

**TABLE 1  
INTERSECTION DELAY BENEFITS OF GRADE-SEPARATED TROLLEY CROSSING**

INTERSECTION	PEAK HOUR	Existing with At-Grade Trolley Crossing <sup>(1)</sup>		Year 2030 with At-Grade Trolley Crossing and Existing Headways <sup>(1)</sup>		Year 2030 with At-Grade Trolley Crossing and Increased Headways <sup>(2)</sup> (A)		Year 2030 with Grade Separation and Signal Optimization (B)		Grade Separation Benefits, Increased Headways (A) - (B) DELAY REDUCTION
		DELAY (a)	LOS (b)	DELAY (a)	LOS (b)	DELAY (a)	LOS (b)	DELAY (a)	LOS (b)	
		DELAY (a)	LOS (b)	DELAY (a)	LOS (b)	DELAY (a)	LOS (b)	DELAY (a)	LOS (b)	
1 E Street/I-5 southbound	AM	9.9	A	12.8	B	12.8	B	12.8	B	0.3
	PM	9.8	A	18.3	B	18.3	B	19.4	B	-1.1
2 E Street/I-5 northbound	AM	34.8	C	158.8	F	201.9	F	23.3	C	178.6
	PM	82.1	F	133.7	F	150.1	F	17.0	B	133.1
3 E Street/Woodlawn Avenue	AM	26.0	C	24.0	C	24.0	C	18.9	B	5.1
	PM	23.2	C	124.7	F	124.8	F	16.5	B	108.3
4 H Street/Bay Boulevard	AM	12.3	B	12.1	B	12.1	B	11.4	B	0.7
	PM	13.7	B	11.9	B	11.9	B	11.3	B	0.6
5 H Street/I-5 southbound	AM	25.4	C	56.4	E	56.4	E	25.2	C	31.2
	PM	33.1	C	113.0	F	113.0	F	50.1	D	62.9
6 H Street/I-5 northbound	AM	11.8	B	31.9	C	61.5	E	10.5	B	51.0
	PM	21.4	C	148.1	F	181.8	F	17.3	B	164.5
7 H Street/Woodlawn Avenue	AM	53.5	D	177.6	F	177.6	F	41.2	D	136.4
	PM	132.8	F	128.8	F	136.2	F	23.3	C	112.9

Notes:

**Bold** values indicate intersections operating at LOS E or F

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 6.0

(1) Five minute interval between transit vehicles assumed with a gate closure time of 54 seconds was observed during peak periods

(2) Two-minute-thirty-second (2:30) interval between transit vehicles with a gate closure time of 54 seconds was assumed during peak periods for the increased frequency alternative