segment ID #: 1

1. Please fill out one of these survey forms for each Bay Trail Gap segment shown in the attached map(s). The gaps are numbered on the map and in this survey – please be sure to match them in your responses.

2. We prefer that you respond to this survey online—see below for web address.

3. If you cannot use the online web site, please fill out each survey form by hand and return it in the enclosed envelope.

4. If you have any questions, please contact: Maureen Gaffney at 510.464.7909 or MaureenG@abag.ca.gov

Thanks for your help!

To complete this survey(s) online go to:

http://www.surveymonkey.com/s.asp?u=59504847661

Important: Fill out one questionnaire for each individual numbered and highlighted segment on the enclosed map(s). The ID is shown above and on the inside of this questionnaire.

BAY TRAIL GAP ANALYSIS QUESTIONNAIRE

Thank you for taking the time to provide this information to us. Please call Maureen Gaffney at 510.464.7909 if you have questions. Please return the completed form(s) in the enclosed addressed envelope by February 25, 2005. If you are not the appropriate contact, please forward to the relevant person in your agency.

Agency Name:			
Contact Name:		Phone Number:	
E-mail Address:		Segment ID:	**1**
		Segment Length (miles):	**0.24**

Identify the proposed type of trail segment (select one):

□ Bike lanes and sidewalk □ Signed bike route and sidewalks □ Separated Path □ Unknown

If the trail segment corridor will have more than one of the above characteristics, please separate into distinct segments and show new segment boundaries on the map.

Is the trail segment accurately represented on the attached map? □ Yes □ No

If not, please show the correct alignment on the map and describe changes below:

1. Is the trail segment included in a planning document?

(i.e. general plan, specific plan, bicycle-pedestrian master plan, trail plan, feasibility study, etc.)

□ Yes □ No

If yes, please list document title, year adopted or current status:

Document Title:	*Year Adopted*:	*Current Status*:

2. Are cost estimates available for trail design and construction of this segment?

□ Yes □ No

If yes, please provide any available cost estimates:

	Cost:	*Year Estimated*:	*Source*:
Total Cost:			
Acquisition:			
Design:			
Environmental Review:			
Trail Construction:			
Other:			

3. Has any funding been programmed or secured for this segment?

□ Yes □ No

Funding:

Amount:	*Schedule*:	*Source*

4. Is the trail segment (or any portion thereof) part of any PROPOSED project or development?

(if more than one development project is proposed along the segment, please list on the front page and indicate project locations and associated trail segments on the map.)

□ Yes □ No Estimated Segment Completion date: _____

Project Name: _____

Staff Contact Name: _____ Phone Number: _____

Brief Description of Project:

_____

5. Identify known obstacles to completing the trail segment by checking all relevant box(es):

A) Physical Constraints:
Slope □ Traffic Hazard □ Adjacent incompatible land use □ Railroad Crossing □ Highway Condo □ Narrow right-of way □ Subject to flooding □ Other □

Description: _____

B) Environmental Setting:
Wetland Habitat □ Sensitive species are present □ Bridge needed □ Boardwalk needed □ Existing soil contamination □ Other □

Description: _____

C) Land Use Constraints:
Located on private property □ Maintenance entity not identified □ Security or operational restrictions □ Safety/liability concerns □ Other □

Description: _____

D) Planning:
Not identified in local plans □ Dependent on development proposal □ Alternative government is preferred □ Other □

Description: _____

E) Political Setting:
Not supported by community □ Not a priority for the jurisdiction Other □

Description: _____

F) Finances:
Funding for land acquisition required □ Environmental review or permitting not funded □ Planning, design, or construction not funded □ Matching funds unavailable □ Maintenance funds unavailable □ Other □

Description:

G) Identify support for the segment (legislative, local groups, etc.):

6. Given the above obstacles along this segment, is there an alternative feasible alignment that could be constructed avoiding the identified obstacles?

□ Yes □ No If yes, please describe and show new alignment on the map:

7. Is there an opportunity for an improved Bay Trail alignment in this area?
(i.e. should the alignment be moved closer to the shoreline, can it be separated from traffic, is there a more direct continuous route, etc.)

□ Yes □ No If yes, please describe and show new alignment on the map:

Notes

APPENDIX E: TRAIL USAGE METHODOLOGY

Trail Usage Methodology

The Trail Demand Model created by Alta Planning + Design is an attempt to provide a systematic approach to estimating potential trail usage for new and developing trail systems in a variety of locations. The model builds on published data and provides several methods of 'factoring' demand to reflect local knowledge and conditions. Where possible, the model is calibrated to actual counts so that its accuracy can be improved. The table below shows the inputs used to develop demand estimates by County for the Bay Trail.

TRAIL USAGE ESTIMATING TOOL	SF ENTER HERE	MARIN	COCO	SOL	SON	SMAT	ALA	SCLARA	NAPA
1. Quality of Completed Pathway /1 1 = poor 2 = fair 3 = good 4 = excellent	4	4	4	4	4	4	4	4	4
2. Area climate 1 = heavy and extended rain-snow 2 = some rain/snow 3 = limited rain only 4 = very mild	4	4	4	4	4	4	4	4	4
3. Population of towns/cities directly served b	776	171	260	142	68	514	1027.5	558.5	86
(round to 1,000s)		100%	69%	27%	36%	15%	73%	71%	33%	69%
Percent of county population									
4. Population of other towns/cities within 20 m	200	63	640	133	161	193	169	820	1
(round to 1,000s)									
5. Annual tourist person visits to area	15000	1742	2952	1978	4458	10125	7026	8915	2627
(round to 1,000s)	13500	1393.6	1476	989	891.6	9112.5	6323.4	1783	525.4
Proximity factor	0.9	0.8	0.5	0.5	0.2	0.9	0.9	0.2	0.2
ESTIMATED ANNUAL USAGE	15,384,192	3,337,169	5,101,993	2,772,837	1,351,251	10,201,515	19,962,112	10,860,392	1,669,450

Notes:

/1 Poor = at least two of these three items: less than 1 mile in length, poor access, or unattractive environment
Fair = at least two of these five items: over 1 mile in length, reasonable access, serves major destinations, serves major transit center, neutral or atrractive environment
Good = at least three of these five items: over 2 miles in length, good access, serves a major destination(s), serves major transit center, attractive environment
Excellent = at least four of these five items: over 2 miles in length, good access, serves a major destination(s), serves major transit center, attractive environment
/3 Enter 1 if local population 1,000 or less
/4 Exclude town/city directly served by trail
/5 Contact State or Local Tourism Department

Factors that influence trail use, from quality of the completed trail system, area climate, base population directly served by the trail, regional population within 20 miles or less of the trail, and annual tourists are collected and entered into the model. A proximity factor is then assigned to the visitor figures, which reflects the fact that visitors are more likely to use the Bay Trail where it is located very close to other visitor destinations, hotels, etc. Calculations are as follows:

Population directly served by trail (rounded to 000s): x 10,000
(+)
Regional population within 20 miles (rounded to 000s): x 48
(+)
Visitors (rounded to 000s, factored by proximity factor): x 18
(x)
(Quality and Climate score x .24)
=
Future (build–out) Usage Estimate

To derive the existing usage figure, the future figure is factored by the percentage the Bay Trail is complete in each county. For example, the future build-out usage figure for Sonoma County is 1,351,251. Since the Bay Trail is only 5% complete in Sonoma County, this figure is factored to 67,563 annual users to reflect existing usage.

San Francisco Bay Trail

The Vision

Contributing Funders and Consultants:

Association of Bay Area Governments | Coastal Conservancy | alta planning + design | Greenbelt Network

June, 2005