



Appendix C – Yellow and Flash Don't Walk Analysis

- Existing and Proposed Flash Don't Walk and Yellow Time Worksheet
- Minimum Green Interval for Bicycles



MTC PASS 2013/14 City of Lafayette
Mt. Diablo Boulevard Existing vs. Proposed Timings

Intersection		Existing Timings								Calculated Timings				Proposed Timings			
ID	Intersection Name	Direction	Phase	Crossing Distance ¹ (ft)	Posted Speed Limit (mph)	Walk (sec)	FDW (sec)	Yellow (sec)	All-Red (sec)	FDW ² (sec)	Calc FDW < Exist FDW?	MUTCD Yellow (sec)	Calc Yellow < Exist Yellow?	Walk (sec)	FDW (sec)	Yellow (sec)	All-Red (sec)
1	Mount Diablo Boulevard/Mountain View Drive-Dolores Drive	NB	8	75	25	7	10	4	1	22	No	3.0	YES	7	22	4.0	1.0
		SB	4	75	25	7	10	4	1	22	No	3.0	YES	7	22	4.0	1.0
		EB	2	38	25	7	10	4	0.5	11	No	3.0	YES	7	11	4.0	0.5
		WB	6	30	25	7	10	4	0.5	9	YES	3.0	YES	7	10	4.0	0.5
2	Mount Diablo Boulevard/Happy Valley Road	NB	3	75	25	6	17	3	1	22	No	3.0	No	6	22	3.0	1.0
		SB	4	78	25	6	17	3	1	23	No	3.0	No	6	23	3.0	1.0
		EB	2	30	25	6	10	3	1	9	YES	3.0	No	6	10	3.0	1.0
		WB	6	40	25	6	10	3	1	12	No	3.0	No	6	12	3.0	1.0
3	Mount Diablo Boulevard/Dewing Avenue	NB	8	63	25	7	18	3	1	18	No	3.0	No	7	18	3.0	1.0
		SB	4	66	25	7	18	3	1	19	No	3.0	No	7	19	3.0	1.0
		EB	2	36	25	6	10	3.5	1	11	No	3.0	YES	6	11	3.5	1.0
		WB	6	26	25	6	10	3.5	1	8	YES	3.0	YES	6	10	3.5	1.0
4	Mount Diablo Boulevard/Lafayette Circles West	NB	3	68	25	6	16	3	1	20	No	3.0	No	6	20	3.0	1.0
		SB	4	60	25	6	16	3	1	18	No	3.0	No	6	18	3.0	1.0
		EB	2	30	25	6	12	3.5	1	9	YES	3.0	YES	6	12	3.5	1.0
		WB	6	27	25	6	12	3.5	1	8	YES	3.0	YES	6	12	3.5	1.0
5	Mount Diablo Boulevard/Oak Hill Road-Lafayette Circles East	NB	4	78	25	6	14	3	1	23	No	3.0	No	6	23	3.0	1.0
		SB	8	68	25	6	14	3	1	20	No	3.0	No	6	20	3.0	1.0
		EB	2	30	25	6	14	3	1	9	YES	3.0	No	6	14	3.0	1.0
		WB	6	78	25	6	14	3	1	23	No	3.0	No	6	23	3.0	1.0
6	Mount Diablo Boulevard/Moraga Road	NB	8	85	25	9	19	3	1	25	No	3.0	No	9	25	3.0	1.0
		SB	4	85	25	9	19	3	1	25	No	3.0	No	9	25	3.0	1.0
		EB	2	75	25	9	16	3.5	1	22	No	3.0	YES	9	22	3.5	1.0
		WB	6	56	25	9	16	3	1	16	No	3.0	No	9	16	3.0	1.0
7	Mount Diablo Boulevard/1st Street	NB	8	78	25	6	15	3	1	23	No	3.0	No	6	23	3.0	1.0
		SB	4	84	25	6	15	3	1	24	No	3.0	No	6	24	3.0	1.0
		EB	2	72	25	6	15	3.5	1	21	No	3.0	YES	6	21	3.5	1.0
		WB	6	68	25	6	15	3.5	1	20	No	3.0	YES	6	20	3.5	1.0
8	Mount Diablo Boulevard/2nd Street	NB	4	72	25	8	18	3	1	21	No	3.0	No	8	21	3.0	1.0
		SB	4	76	25	8	18	3	1	22	No	3.0	No	8	22	3.0	1.0
		EB	2	40	35	8	10	4	1	12	No	3.6	YES	8	12	4.0	1.0
		WB	6	32	35	8	10	4	1	10	No	3.6	YES	8	10	4.0	1.0
9	Mount Diablo Boulevard/Brown Avenue-Almanor Lane	NB	3	68	25	8	16	3	2	20	No	3.0	No	8	20	3.0	2.0
		SB	4	68	25	8	16	3	2	20	No	3.0	No	8	20	3.0	2.0
		EB	6	28	35	6	10	3.5	2.5	8	YES	3.6	No	6	10	3.6	2.5
		WB	2	42	35	6	10	3.5	2.5	12	No	3.6	No	6	12	3.6	2.5

Notes:

¹Crossing Distance is the measured distance (in feet) of the shortest curb to curb distance of the crosswalk;

²FDW Calculation is based on (Calculated Ped Clearance Time assuming a walking speed of 3.5 ft/sec).

³FDW=Total Crosswalk Distance (ft)/3.5ft/sec

MTC PASS 2013/14 City of Lafayette
Moraga Road Existing vs. Proposed Timings

Intersection		Existing Timings								Calculated Timings				Proposed Timings			
ID	Intersection Name	Direction	Phase	Crossing Distance ¹ (ft)	Posted Speed Limit (mph)	Walk (sec)	FDW (sec)	Yellow (sec)	All-Red (sec)	FDW ² (sec)	Calc FDW < Exist FDW?	MUTCD Yellow (sec)	Calc Yellow < Exist Yellow?	Walk (sec)	FDW (sec)	Yellow (sec)	All-Red (sec)
10	Moraga Road/Moraga Boulevard	NB	6	34	20	7	12	3.0	1.0	10	YES	3.0	No	7	12	3.0	1.0
		WB	4	55	25	7	14	3.0	1.0	16	No	3.0	No	7	16	3.0	1.0
11	Moraga Road/School Street-Brook Street	Ped-Scr*	3	74	20	7	15	-	-	22	No	3.0	-	7	22	-	-
12	Moraga Road/St. Mary's Street-Herman Drive	NB	6	45	25	7	15	4	1.0	13	YES	3.0	YES	7	15	4.0	1.0
		SB	2	32	25	5	10	4	1.0	10	No	3.0	YES	5	10	4.0	1.0
		WB	4	38	25	7	15	3	1.0	11	YES	3.0	No	7	15	3.0	1.0

Notes:

¹Crossing Distance is the measured distance (in feet) of the shortest curb to curb distance of the crosswalk;

²FDW Calculation is based on (Calculated Ped Clearance Time assuming a walking speed of 3.5 ft/sec).

³FDW=Total Crosswalk Distance (ft)/3.5ft/sec

*Ped-Scr: Pedestrian Scramble Phase has no Yellow & All-Red Calculations

MTC PASS 2013/14 City of Lafayette
Minimum Green Timing Evaluation for Bicycle Crossing

MTC PASS (2013-2014) - City of Lafayette				
Minimum Green Timing Evaluation for Bicycle Crossing				
Intersections	Direction	Phase	Minimum Green Time	
			Existing (sec)	Proposed (sec)
Mount Diablo Boulevard/Mountain View Drive-Dolores Drive	EBL	5	3	7
	WBL	1	3	7
	EBT	2	7	10
	WBT	6	7	9
	NBTL	8	7	9
	SBTL	4	7	9
Mount Diablo Boulevard/Happy Valley Road	EBL	5	4	6
	WBL	1	4	6
	NBTL	3	6	8
	SBTL	4	6	8
Mount Diablo Boulevard/Dewing Avenue	EBL	5	4	6
	WBL	1	4	6
Mount Diablo Boulevard/Lafayette Circles West	EBL	5	4	6
	WBL	1	4	6
	NBTL	3	5	7
	SBTL	4	4	7
Mount Diablo Boulevard/Oak Hill Road-Lafayette Circles East	EBL	5	4	8
	WBL	1	4	6
	NBTL	4	4	10
	SBTL	8	4	10
Mount Diablo Boulevard/Moraga Road	WBL	1	6	8
	NBTL	8	6	9
Mount Diablo Boulevard/1st Street	EBL	5	6	8
	WBL	1	4	8
	NBL	3	6	8
	SBL	7	4	8
Mount Diablo Boulevard/2nd Street	EBL	5	2	8
	WBL	1	4	7
Mount Diablo Boulevard/Brown Avenue-Almanor Lane	EBL	1	4	8
	WBL	5	4	8
	NBTL	3	5	10
	SBTL	4	5	10
Moraga Road/Moraga Boulevard	WBL	4	4	7
	SBL	5	3	6
Moraga Road/School Street-Brook Street	EBL	7	4	8
	EB WB	8	4	8