Appendices

Appendix A

Vehicle Counts, Pedestrian/Bicycle Counts, and Speed Surveys

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Perris
B Street
N/ Montanoso Lane
24 Hour Directional Volume Count

PER001
Site Code: 105-221035

Start Time	11/16/22 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		1	15			1	14				
12:15		1	10			3	8				
12:30		0	8			0	8				
12:45		0	12	2	45	0	8	4	38	6	83
01:00		0	8			1	13				
01:15		1	16			0	21				
01:30		1	14			2	**15**				
01:45		0	13	2	51	1	**27**	4	76	6	127
02:00		0	**45**			0	**48**				
02:15		0	**63**			1	**24**				
02:30		1	**26**			1	12				
02:45		1	**14**	2	148	0	13	2	97	4	245
03:00		0	9			1	14				
03:15		3	16			0	14				
03:30		1	25			1	12				
03:45		4	19	8	69	1	25	3	65	11	134
04:00		1	16			0	16				
04:15		2	3			0	11				
04:30		9	14			2	10				
04:45		1	6	13	39	1	14	3	51	16	90
05:00		3	14			2	14				
05:15		9	12			1	13				
05:30		7	13			1	11				
05:45		2	12	21	51	3	12	7	50	28	101
06:00		3	14			2	16				
06:15		5	3			6	6				
06:30		5	7			3	6				
06:45		7	7	20	31	2	8	13	36	33	67
07:00		10	9			9	8				
07:15		18	3			10	8				
07:30		**45**	4			20	7				
07:45		**60**	7	133	23	**29**	9	68	32	201	55
08:00		**60**	7			**13**	5				
08:15		**28**	3			**29**	9				
08:30		15	4			**30**	8				
08:45		10	2	113	16	8	2	80	24	193	40
09:00		12	2			12	3				
09:15		9	3			8	8				
09:30		6	4			5	2				
09:45		10	2	37	11	5	4	30	17	67	28
10:00		8	1			8	4				
10:15		6	0			8	4				
10:30		11	3			5	2				
10:45		4	0	29	4	8	2	29	12	58	16
11:00		8	2			13	1				
11:15		15	2			9	2				
11:30		14	1			13	0				
11:45		5	1	42	6	7	2	42	5	84	11
Total		422	494	422	494	285	503	285	503	707	997
Combined Total		916		916		788		788		1704	
AM Peak	-	07:30	-	-	-	07:45	-	-	-	-	-
Vol.	-	193	-	-	-	101	-	-	-	-	-
P.H.F.		0.804				0.842					
PM Peak	-	-	02:00	-	-	-	01:30	-	-	-	-
Vol.	-	-	148	-	-	-	114	-	-	-	-
P.H.F.			0.587				0.594				
Percentage		46.1%	53.9%			36.2%	63.8%				
ADT/AADT		ADT 1,704		AADT 1,704							

Counts Unlimited, Inc.

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City of Perris
B Street
B/ Montanoso Lane - Ellis Avenue
24 Hour Directional Volume Count

PER002
Site Code: 105-221035

Start Time	11/16/22 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		1	14			2	8				
12:15		1	9			3	9				
12:30		0	10			0	7				
12:45		0	8	2	41	0	9	5	33	7	74
01:00		0	7			0	11				
01:15		1	13			0	16				
01:30		1	14			2	13				
01:45		0	10	2	44	1	**23**	3	63	5	107
02:00		0	**39**			0	**34**				
02:15		0	**62**			1	**24**				
02:30		0	**26**			1	**14**				
02:45		1	**16**	1	143	1	13	3	85	4	228
03:00		0	9			1	18				
03:15		3	14			0	15				
03:30		1	11			1	14				
03:45		4	15	8	49	1	27	3	74	11	123
04:00		1	15			0	16				
04:15		2	4			0	12				
04:30		9	13			1	10				
04:45		1	7	13	39	1	14	2	52	15	91
05:00		2	13			2	14				
05:15		9	12			1	13				
05:30		7	13			0	10				
05:45		2	12	20	50	4	13	7	50	27	100
06:00		3	15			2	16				
06:15		5	2			3	6				
06:30		5	7			3	7				
06:45		8	6	21	30	1	9	9	38	30	68
07:00		10	8			6	7				
07:15		20	2			6	6				
07:30		**46**	5			22	8				
07:45		**61**	8	137	23	**22**	10	56	31	193	54
08:00		**57**	5			**14**	5				
08:15		**22**	3			**19**	8				
08:30		11	4			**26**	8				
08:45		10	2	100	14	5	1	64	22	164	36
09:00		13	3			8	3				
09:15		9	3			6	9				
09:30		5	3			5	2				
09:45		11	2	38	11	5	4	24	18	62	29
10:00		10	1			7	4				
10:15		5	0			6	4				
10:30		8	3			3	1				
10:45		5	0	28	4	10	1	26	10	54	14
11:00		8	2			9	1				
11:15		12	2			7	3				
11:30		13	1			12	0				
11:45		3	1	36	6	4	2	32	6	68	12
Total		406	454	406	454	234	482	234	482	640	936
Combined Total		860		860		716		716		1576	
AM Peak	-	07:30	-	-	-	07:45	-	-	-	-	-
Vol.	-	186	-	-	-	81	-	-	-	-	-
P.H.F.		0.762				0.779					
PM Peak	-	-	02:00	-	-	-	01:45	-	-	-	-
Vol.	-	-	143	-	-	-	95	-	-	-	-
P.H.F.			0.577				0.699				
Percentage		47.2%	52.8%			32.7%	67.3%				
ADT/AADT		ADT 1,576		AADT 1,576							

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City of Perris
Montanoso Lane
E/ B Street
24 Hour Directional Volume Count

PER005
Site Code: 105-221035

Start Time	11/16/22 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	6			1	0				
12:15		0	1			0	2				
12:30		0	3			0	1				
12:45		0	1	0	11	0	3	1	6	1	17
01:00		1	2			0	2				
01:15		0	5			0	2				
01:30		0	**6**			0	**2**				
01:45		0	**4**	1	17	0	**5**	0	11	1	28
02:00		0	**19**			0	**7**				
02:15		0	**6**			0	**4**				
02:30		0	1			1	1				
02:45		0	3	0	29	1	2	2	14	2	43
03:00		0	1			0	3				
03:15		0	4			0	2				
03:30		0	0			0	0				
03:45		0	1	0	6	0	2	0	7	0	13
04:00		0	2			0	3				
04:15		0	2			0	1				
04:30		1	1			0	2				
04:45		0	1	1	6	0	0	0	6	1	12
05:00		0	1			1	2				
05:15		0	2			0	2				
05:30		1	2			0	1				
05:45		0	2	1	7	2	3	3	8	4	15
06:00		0	1			0	0				
06:15		1	0			2	1				
06:30		1	1			1	2				
06:45		0	2	2	4	0	4	3	7	5	11
07:00		2	1			6	1				
07:15		3	3			2	1				
07:30		5	1			**10**	1				
07:45		**6**	1	16	6	**2**	1	20	4	36	10
08:00		**8**	1			**6**	3				
08:15		**13**	1			**4**	0				
08:30		**10**	0			3	0				
08:45		4	1	35	3	1	0	14	3	49	6
09:00		3	1			0	0				
09:15		2	0			0	1				
09:30		0	0			0	1				
09:45		0	0	5	1	1	0	1	2	6	3
10:00		5	0			1	0				
10:15		1	0			1	0				
10:30		1	1			0	0				
10:45		1	1	8	2	3	0	5	0	13	2
11:00		2	0			1	0				
11:15		3	0			2	1				
11:30		4	0			4	0				
11:45		2	0	11	0	2	0	9	1	20	1
Total		80	92	80	92	58	69	58	69	138	161
Combined Total		172		172		127		127		299	
AM Peak	-	07:45	-	-	-	07:30	-	-	-	-	-
Vol.	-	37	-	-	-	22	-	-	-	-	-
P.H.F.		0.712				0.550					
PM Peak	-	-	01:30	-	-	-	01:30	-	-	-	-
Vol.	-	-	35	-	-	-	18	-	-	-	-
P.H.F.			0.461				0.643				
Percentage		46.5%	53.5%			45.7%	54.3%				
ADT/AADT		ADT 299		AADT 299							

Counts Unlimited, Inc.

PO Box 1178
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City of Perris
Perris Lake High School North Driveway
W/ B Street
24 Hour Directional Volume Count

PER004
Site Code: 105-221035

Start Time	11/16/22 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	2			0	**1**				
12:15		0	5			0	**4**				
12:30		0	2			0	**3**				
12:45		0	3	0	12	0	**0**	0	8	0	20
01:00		0	0			0	1				
01:15		0	3			0	2				
01:30		0	2			0	0				
01:45		0	0	0	5	0	2	0	5	0	10
02:00		0	5			0	1				
02:15		0	4			0	1				
02:30		0	2			0	0				
02:45		0	0	0	11	0	1	0	3	0	14
03:00		0	**2**			0	0				
03:15		0	**5**			0	0				
03:30		0	**17**			0	1				
03:45		0	**5**	0	29	0	0	0	1	0	30
04:00		0	0			0	0				
04:15		0	1			0	0				
04:30		0	0			0	0				
04:45		0	0	0	1	0	0	0	0	0	1
05:00		0	0			0	0				
05:15		0	0			0	0				
05:30		0	0			0	0				
05:45		0	0	0	0	1	0	1	0	1	0
06:00		0	0			0	0				
06:15		0	0			4	0				
06:30		0	1			0	1				
06:45		0	0	0	1	2	0	6	1	6	2
07:00		1	0			**8**	0				
07:15		0	1			**5**	0				
07:30		2	0			**6**	0				
07:45		**1**	0	4	1	**5**	0	24	0	28	1
08:00		**7**	0			1	0				
08:15		**9**	0			4	0				
08:30		**7**	0			0	0				
08:45		1	0	24	0	1	0	6	0	30	0
09:00		0	0			2	0				
09:15		0	0			0	0				
09:30		1	0			0	0				
09:45		0	0	1	0	2	0	4	0	5	0
10:00		1	0			0	0				
10:15		0	0			1	0				
10:30		3	0			1	0				
10:45		1	0	5	0	2	0	4	0	9	0
11:00		0	0			3	0				
11:15		5	0			3	0				
11:30		0	0			0	0				
11:45		1	0	6	0	2	0	8	0	14	0
Total		40	60	40	60	53	18	53	18	93	78
Combined Total		100		100		71		71		171	
AM Peak	-	07:45	-	-	-	07:00	-	-	-	-	-
Vol.	-	24	-	-	-	24	-	-	-	-	-
P.H.F.		0.667				0.750					
PM Peak	-	-	03:00	-	-	-	12:00	-	-	-	-
Vol.	-	-	29	-	-	-	8	-	-	-	-
P.H.F.			0.426				0.500				
Percentage		40.0%	60.0%			74.6%	25.4%				
ADT/AADT		ADT 171		AADT 171							

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
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City of Perris
B Street
S/ Ellis Avenue
24 Hour Directional Volume Count

PER003
Site Code: 105-221035

Start Time	11/16/22 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	3			2	4				
12:15		1	4			1	4				
12:30		0	2			0	3				
12:45		0	4	1	13	0	3	3	14	4	27
01:00		0	4			0	3				
01:15		0	1			0	8				
01:30		1	2			1	4				
01:45		0	5	1	12	0	4	1	19	2	31
02:00		0	**9**			0	**12**				
02:15		0	**12**			0	**10**				
02:30		0	**4**			0	**6**				
02:45		0	**7**	0	32	0	**8**	0	36	0	68
03:00		0	3			1	9				
03:15		3	4			0	7				
03:30		1	5			1	7				
03:45		3	8	7	20	0	9	2	32	9	52
04:00		0	9			0	5				
04:15		1	1			0	7				
04:30		5	4			1	6				
04:45		1	4	7	18	1	9	2	27	9	45
05:00		1	8			2	11				
05:15		5	6			0	9				
05:30		4	6			0	5				
05:45		0	8	10	28	1	5	3	30	13	58
06:00		2	12			0	12				
06:15		4	2			0	4				
06:30		4	5			2	2				
06:45		5	0	15	19	2	5	4	23	19	42
07:00		4	5			1	3				
07:15		**13**	1			2	5				
07:30		**4**	0			1	4				
07:45		**6**	2	27	8	**12**	4	16	16	43	24
08:00		**8**	1			**2**	2				
08:15		9	0			**2**	3				
08:30		2	1			**8**	6				
08:45		2	0	21	2	2	0	14	11	35	13
09:00		7	0			3	3				
09:15		4	1			1	2				
09:30		2	2			2	2				
09:45		3	0	16	3	1	0	7	7	23	10
10:00		5	0			2	0				
10:15		2	0			2	0				
10:30		3	0			2	0				
10:45		1	0	11	0	4	0	10	0	21	0
11:00		1	0			4	0				
11:15		4	3			3	0				
11:30		6	0			3	1				
11:45		2	0	13	3	1	2	11	3	24	6
Total		129	158	129	158	73	218	73	218	202	376
Combined Total		287		287		291		291		578	
AM Peak	-	07:15	-	-	-	07:45	-	-	-	-	-
Vol.	-	31	-	-	-	24	-	-	-	-	-
P.H.F.		0.596				0.500					
PM Peak	-	-	02:00	-	-	-	02:00	-	-	-	-
Vol.	-	-	32	-	-	-	36	-	-	-	-
P.H.F.			0.667				0.750				
Percentage		44.9%	55.1%			25.1%	74.9%				
ADT/AADT		ADT 578		AADT 578							

Counts Unlimited, Inc.

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City of Perris
Ellis Avenue
W/ B Street
24 Hour Directional Volume Count

PER006
Site Code: 105-221035

Start Time	11/16/22 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		1	11			0	4				
12:15		0	7			3	6				
12:30		0	11			0	7				
12:45		0	4	1	33	0	4	3	21	4	54
01:00		0	2			0	9				
01:15		1	13			0	8				
01:30		1	14			2	9				
01:45		0	8	2	37	1	**13**	3	39	5	76
02:00		0	**26**			0	**26**				
02:15		0	**49**			1	**15**				
02:30		0	**24**			1	**10**				
02:45		1	**10**	1	109	1	6	3	57	4	166
03:00		0	8			0	11				
03:15		0	10			0	8				
03:30		0	8			0	9				
03:45		1	6	1	32	1	18	1	46	2	78
04:00		1	6			0	11				
04:15		1	4			0	5				
04:30		4	9			0	5				
04:45		0	4	6	23	0	7	0	28	6	51
05:00		1	10			0	7				
05:15		5	6			1	4				
05:30		2	7			1	5				
05:45		3	5	11	28	2	8	4	24	15	52
06:00		2	4			3	7				
06:15		1	1			3	3				
06:30		1	2			1	5				
06:45		5	5	9	12	1	4	8	19	17	31
07:00		7	4			6	5				
07:15		**9**	1			5	1				
07:30		**42**	6			**20**	5				
07:45		**54**	7	112	18	**11**	6	42	17	154	35
08:00		**52**	3			**11**	3				
08:15		9	3			**15**	5				
08:30		9	3			19	4				
08:45		7	2	77	11	3	1	48	13	125	24
09:00		6	3			5	0				
09:15		4	2			5	7				
09:30		3	1			3	1				
09:45		9	0	22	6	4	0	17	8	39	14
10:00		6	0			5	0				
10:15		3	0			4	0				
10:30		6	0			1	0				
10:45		3	0	18	0	6	0	16	0	34	0
11:00		7	0			4	0				
11:15		6	2			7	2				
11:30		6	2			8	2				
11:45		1	1	20	5	3	0	22	4	42	9
Total		280	314	280	314	167	276	167	276	447	590
Combined Total		594		594		443		443		1037	
AM Peak	-	07:15	-	-	-	07:30	-	-	-	-	-
Vol.	-	157	-	-	-	57	-	-	-	-	-
P.H.F.		0.727				0.713					
PM Peak	-	-	02:00	-	-	-	01:45	-	-	-	-
Vol.	-	-	109	-	-	-	64	-	-	-	-
P.H.F.			0.556				0.615				
Percentage		47.1%	52.9%			37.7%	62.3%				
ADT/AADT		ADT 1,037		AADT 1,037							

Location: Perris
N/S: B Street
E/W: Montanoso Lane

Date: 11/16/2022
Weather: Clear

PEDS

	North Leg B Street	East Leg Montanoso Lane	South Leg B Street	West Leg Montanoso Lane	
12:00 AM	0	0	0	0	0
12:15 AM	0	0	0	0	0
12:30 AM	0	0	0	0	0
12:45 AM	0	0	0	0	0
1:00 AM	0	0	0	0	0
1:15 AM	0	0	0	0	0
1:30 AM	0	0	0	0	0
1:45 AM	0	0	0	0	0
2:00 AM	0	0	0	0	0
2:15 AM	0	0	0	0	0
2:30 AM	0	0	0	0	0
2:45 AM	0	0	0	0	0
3:00 AM	0	0	0	1	1
3:15 AM	0	0	0	0	0
3:30 AM	0	0	0	0	0
3:45 AM	0	0	0	0	0
4:00 AM	0	0	0	0	0
4:15 AM	0	0	0	0	0
4:30 AM	0	0	0	0	0
4:45 AM	0	0	0	0	0
5:00 AM	0	0	0	0	0
5:15 AM	0	0	0	0	0
5:30 AM	0	0	0	0	0
5:45 AM	0	0	0	0	0
6:00 AM	0	2	0	0	2
6:15 AM	0	2	0	0	2
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	0	1
7:45 AM	0	0	0	2	2
8:00 AM	0	0	2	1	3
8:15 AM	1	2	0	0	3
8:30 AM	3	0	1	0	4
8:45 AM	0	0	0	0	0
9:00 AM	0	0	1	0	1
9:15 AM	1	0	0	1	2
9:30 AM	0	0	0	0	0
9:45 AM	2	2	3	0	7
10:00 AM	0	0	0	0	0
10:15 AM	2	0	0	2	4
10:30 AM	0	0	0	1	1
10:45 AM	0	0	0	0	0
11:00 AM	0	0	0	0	0
11:15 AM	1	0	0	0	1
11:30 AM	0	0	0	0	0
11:45 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0
12:15 PM	1	0	0	0	1
12:30 PM	0	0	0	0	0
12:45 PM	0	0	0	0	0
1:00 PM	0	0	0	0	0
1:15 PM	0	0	0	0	0
1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	0	0
2:00 PM	5	0	15	2	22
2:15 PM	2	1	0	2	5
2:30 PM	0	2	1	2	5
2:45 PM	0	0	0	0	0
3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0
3:30 PM	0	1	0	0	1
3:45 PM	0	1	0	0	1
4:00 PM	0	3	0	0	3
4:15 PM	1	1	0	1	3
4:30 PM	0	0	0	0	0
4:45 PM	0	1	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	1	0	0	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
6:00 PM	0	0	0	1	1
6:15 PM	0	0	0	1	1
6:30 PM	0	0	0	0	0
6:45 PM	0	1	1	0	2
7:00 PM	0	0	0	0	0
7:15 PM	0	0	0	0	0
7:30 PM	0	0	0	1	1
7:45 PM	0	0	0	0	0
8:00 PM	0	0	0	0	0
8:15 PM	0	0	0	0	0
8:30 PM	0	0	0	0	0
8:45 PM	0	0	0	0	0
9:00 PM	0	0	0	0	0
9:15 PM	0	0	0	0	0
9:30 PM	0	0	0	0	0
9:45 PM	0	0	0	0	0
10:00 PM	0	0	0	0	0
10:15 PM	0	0	0	0	0
10:30 PM	0	0	0	0	0
10:45 PM	0	0	0	0	0
11:00 PM	0	0	0	0	0
11:15 PM	0	0	0	0	0
11:30 PM	0	0	0	1	1
11:45 PM	0	0	0	0	0
TOTAL VOLUMES:	19	21	24	19	83

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
951-268-6268

Location: Perris
N/S: B Street
E/W: Montanoso Lane

Date: 11/16/2022
Weather: Clear

BIKES

	Southbound B Street			Westbound Montanoso Lane			Northbound B Street			Eastbound Montanoso Lane			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	2	0	0	0	0	0	0	0	0	2
2:15 PM	0	1	0	0	0	0	0	0	2	0	0	0	3
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	2	0	0	0	2	1	0	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
4:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	3	1	6	0	0	0	2	4	0	0	0	16

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
951-268-6268

Location: Perris
N/S: B Street
E/W: Ellis Avenue

Date: 11/16/2022
Weather: Clear

PEDS

	North Leg B Street	East Leg Ellis Avenue	South Leg B Street	West Leg Ellis Avenue	
12:00 AM	0	0	0	0	0
12:15 AM	0	0	0	0	0
12:30 AM	0	0	0	0	0
12:45 AM	0	0	0	0	0
1:00 AM	0	0	0	0	0
1:15 AM	0	0	0	0	0
1:30 AM	0	0	0	0	0
1:45 AM	0	0	0	0	0
2:00 AM	0	0	0	0	0
2:15 AM	0	0	0	0	0
2:30 AM	0	0	0	0	0
2:45 AM	0	0	0	0	0
3:00 AM	0	0	0	0	0
3:15 AM	0	0	0	0	0
3:30 AM	0	0	0	0	0
3:45 AM	0	0	0	0	0
4:00 AM	0	0	0	0	0
4:15 AM	0	0	0	0	0
4:30 AM	0	0	0	0	0
4:45 AM	0	0	0	0	0
5:00 AM	0	0	0	0	0
5:15 AM	0	0	0	0	0
5:30 AM	0	0	0	0	0
5:45 AM	0	0	0	0	0
6:00 AM	0	0	0	0	0
6:15 AM	0	0	0	0	0
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	2	0	0	2
7:30 AM	1	0	1	0	2
7:45 AM	0	0	0	1	1
8:00 AM	0	0	0	0	0
8:15 AM	1	0	0	1	2
8:30 AM	1	0	0	0	1
8:45 AM	0	0	0	0	0
9:00 AM	0	0	0	0	0
9:15 AM	1	0	0	1	2
9:30 AM	0	0	0	0	0
9:45 AM	3	0	0	0	3
10:00 AM	0	1	0	0	1
10:15 AM	0	0	0	0	0
10:30 AM	0	1	0	0	1
10:45 AM	0	0	0	0	0
11:00 AM	0	1	1	0	2
11:15 AM	0	0	0	0	0
11:30 AM	0	0	0	0	0
11:45 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0
12:15 PM	0	0	0	0	0
12:30 PM	0	0	0	0	0
12:45 PM	0	0	0	0	0
1:00 PM	0	0	0	0	0
1:15 PM	0	0	0	0	0
1:30 PM	0	0	0	0	0
1:45 PM	1	0	0	1	2
2:00 PM	3	0	0	3	6
2:15 PM	6	5	4	0	15
2:30 PM	0	3	1	0	4
2:45 PM	0	0	0	0	0
3:00 PM	0	0	0	0	0
3:15 PM	5	0	0	0	5
3:30 PM	0	1	0	0	1
3:45 PM	3	0	0	0	3
4:00 PM	3	0	0	0	3
4:15 PM	2	0	0	0	2
4:30 PM	1	0	0	0	1
4:45 PM	3	0	0	0	3
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	1	1
6:00 PM	0	0	0	0	0
6:15 PM	0	0	0	0	0
6:30 PM	0	0	0	0	0
6:45 PM	0	0	0	1	1
7:00 PM	0	0	0	0	0
7:15 PM	0	0	0	0	0
7:30 PM	0	0	0	0	0
7:45 PM	0	0	0	0	0
8:00 PM	0	0	0	0	0
8:15 PM	0	0	0	0	0
8:30 PM	0	0	0	0	0
8:45 PM	0	0	0	0	0
9:00 PM	0	0	0	0	0
9:15 PM	0	0	0	0	0
9:30 PM	0	0	0	0	0
9:45 PM	0	0	0	0	0
10:00 PM	0	0	0	0	0
10:15 PM	0	0	0	0	0
10:30 PM	0	0	0	0	0
10:45 PM	0	0	0	0	0
11:00 PM	0	0	0	0	0
11:15 PM	0	0	0	0	0
11:30 PM	0	0	0	0	0
11:45 PM	0	0	0	0	0
TOTAL VOLUMES:	34	14	7	10	65

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
951-268-6268

Location: Perris
N/S: B Street
E/W: Ellis Avenue

Date: 11/16/2022
Weather: Clear

BIKES

	Southbound B Street			Westbound Ellis Avenue			Northbound B Street			Eastbound Ellis Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	3	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	0	1	0	0	2	0	0	3
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	2	0	0	0	0	0	0	2	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	5	0	0	0	4	0	0	5	0	1	17

Counts Unlimited, Inc.
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951-268-6268

City of Perris

Radar Speed Survey

Speed	NB	SB	MPH	Vehicles Surveyed		TOT. VEH.
				Northbound	Southbound	
55	0	0	55			0
54	0	0	54			0
53	0	0	53			0
52	0	0	52			0
51	0	0	51			0
50	0	0	50			0
49	0	0	49			0
48	0	0	48			0
47	0	0	47			0
46	0	0	46			0
45	0	0	45			0
44	0	0	44			0
43	0	0	43			0
42	0	0	42			0
41	0	0	41			0
40	0	0	40			0
39	2	1	39	X X	X	3
38	1	1	38	X	X	2
37	1	2	37	X	X X	3
36	4	2	36	X X X X	X X	6
35	3	0	35	X X X		3
34	1	3	34	X	X X X	4
33	2	3	33	X X	X X X	5
32	4	3	32	X X X X	X X X	7
31	2	2	31	X X	X X	4
30	0	5	30		X X X X X	5
29	4	3	29	X X X X	X X X	7
28	5	3	28	X X X X X	X X X	8
27	7	3	27	X X X X X X X	X X X	10
26	3	3	26	X X X	X X X	6
25	1	3	25	X	X X X	4
24	3	4	24	X X X	X X X X	7
23	2	6	23	X X	X X X X X X	8
22	2	2	22	X X	X X	4
21	2	0	21	X X		2
20	1	1	20	X	X	2
19	0	0	19			0
18	0	0	18			0
17	0	0	17			0
16	0	0	16			0
15	0	0	15			0
14	0	0	14			0
13	0	0	13			0
12	0	0	12			0
11	0	0	11			0
10	0	0	10			0
9	0	0	9			0
8	0	0	8			0
7	0	0	7			0
6	0	0	6			0
5	0	0	5			0
Total	50	50			GRAND TOTALS	100

Location: B Street

Between: Faith Circle - Ellis Avenue

Weather: Clear

Date: 11/15/22

Time From: 9:00

Time To: 12:15

Existing Speed Limit: N / P MPH

	Northbound	Southbound	Combined Statistics
% Over Pace:	8%	24%	26%
% In Pace:	64%	70%	66%
% Under Pace:	28%	6%	8%
Average Speed:	29 MPH	29 MPH	29 MPH
Pace Speed:	27 - 36 MPH	23 - 32 MPH	23 - 32 MPH
15th Percentile / Critical Speed:	24 MPH	23 MPH	23 MPH
50th Percentile / Critical Speed:	28 MPH	28 MPH	28 MPH
85th Percentile / Critical Speed:	36 MPH	34 MPH	35 MPH

Radar Survey Conducted By:

Counts Unlimited, Inc.

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Corona, CA 92880

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City of Perris

Radar Speed Survey

Speed	NB	SB	MPH	Vehicles Surveyed	TOT. VEH.	
				Northbound / Southbound		
55	0	0	55		0	
54	0	0	54		0	
53	0	0	53		0	
52	0	0	52		0	
51	0	0	51		0	
50	0	0	50		0	
49	0	0	49		0	
48	0	0	48		0	
47	0	0	47		0	
46	0	0	46		0	
45	0	0	45		0	
44	0	0	44		0	
43	0	0	43		0	
42	0	0	42		0	
41	0	0	41		0	
40	0	0	40		0	
39	0	0	39		0	
38	0	0	38		0	
37	0	0	37		0	
36	1	0	36	X	1	
35	0	0	35		0	
34	2	1	34	X X / X	3	
33	0	0	33		0	
32	4	3	32	X X X X / X X X	7	*
31	3	3	31	X X X / X X X	6	*
30	4	2	30	X X X X / X X	6	*
29	6	5	29	X X X X X X / X X X X X	11	PACE
28	3	3	28	X X X / X X X	6	
27	7	2	27	X X X X X X X / X X	9	
26	8	9	26	X X X X X X X X / X X X X X X X X	17	
25	5	6	25	X X X X X / X X X X X X	11	*
24	5	6	24	X X X X X / X X X X X X	11	*
23	2	2	23	X X / X X	4	*
22	0	3	22	/ X X X	3	
21	0	0	21		0	
20	0	0	20		0	
19	0	1	19	/ X	1	
18	0	2	18	/ X X	2	
17	0	0	17		0	
16	0	1	16	/ X	1	
15	0	1	15	/ X	1	
14	0	0	14		0	
13	0	0	13		0	
12	0	0	12		0	
11	0	0	11		0	
10	0	0	10		0	
9	0	0	9		0	
8	0	0	8		0	
7	0	0	7		0	
6	0	0	6		0	
5	0	0	5		0	
Total	50	50		GRAND TOTALS	100	

Location: B Street

Between: Ellis Avenue - Red Spruce Place

Weather: Clear

Date: 11/15/22

Time From: 12:15

Time To: 4:00

Existing Speed Limit: N / P MPH

	Northbound	Southbound	Combined Statistics
% Over Pace:	6%	2%	4%
% In Pace:	94%	82%	88%
% Under Pace:	0%	16%	8%
Average Speed:	28 MPH	26 MPH	27 MPH
Pace Speed:	23 - 32 MPH	23 - 32 MPH	23 - 32 MPH
15th Percentile / Critical Speed:	25 MPH	22 MPH	24 MPH
50th Percentile / Critical Speed:	27 MPH	26 MPH	26 MPH
85th Percentile / Critical Speed:	31 MPH	30 MPH	31 MPH

Radar Survey Conducted By:

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92880

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City of Perris

Radar Speed Survey

Speed	EB	WB	MPH	Vehicles Surveyed	TOT. VEH.
				Eastbound / Westbound	
55	0	0	55		0
54	0	0	54		0
53	0	0	53		0
52	0	0	52		0
51	0	0	51		0
50	0	0	50		0
49	0	0	49		0
48	0	0	48		0
47	0	0	47		0
46	0	0	46		0
45	0	0	45		0
44	0	0	44		0
43	0	0	43		0
42	0	0	42		0
41	0	0	41		0
40	1	0	40	X	1
39	0	1	39	X	1
38	3	0	38	X X X	3
37	0	2	37	X X	2
36	0	0	36		0
35	1	0	35	X	1
34	1	1	34	X X	2
33	3	2	33	X X X X X	5
32	5	2	32	X X X X X X X	7
31	5	1	31	X X X X X X	6
30	2	1	30	X X X	3
29	4	2	29	X X X X X X	6
28	4	2	28	X X X X X X	6
27	4	5	27	X X X X X X X X X	9
26	2	4	26	X X X X X X	6
25	2	4	25	X X X X X X	6
24	4	4	24	X X X X X X X X	8
23	4	4	23	X X X X X X X X	8
22	1	3	22	X X X X	4
21	2	5	21	X X X X X X X	7
20	2	1	20	X X X	3
19	0	2	19	X X	2
18	0	1	18	X	1
17	0	1	17	X	1
16	0	1	16	X	1
15	0	1	15	X	1
14	0	0	14		0
13	0	0	13		0
12	0	0	12		0
11	0	0	11		0
10	0	0	10		0
9	0	0	9		0
8	0	0	8		0
7	0	0	7		0
6	0	0	6		0
5	0	0	5		0
Total	50	50		GRAND TOTALS	100

Location: Ellis Avenue

Between: A Street - B Street

Weather: Clear

Date: 11/16/22

Time From: 9:00

Time To: 12:45

Existing Speed Limit: N / P MPH

	Eastbound	Westbound	Combined Statistics
% Over Pace:	18%	18%	15%
% In Pace:	72%	68%	65%
% Under Pace:	10%	14%	20%
Average Speed:	29 MPH	25 MPH	27 MPH
Pace Speed:	23 - 32 MPH	21 - 30 MPH	23 - 32 MPH
15th Percentile / Critical Speed:	23 MPH	21 MPH	21 MPH
50th Percentile / Critical Speed:	28 MPH	25 MPH	27 MPH
85th Percentile / Critical Speed:	33 MPH	32 MPH	32 MPH

PACE * * * * * * * *

Radar Survey Conducted By:

Counts Unlimited, Inc.

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Corona, CA 92880

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Appendix B

Statewide Integrated Traffic Records System (SWITRS)

Primary Rd **RAMONA EXPWY** *Distance (ft)* **73.0** *Direction* **W** *Secondary Rd* **RIDER ST** *NCIC* **3300** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Perris** *County* **Riverside** *Population* **4** *Rpt Dist* **916A** *Beat* **031** *Type* **0** *CalTrans* *Badge* **4237** *Collision Date* **20220818** *Time* **1211** *Day* **THU**
Primary Collision Factor **STOP SGN|SIG** *Violation* **21453A** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20220920**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info																	Victim Info							
Party	*Type*	*Age*	*Sex*	*Race*	*Sobriety1*	*Sobriety2*	*Move Pre*	*Dir*	*SW Veh*	*CHP Veh*	*Make*	*Year*	*SP Info*	*OAF1*	*Viol*	*OAF2*	*Safety Equip*	*ROLE*	*Ext Of Inj*	*AGE*	*Sex*	*Seat Pos*	*Safety*	*EQUIP*	*Ejected*
1	DRVR	42	F	H	HNBD		PROC ST	W	C	0200	AUDI	2017	-	3	N	-	M G	DRVR	COMP PN	42	F	1	-	-	-
																		PASS		5	F	-	0	M	G
2F	DRVR	29	M	H	HNBD		PROC ST	W	D	2200	-	2000	-	3	N	-	M G	PASS		48	M	3	0	M	G

Primary Rd **RAVENHOLLOW DR** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **PORTLAND PL** *NCIC* **3300** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Perris** *County* **Riverside** *Population* **4** *Rpt Dist* **916A** *Beat* **031** *Type* **0** *CalTrans* *Badge* **5931** *Collision Date* **20220919** *Time* **1916** *Day* **MON**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20221012**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info																	Victim Info							
Party	*Type*	*Age*	*Sex*	*Race*	*Sobriety1*	*Sobriety2*	*Move Pre*	*Dir*	*SW Veh*	*CHP Veh*	*Make*	*Year*	*SP Info*	*OAF1*	*Viol*	*OAF2*	*Safety Equip*	*ROLE*	*Ext Of Inj*	*AGE*	*Sex*	*Seat Pos*	*Safety*	*EQUIP*	*Ejected*
1F	OTHR	998	-		IMP UNK	IMP UNK	RAN OFF RD	E	-	9900	MAZDA	2012	-	-	N	-	- -								

Primary Rd **RED PINE PL** *Distance (ft)* **65.0** *Direction* **W** *Secondary Rd* **B ST** *NCIC* **3300** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Perris** *County* **Riverside** *Population* **4** *Rpt Dist* **916D** *Beat* **035** *Type* **0** *CalTrans* *Badge* **5932** *Collision Date* **20220126** *Time* **1251** *Day* **WED**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20220203**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info																	Victim Info							
Party	*Type*	*Age*	*Sex*	*Race*	*Sobriety1*	*Sobriety2*	*Move Pre*	*Dir*	*SW Veh*	*CHP Veh*	*Make*	*Year*	*SP Info*	*OAF1*	*Viol*	*OAF2*	*Safety Equip*	*ROLE*	*Ext Of Inj*	*AGE*	*Sex*	*Seat Pos*	*Safety*	*EQUIP*	*Ejected*
1F	DRVR	998	-		IMP UNK	IMP UNK	UNS TURN	W	A	0100	BMW	2008	-	3	N	-	- -								
2	PRKD	998	-				PARKED	W	A	0100	HONDA	2008	-	-	N	-	- -								

Primary Rd **RED SPRUCE PL** *Distance (ft)* **15.0** *Direction* **W** *Secondary Rd* **E/ ROADWAY** *NCIC* **3300** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Perris** *County* **Riverside** *Population* **4** *Rpt Dist* **916D** *Beat* **035** *Type* **0** *CalTrans* *Badge* **N4187** *Collision Date* **20220608** *Time* **1630** *Day* **WED**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20220615**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info																	Victim Info							
Party	*Type*	*Age*	*Sex*	*Race*	*Sobriety1*	*Sobriety2*	*Move Pre*	*Dir*	*SW Veh*	*CHP Veh*	*Make*	*Year*	*SP Info*	*OAF1*	*Viol*	*OAF2*	*Safety Equip*	*ROLE*	*Ext Of Inj*	*AGE*	*Sex*	*Seat Pos*	*Safety*	*EQUIP*	*Ejected*
1F	DRVR	0	M	H	HNBD		PROC ST	S	A	0700	HONDA	2008	-	3	N	-	M G	DRVR	MINOR	0	M	1	0	M	G

Primary Rd **REDLANDS AV** *Distance (ft)* **39.0** *Direction* **N** *Secondary Rd* **7TH ST** *NCIC* **3300** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Perris** *County* **Riverside** *Population* **4** *Rpt Dist* **916D** *Beat* **035** *Type* **0** *CalTrans* *Badge* **3870** *Collision Date* **20220520** *Time* **1255** *Day* **FRI**
Primary Collision Factor **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20220602**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info																	Victim Info							
Party	*Type*	*Age*	*Sex*	*Race*	*Sobriety1*	*Sobriety2*	*Move Pre*	*Dir*	*SW Veh*	*CHP Veh*	*Make*	*Year*	*SP Info*	*OAF1*	*Viol*	*OAF2*	*Safety Equip*	*ROLE*	*Ext Of Inj*	*AGE*	*Sex*	*Seat Pos*	*Safety*	*EQUIP*	*Ejected*
1F	DRVR	23	M	H	HNBD		LFT TURN	E	D	2200	GMC	2018	-	3	N	-	M G								
2	DRVR	54	F	H	HNBD		PROC ST	N	A	0100	TOYOT	2018	-	3	N	-	M G	DRVR	POSSIBL	54	F	1	0	M	G

Appendix C

Intersection Sight Distance Standards

LEGEND:

- LIMITED USE AREA
- SIGHT LINE
- CENTERLINE OF ROADWAY
- CENTERLINE OF TRAFFIC LANE

POINT "A": DRIVER'S VANTAGE POINT.
POINT "B": THE REQUIRED SIGHT DISTANCE POINT, MEASURED ALONG THE CENTERLINE OF THE NEAREST LANE OF APPROACHING TRAFFIC.

NOT TO SCALE

DESIGN SPEED (M.P.H.)	PUBLIC STREETS CORNER SIGHT DIST. (FT.)	PRIV. ROADS & DRIVEWAYS STOPPING SIGHT DIST. (FT.)
20	220	125
25	275	150
30	330	200
35	385	250
40	440	300
45	495	360
50	550	430
55	605	500
60	660	580
65	715	660

NOTES:

1. THE LIMITED USE AREA IS DETERMINED BY THE GRAPHICAL METHOD. IT SHALL BE USED FOR THE PURPOSE OF PROHIBITING OR CLEARING OBSTRUCTIONS TO MAINTAIN ADEQUATE SIGHT DISTANCE AT INTERSECTIONS.
2. LIMITED USE AREA TO BE KEPT CLEAR OF ALL OBSTRUCTIONS OVER 30 INCHES HIGH, INCLUDING VEGETATION.
3. NO TREES, WALLS, OR ANY OBSTRUCTIONS SHALL BE ALLOWED IN THE LIMITED USE AREA.
4. THE TOE OF SLOPE SHALL NOT ENCROACH INTO THE LIMITED USE AREA.
5. THE SIGHT DISTANCE SHALL BE MEASURED ALONG THE CENTERLINE OF THE ROAD.
6. POINT "A" IS THE LOCATION OF THE DRIVER'S EYE, MEASURED 15 FEET BACK FROM THE EDGE OF THE TRAVELED WAY. (6 FEET FROM ETW, 1 FOOT STOP BAR, AND 8 FEET FROM FRONT BUMPER TO DRIVER.) IF THE STOP BAR IS MORE THAN 6 FEET FROM THE ETW, ADDITIONAL ALLOWANCE SHOULD BE CONSIDERED.
7. POINT "B" IS THE REQUIRED SIGHT DISTANCE POINT LOCATED ALONG THE CENTER OF THE NEAREST TRAFFIC LANE.
8. THE LINE OF SIGHT SHALL BE SHOWN AT INTERSECTIONS ON TENTATIVE MAPS, SITE PLANS, GRADING PLANS, STREET PLANS, AND LANDSCAPE PLANS.
9. CORNER SIGHT DISTANCE IS MEASURED FROM A 3.5 FOOT HEIGHT AT THE LOCATION OF THE DRIVER'S EYE ON THE MINOR ROAD, TO A 4.25 FOOT OBJECT HEIGHT IN THE CENTER OF THE NEAREST TRAFFIC LANE OF THE MAJOR ROAD.
10. WHEN AN INTERSECTION IS LOCATED ON A VERTICAL CURVE, A PROFILE OF THE SIGHT LINE SHALL BE PROVIDED.

APPROVED BY:

DATE: 05/01/07

DIRECTOR OF TRANSPORTATION
GEORGE A. JOHNSON, RCE 42328

REGISTERED PROFESSIONAL ENGINEER
GEORGE A. JOHNSON
No. CE 42328
Exp. 3-31-08
CIVIL
STATE OF CALIFORNIA

REVISIONS		REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE
		1				4			
		2				5			
		3				6			

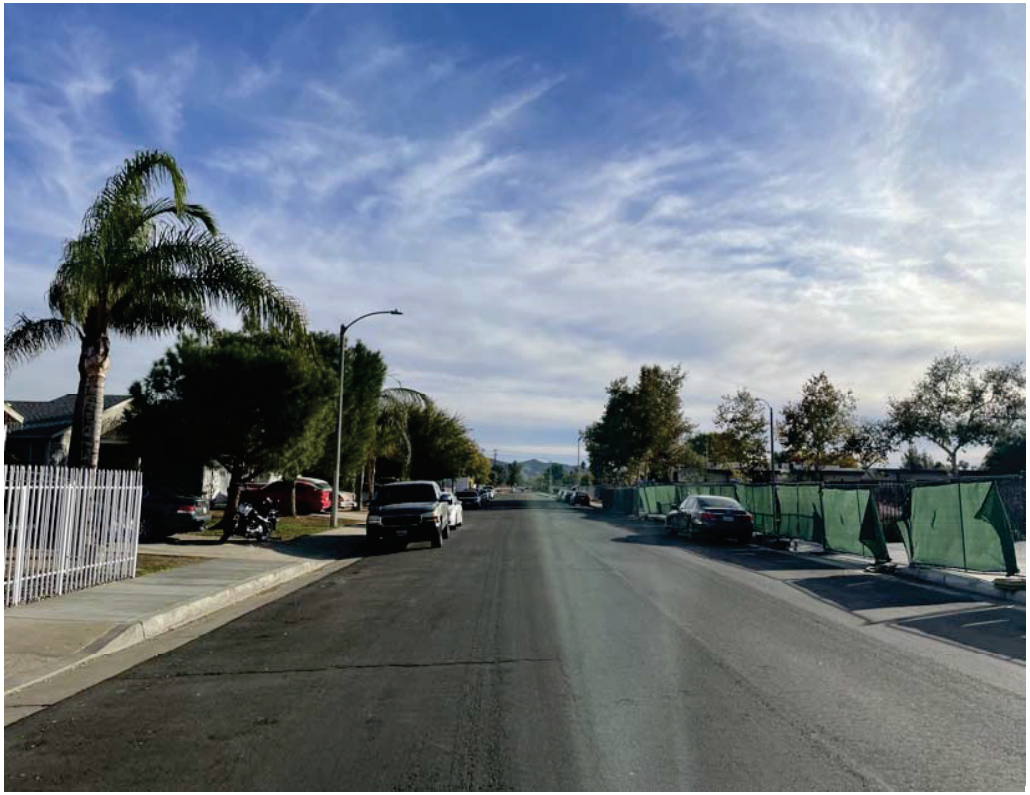
COUNTY OF RIVERSIDE

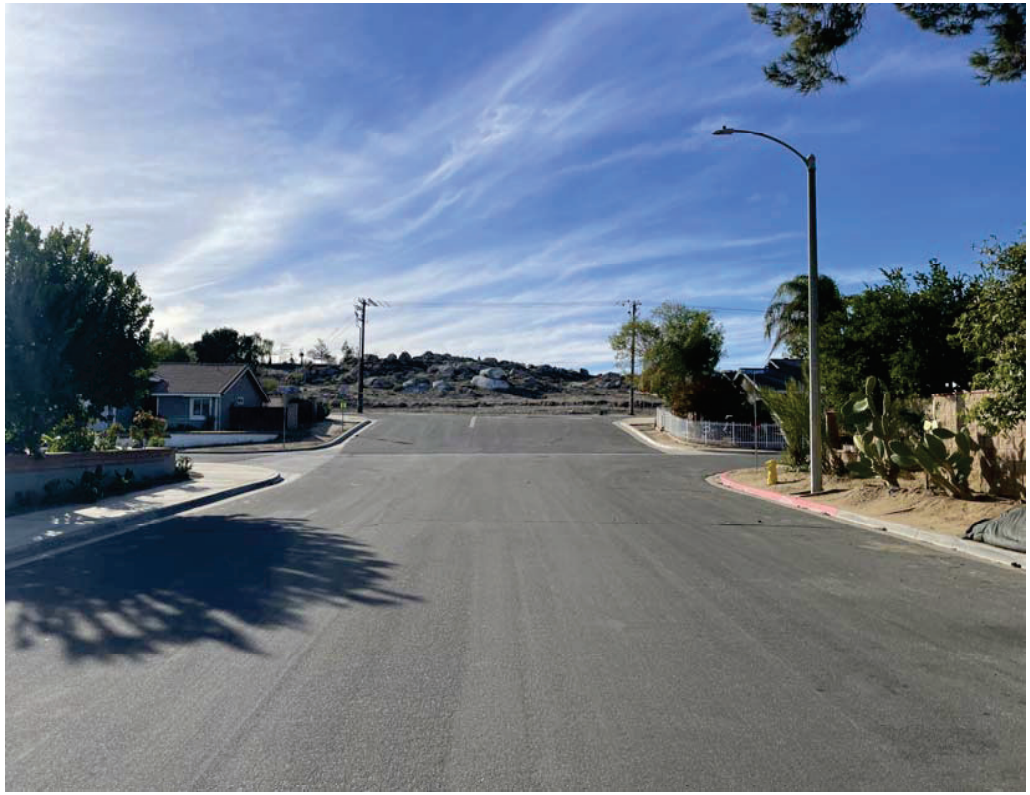
INTERSECTION SIGHT DISTANCE

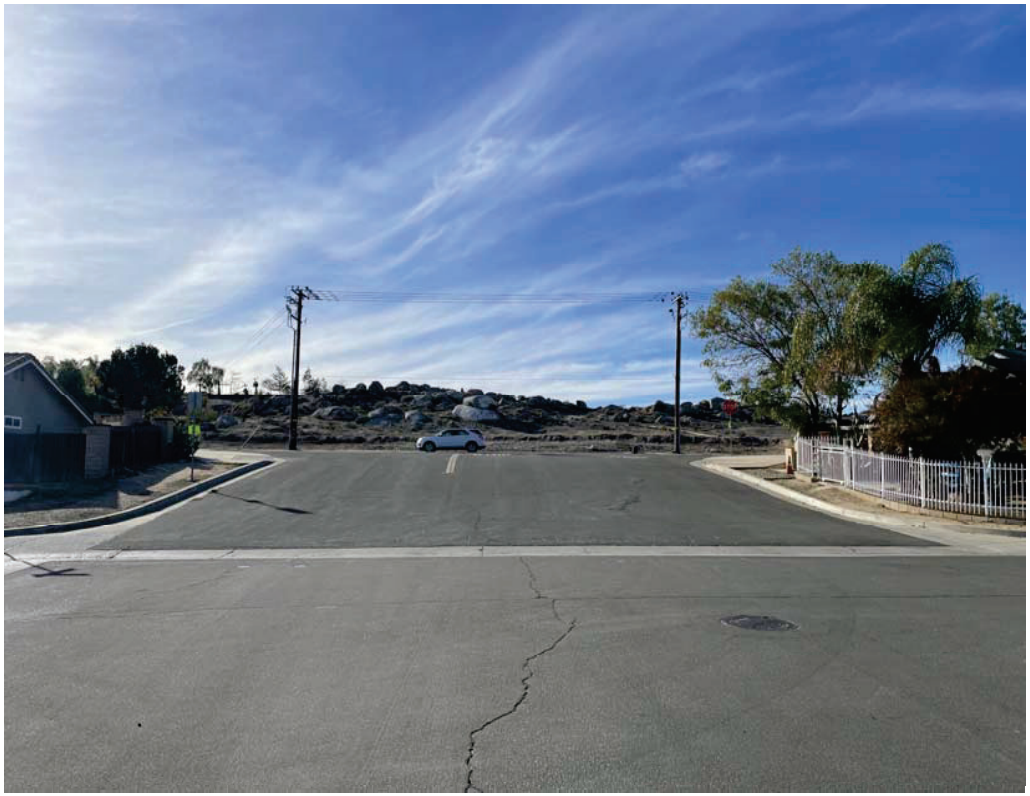
STANDARD NO. 821

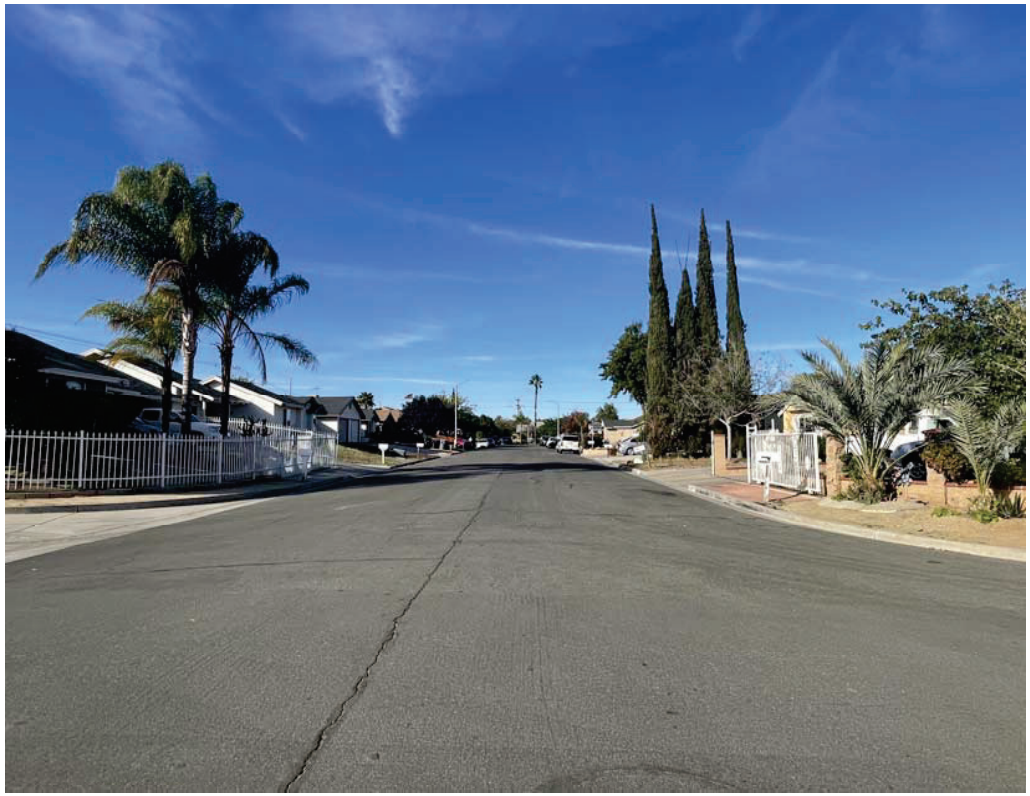
Appendix D

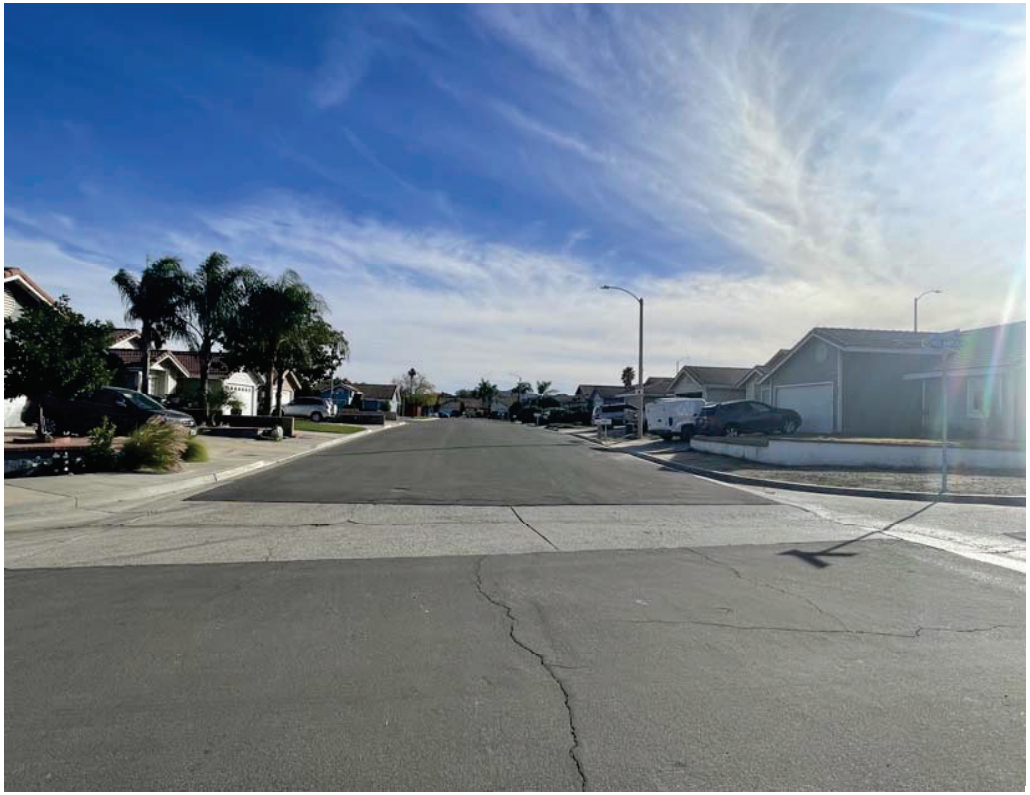
Field Review Photographs

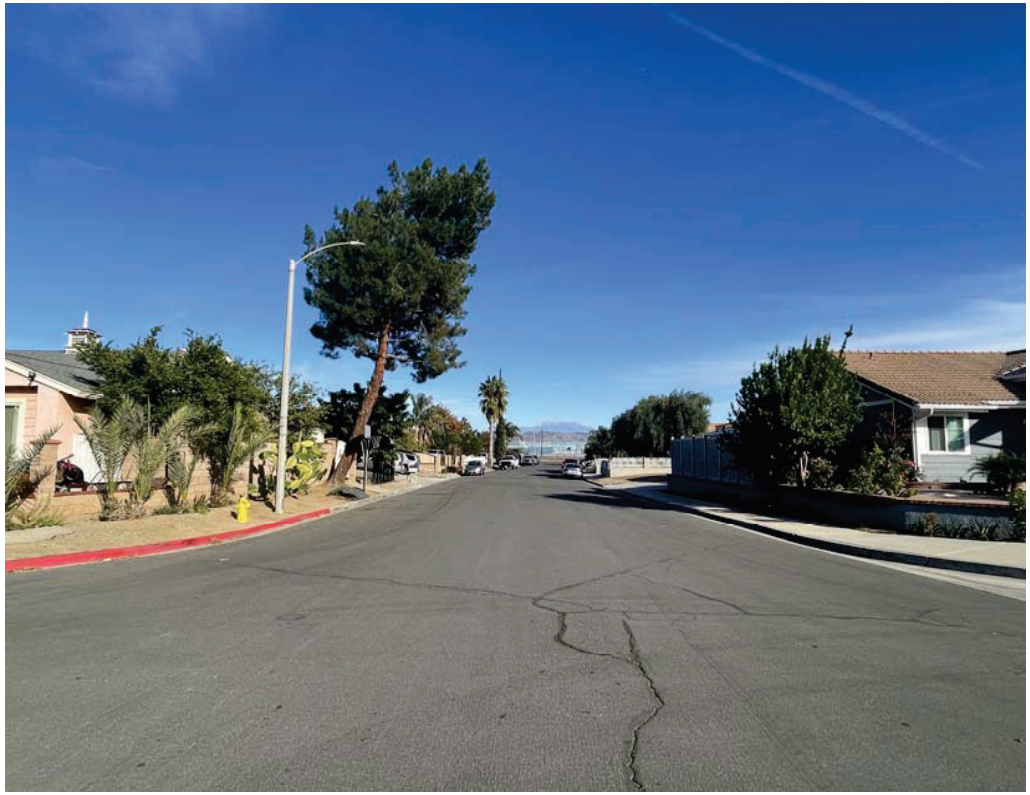


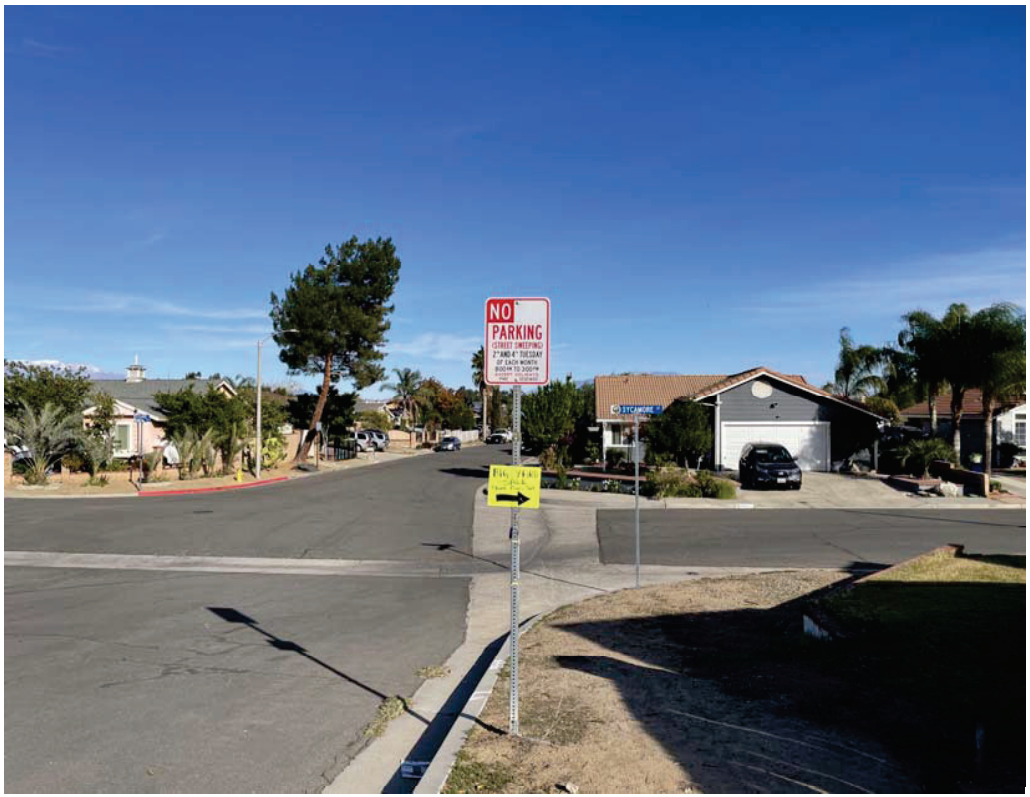








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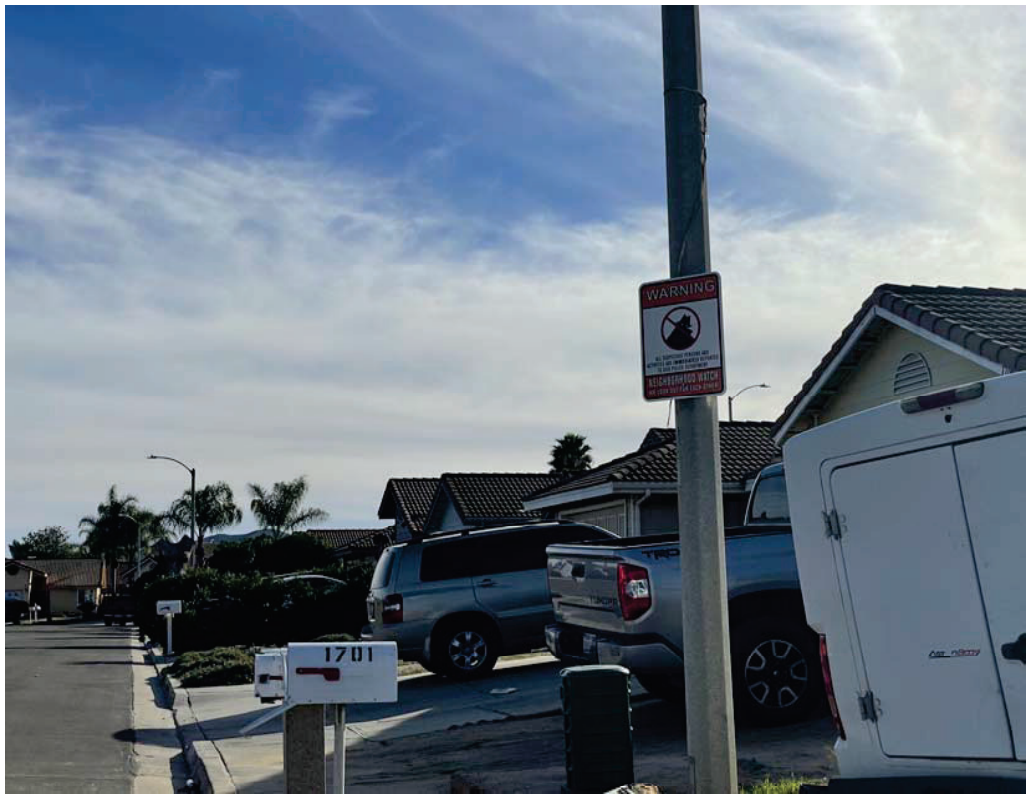
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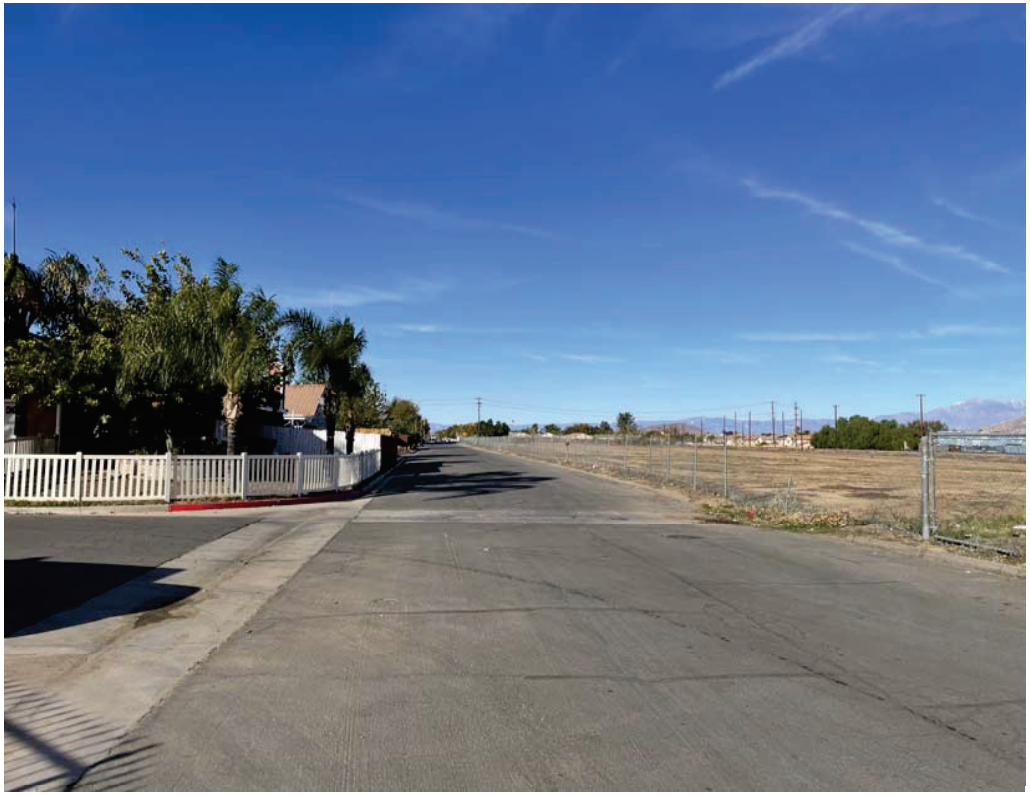
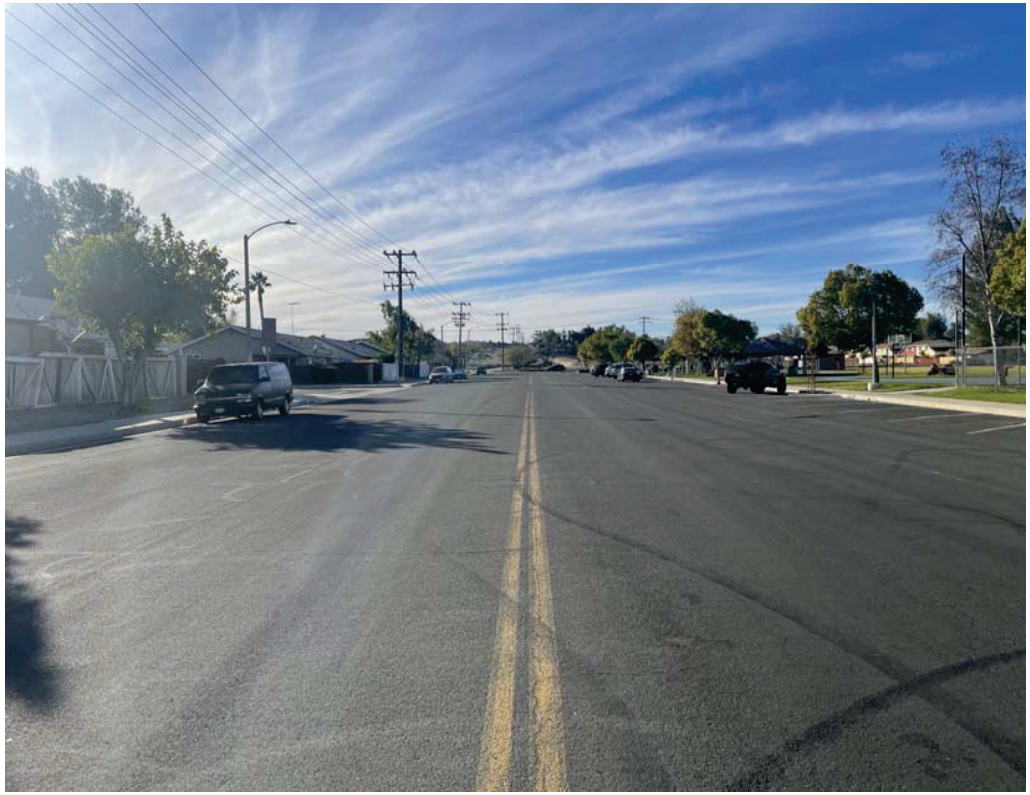
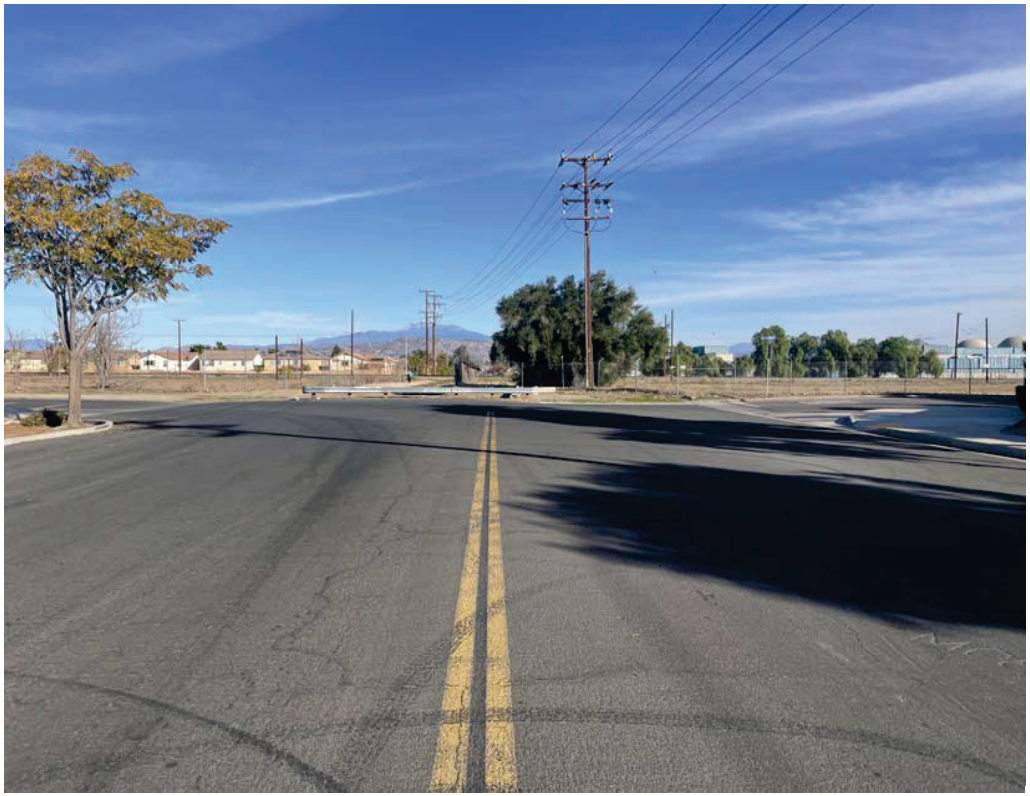
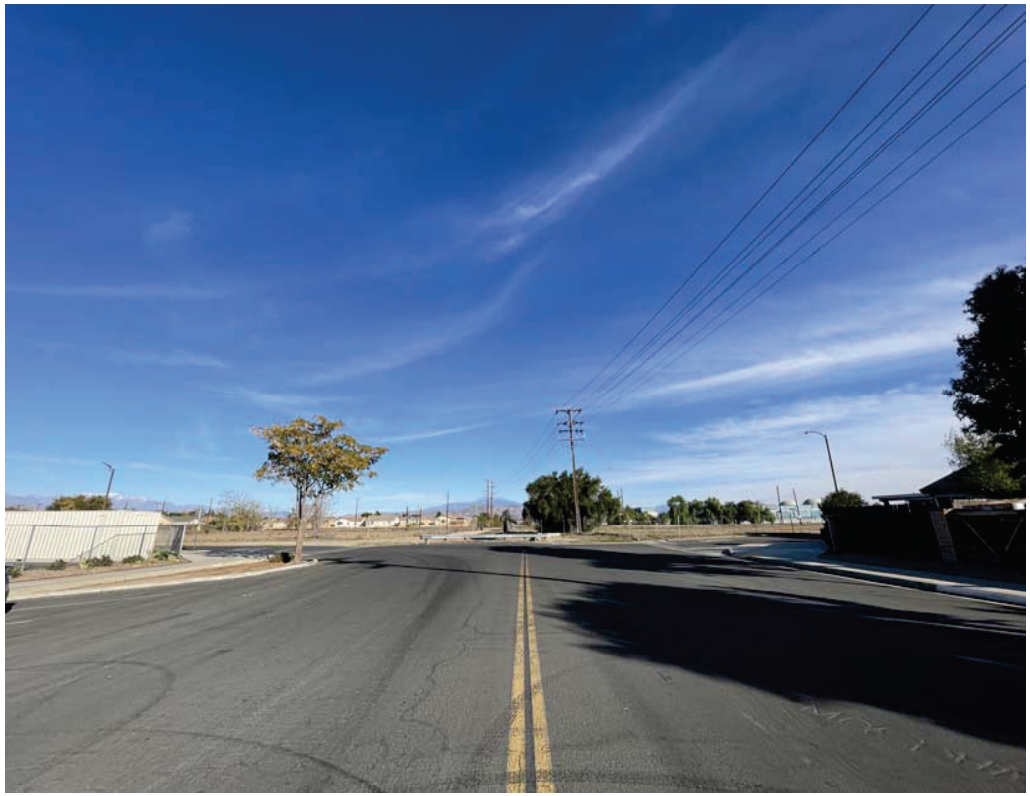
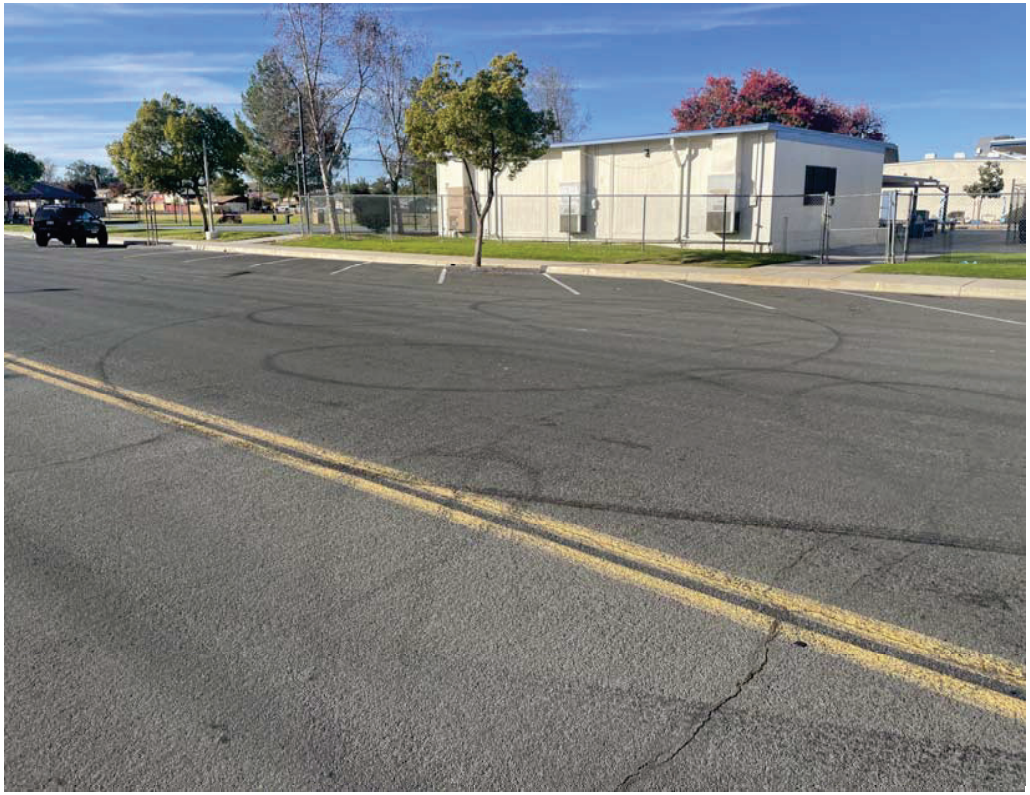
1701

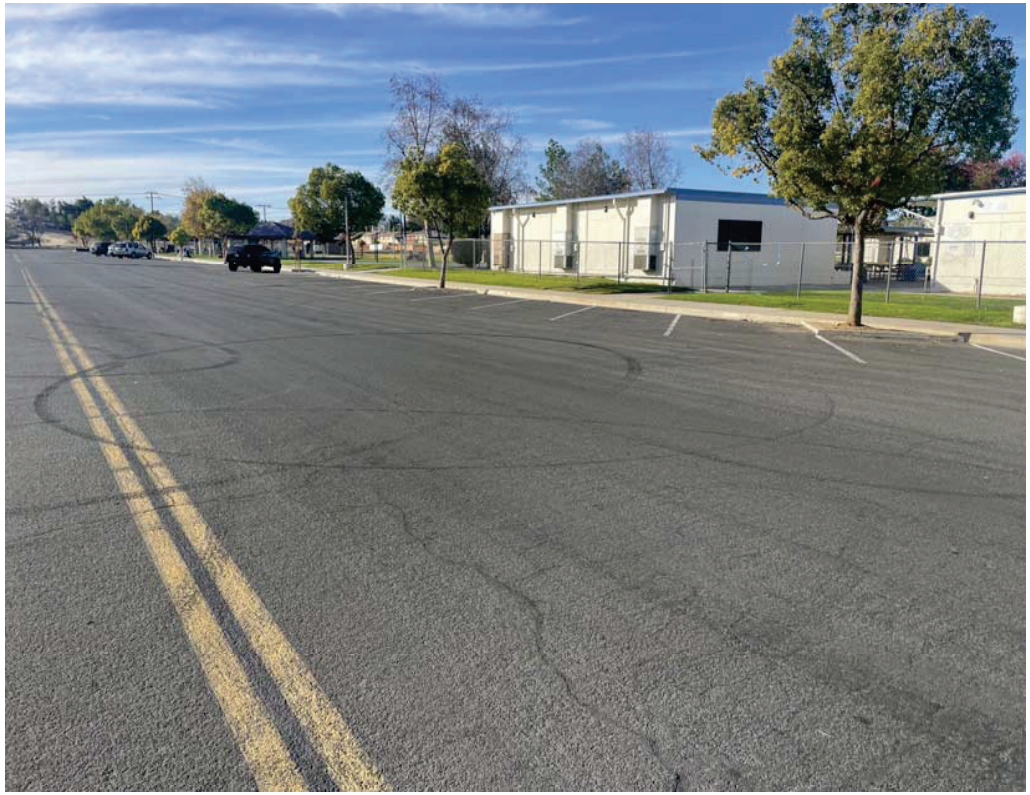


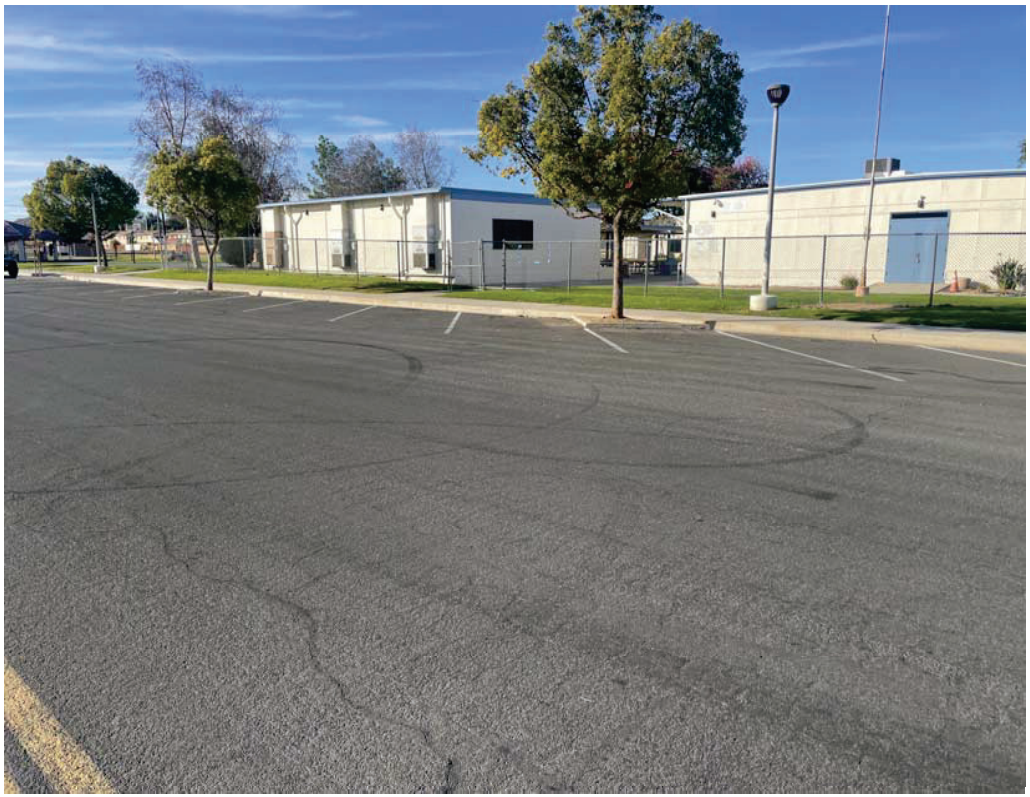


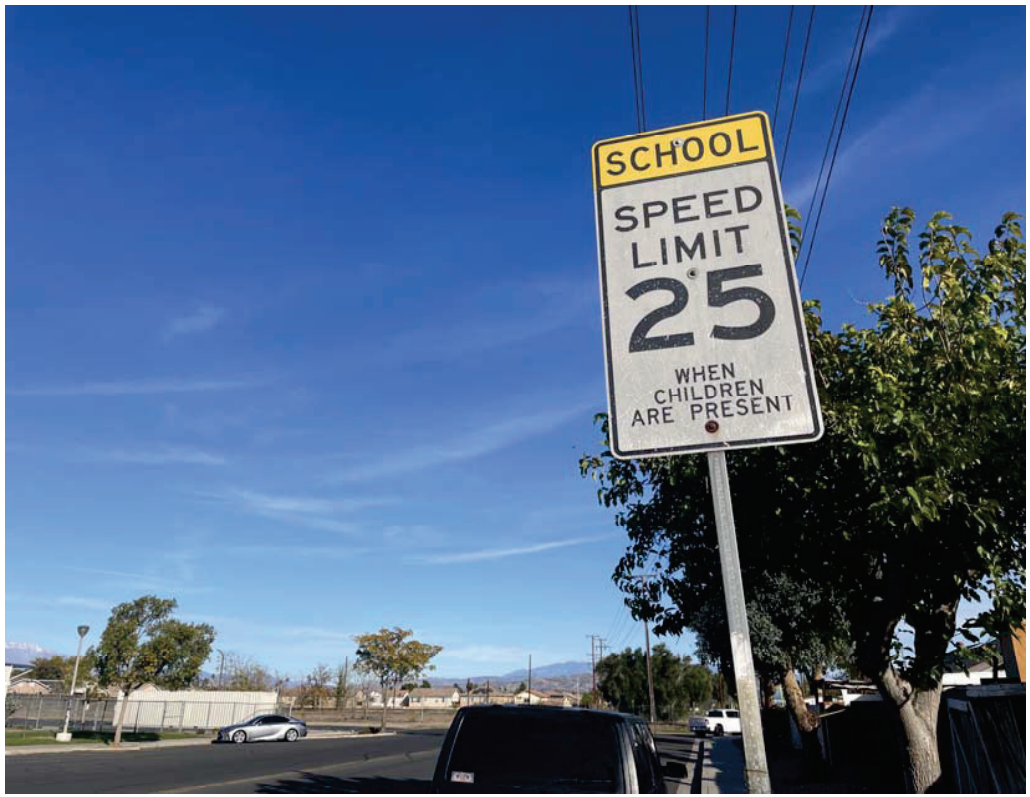


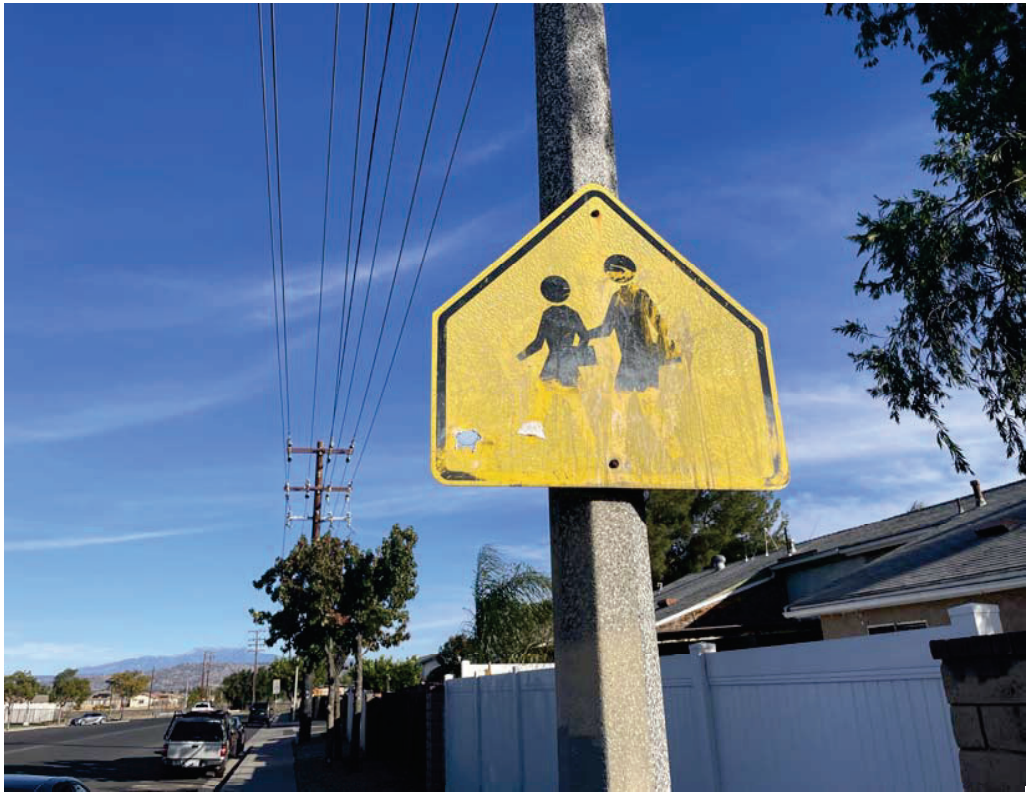


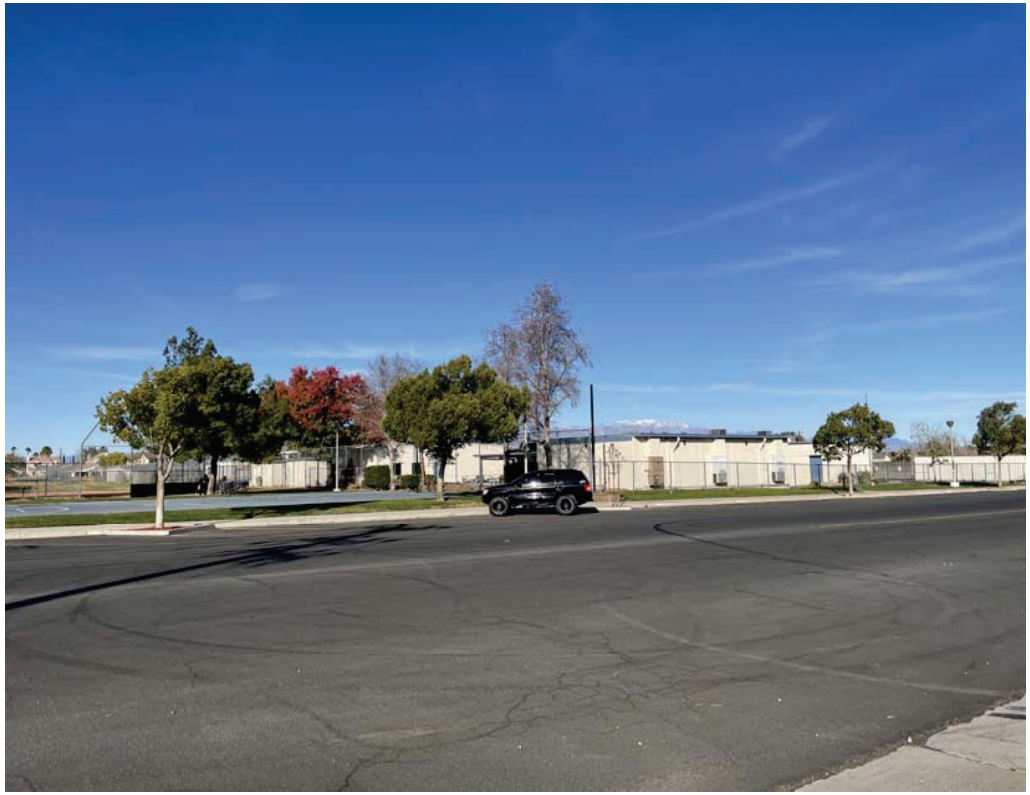


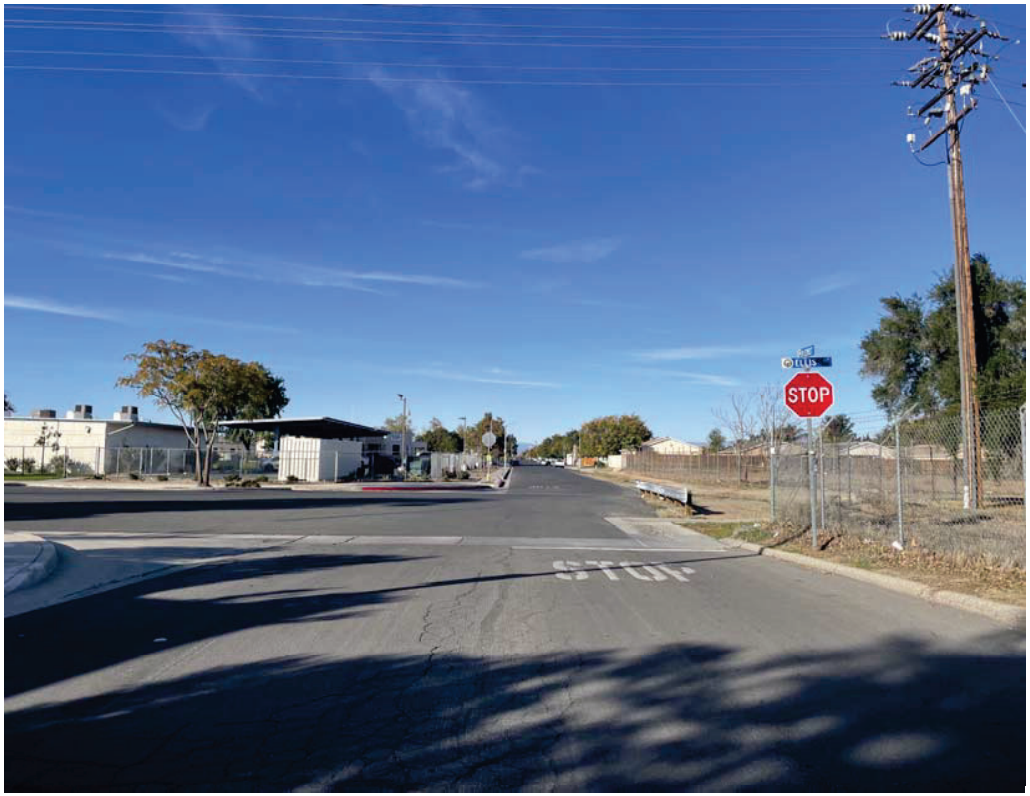





SCHOOL
SPEED
LIMIT
25
WHEN
CHILDREN
ARE PRESENT



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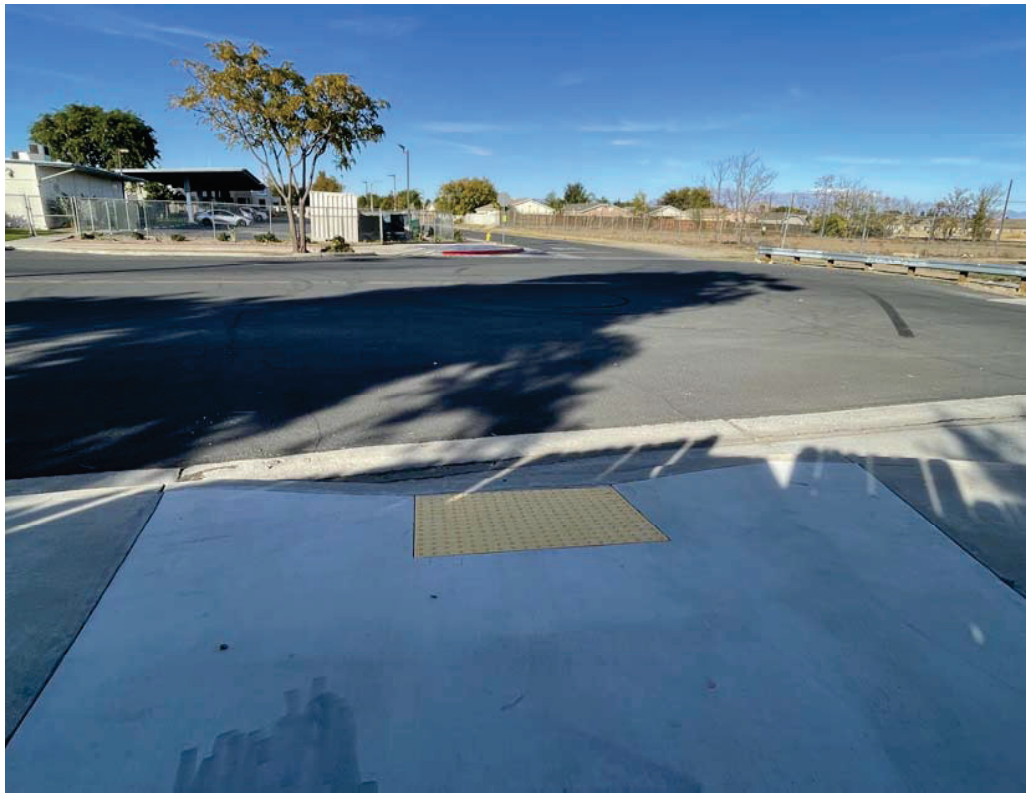
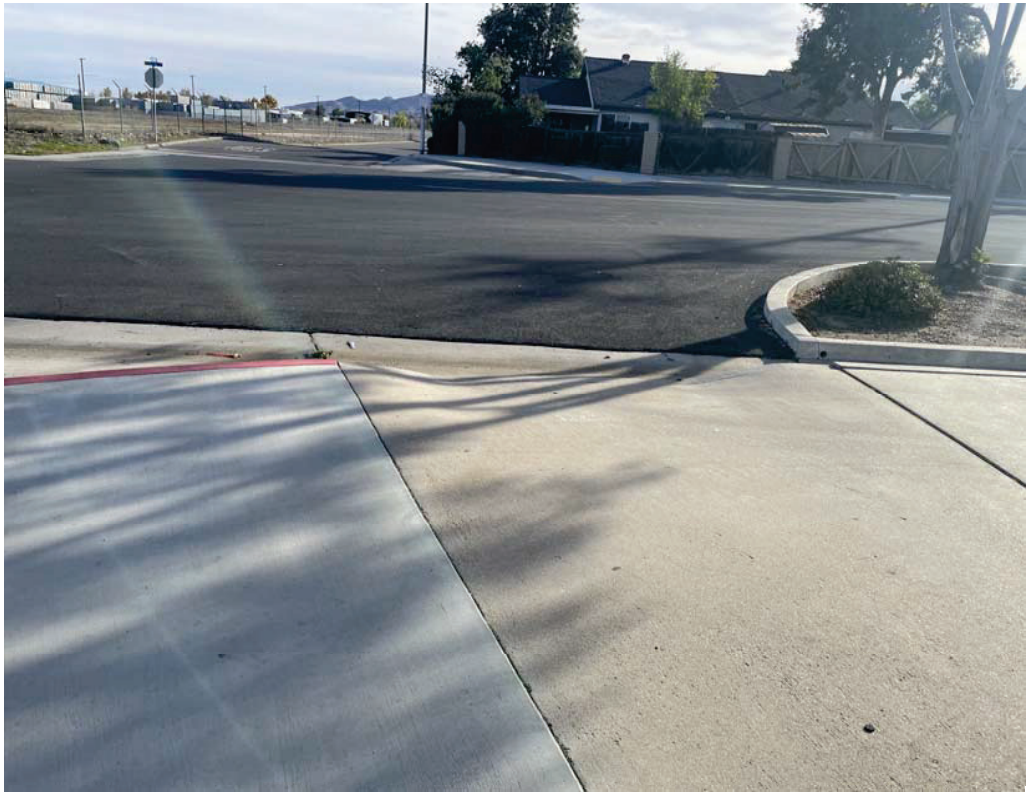
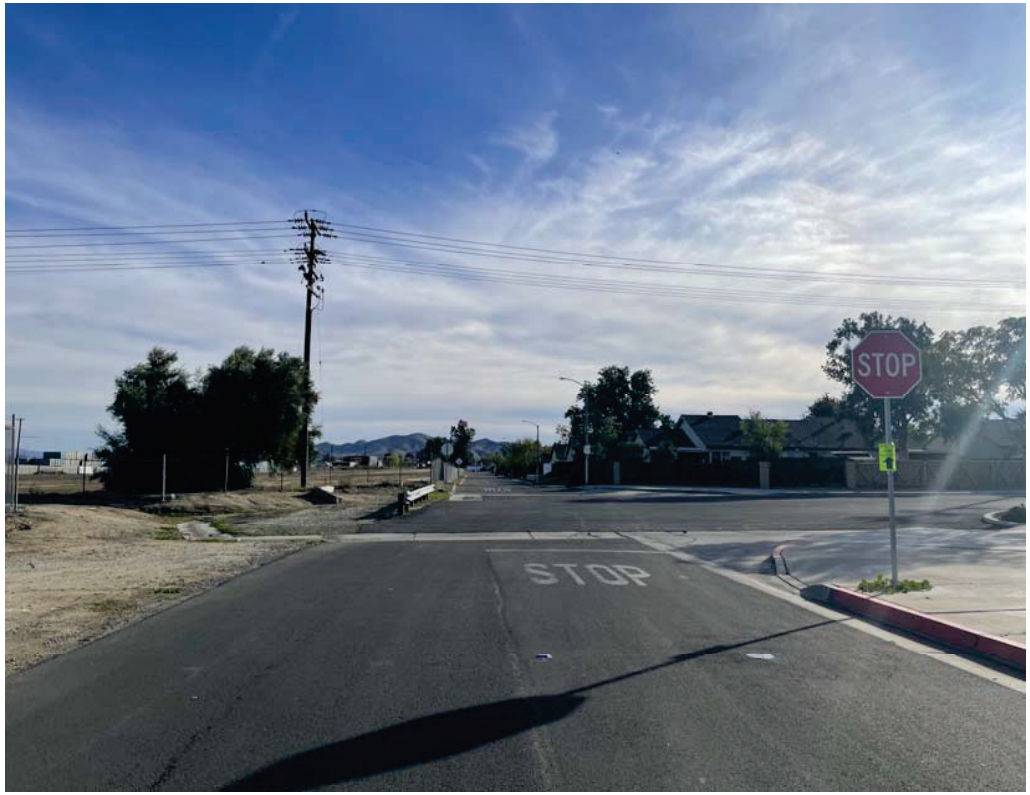
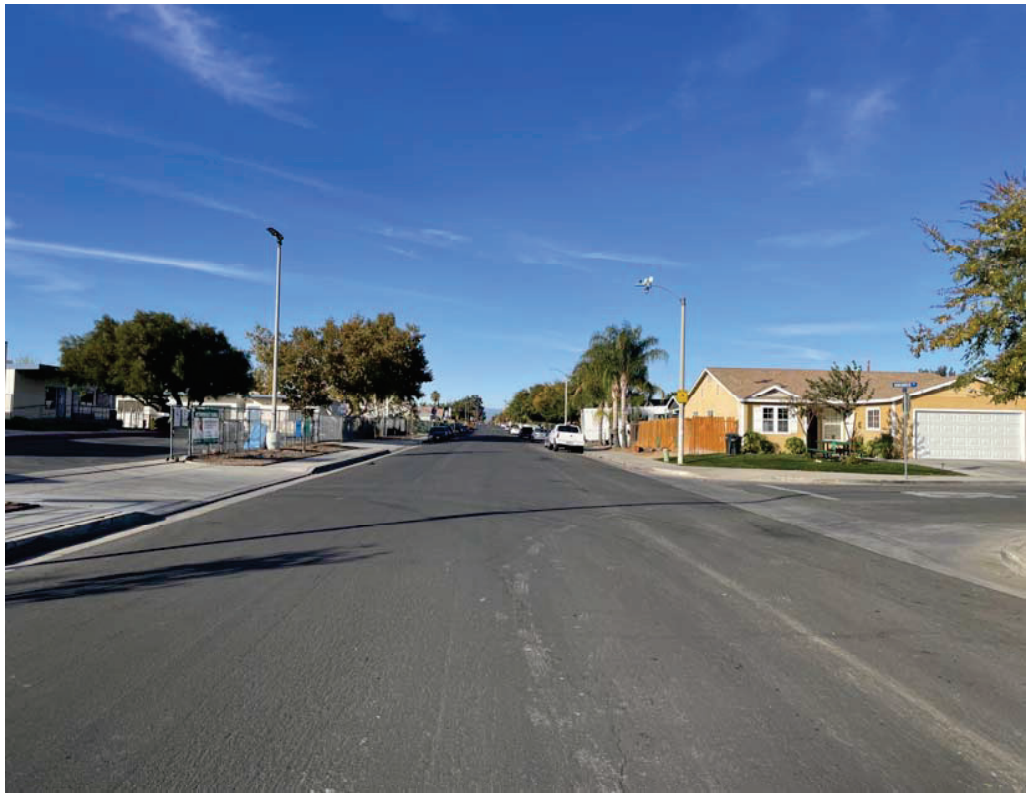
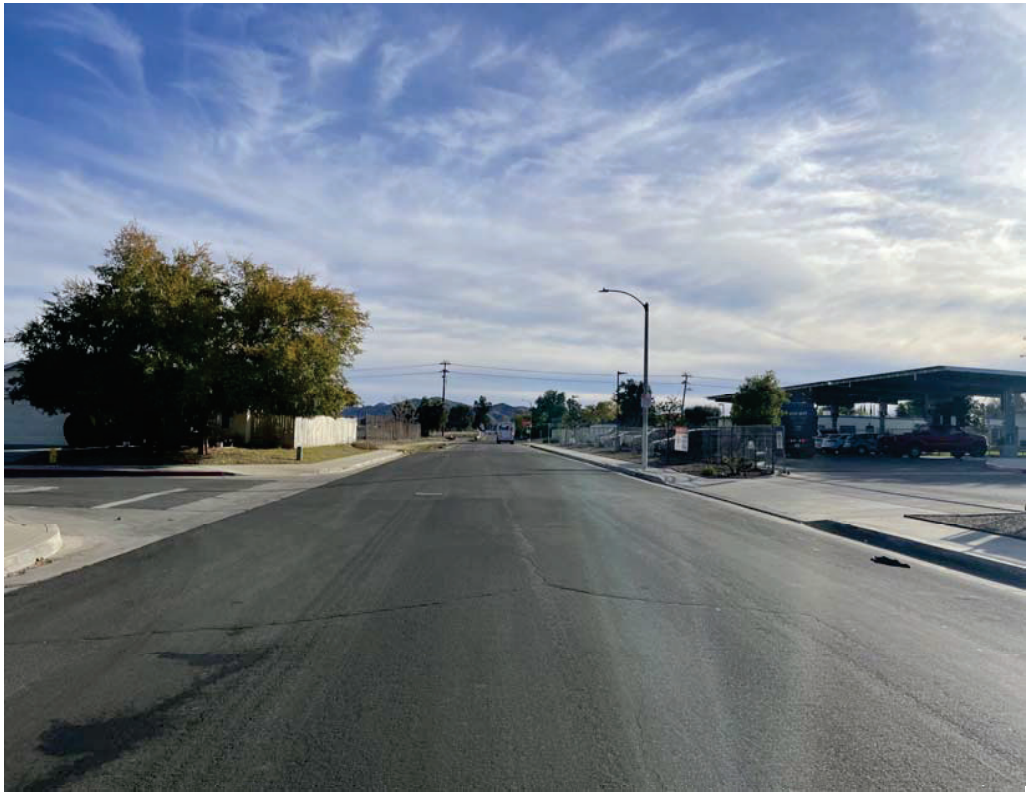


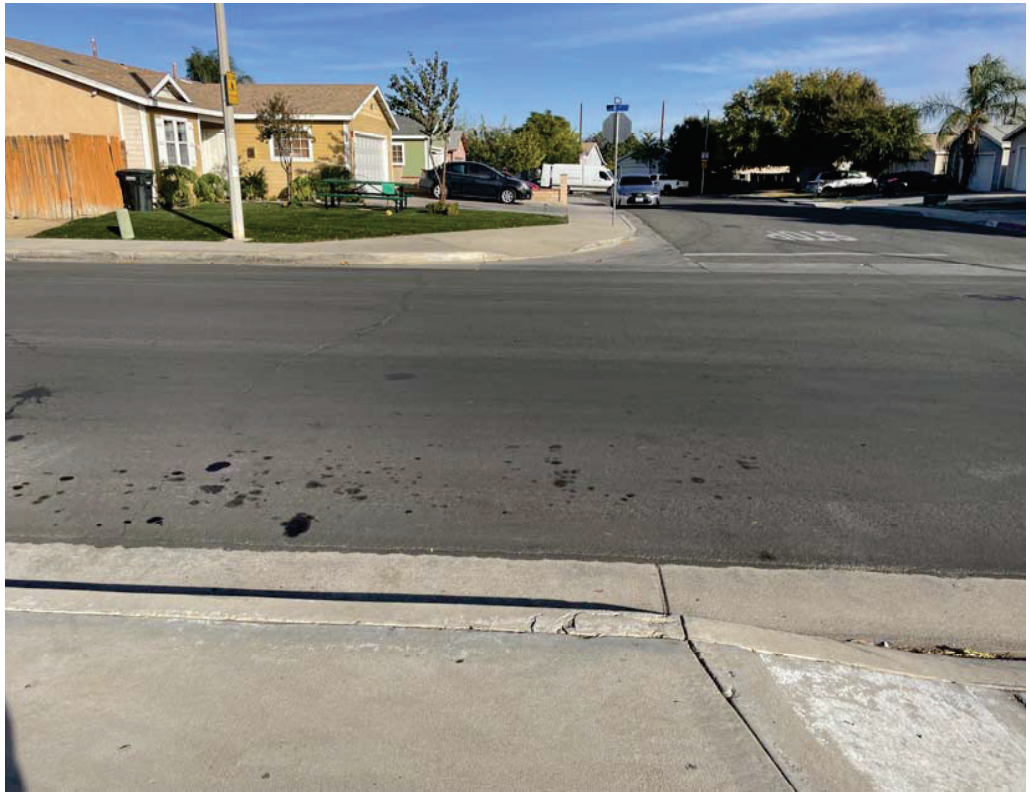


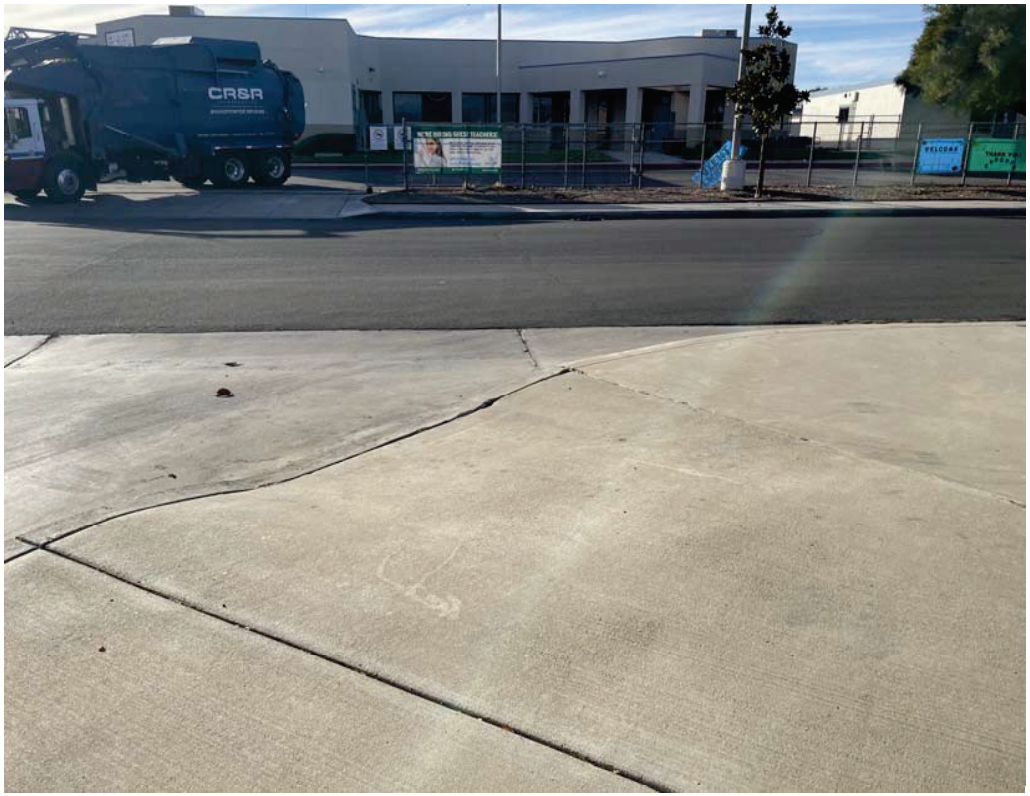

STOP
STOP

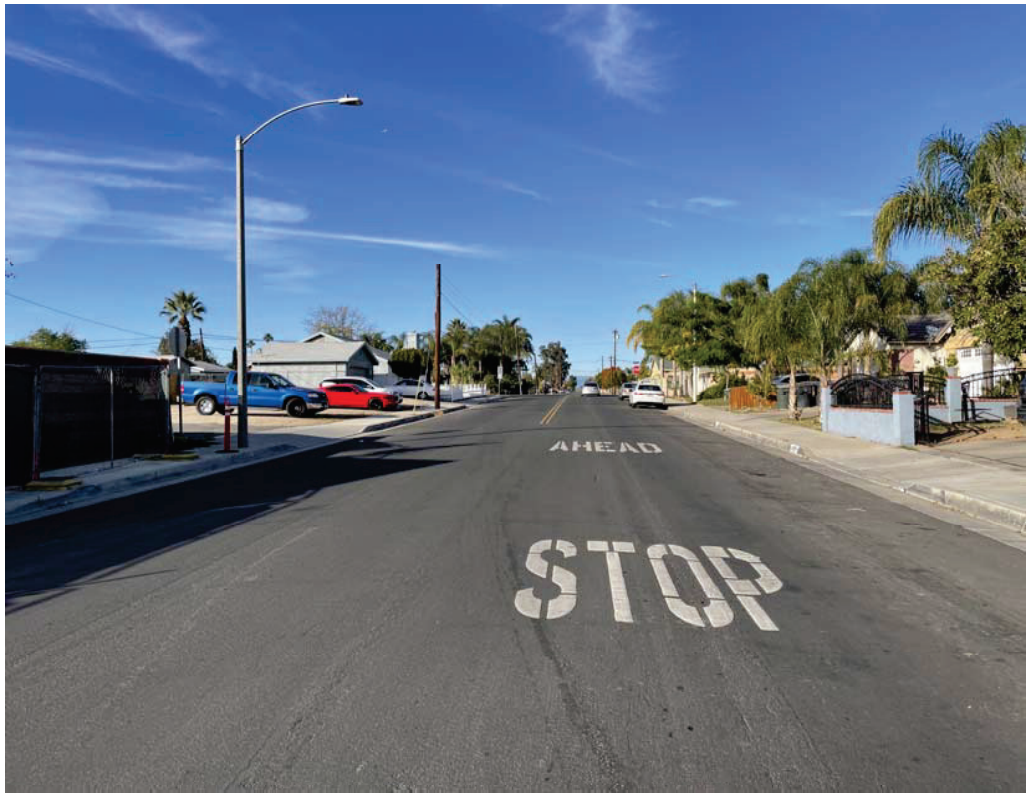

STOP
STOP








CR&R


AHEAD
STOP

Appendix E

CA MUTCD All-Way Stop Warrant Conditions

Support:

17 Caltrans will grant such permission only when an investigation indicates that the STOP (R1-1) sign will benefit traffic.

Section 2B.06 STOP Sign Applications

Guidance:

01 *At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs (see Sections 2B.08 and 2B.09).*

02 *The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:*

A. The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;

B. A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or

C. Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.

Support:

03 The use of STOP signs at grade crossings is described in Sections 8B.04 and 8B.05.

Section 2B.07 Multi-Way Stop Applications

Support:

01 Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.

02 The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications.

Guidance:

03 *The decision to install multi-way stop control should be based on an engineering study.*

04 *The following criteria should be considered in the engineering study for a multi-way STOP sign installation:*

A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.

C. Minimum volumes:

1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and

2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but

3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.

D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

Option:

05 Other criteria that may be considered in an engineering study include:

A. The need to control left-turn conflicts;

B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;

C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and

D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

Section 2B.08 YIELD Sign (R1-2)

Standard:

01 **The YIELD (R1-2) sign (see Figure 2B-1) shall be a downward-pointing equilateral triangle with a wide red border and the legend YIELD in red on a white background.**

Support:

02 The YIELD sign assigns right-of-way to traffic on certain approaches to an intersection. Vehicles controlled by a YIELD sign need to slow down to a speed that is reasonable for the existing conditions or stop when necessary to avoid interfering with conflicting traffic.

Section 2B.09 YIELD Sign Applications

Option:

01 YIELD signs may be installed:

A. On the approaches to a through street or highway where conditions are such that a full stop is not always required.

B. At the second crossroad of a divided highway, where the median width at the intersection is 30 feet or greater. In this case, a STOP or YIELD sign may be installed at the entrance to the first roadway of a divided highway, and a YIELD sign may be installed at the entrance to the second roadway.

C. For a channelized turn lane that is separated from the adjacent travel lanes by an island, even if the adjacent lanes at the intersection are controlled by a highway traffic control signal or by a STOP sign.

D. At an intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign.

E. Facing the entering roadway for a merge-type movement if engineering judgment indicates that control is needed because acceleration geometry and/or sight distance is not adequate for merging traffic operation.

Standard:

02 **A YIELD (R1-2) sign shall be used to assign right-of-way at the entrance to a roundabout. YIELD signs at roundabouts shall be used to control the approach roadways and shall not be used to control the circulatory roadway.**

03 **Other than for all of the approaches to a roundabout, YIELD signs shall not be placed on all of the approaches to an intersection.**

Section 2B.10 STOP Sign or YIELD Sign Placement

Standard:

01 **The STOP or YIELD sign shall be installed on the near side of the intersection on the right-hand side of the approach to which it applies. When the STOP or YIELD sign is installed at this required location and the sign visibility is restricted, a Stop Ahead sign (see Section 2C.36) shall be installed in advance of the STOP sign or a Yield Ahead sign (see Section 2C.36) shall be installed in advance of the YIELD sign.**

02 **The STOP or YIELD sign shall be located as close as practical to the intersection it regulates, while optimizing its visibility to the road user it is intended to regulate.**

02a **YIELD signs shall not be erected upon the approaches to more than one of the intersecting streets. Refer to CVC 21356.**

03 **STOP signs and YIELD signs shall not be mounted on the same post.**

04 **No items other than inventory stickers, sign installation dates, and bar codes shall be affixed to the fronts of STOP or YIELD signs, and the placement of these items shall be in the border of the sign.**

05 **No items other than official traffic control signs, inventory stickers, sign installation dates, anti-vandalism stickers, and bar codes shall be mounted on the backs of STOP or YIELD signs.**

06 **No items other than retroreflective strips (see Section 2A.21) or official traffic control signs shall be mounted on the fronts or backs of STOP or YIELD signs supports.**

Appendix F

All-Way Stop Warrants Worksheet

ALL-WAY STOP WARRANTS

Major Street: **B STREET** CALC JN DATE 12/7/2022
Minor Street: **MONTANOSO LANE** CHK RK DATE 12/7/2022
Scenario: **WEEKDAY**

CRITERIA SATISFIED FOR FOUR-WAY STOP CONTROL: NO

Any one of the following criteria may warrant four-way stop control:

A. TRAFFIC SIGNAL WARRANTED — SATISFIED = NO

Urgent need for a four-way stop as an interim measure: NO

B. ACCIDENTS — SATISFIED = NO

Number of Correctable Accidents: 0 (5 or more in a 12-month period)

C. MINIMUM VOLUMES — SATISFIED = NO

1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and — SATISFIED = NO; Total Volume = 141

2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but — SATISFIED = NO; Minor Volume = 26

3. If the 85th-percentile approach speed of the major-street traffic exceeds 65 km/h or exceeds 40 mph, the mimimum vehicular volume warrants are 70% of the above values. — SATISFIED = NO; Critical Speed = 36

   Combined average vehicle volume exceeds 210 (300 * 70%) — SATISFIED = NO
   Combined average minor volume exceeds 140 (200 * 70%) — SATISFIED = NO

Peak Hour Period		Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	TOTAL	AVG.
		7-8	8-9	12-1	1-2	2-3	3-4	4-5	5-6	VOL.	VOL.
Major Street	Vehicles	205	180	79	120	240	114	90	100	1128	141
Minor Street	Vehicles	24	38	18	16	25	36	7	8	172	22
	Pedestrians	0	7	1	0	25	0	4	0	37	5
	Subtotal	24	45	19	16	50	36	11	8	209	26
				TOTAL AVERAGE HOURLY VOLUME							167

D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80% of the minimum values. Criterion C.3 is excluded from this condition. — SATISFIED = NO

Number of correctable accidents exceeds 4 (5 * 80%) — SATISFIED = NO
Combined average vehicle volume exceeds 240 (300 * 80%) — SATISFIED = NO
Combined average minor volume exceeds 160 (200 * 80%) — SATISFIED = NO

OPTION:

Other criteria that may be considered include:

E. The need to control left-turn conflicts — NO

F. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes; — NO

G. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop; and — NO

H. An intersection of two residential neighborhod collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection. — NO

ALL-WAY STOP WARRANTS

Major Street: **B STREET** CALC JN DATE 12/7/2022
Minor Street: **ELLIS AVENUE** CHK RK DATE 12/7/2022
Scenario: **WEEKDAY**

CRITERIA SATISFIED FOR FOUR-WAY STOP CONTROL: YES

Any one of the following criteria may warrant four-way stop control:

A. TRAFFIC SIGNAL WARRANTED — SATISFIED = NO

Urgent need for a four-way stop as an interim measure: NO

B. ACCIDENTS — SATISFIED = NO

Number of Correctable Accidents: 0 (5 or more in a 12-month period)

C. MINIMUM VOLUMES — SATISFIED = NO

1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and — SATISFIED = NO; Total Volume = 82

2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but — SATISFIED = NO; Minor Volume = 59

3. If the 85th-percentile approach speed of the major-street traffic exceeds 65 km/h or exceeds 40 mph, the mimimum vehicular volume warrants are 70% of the above values. — SATISFIED = NO; Critical Speed = 34

   Combined average vehicle volume exceeds 210 (300 * 70%) — SATISFIED = NO
   Combined average minor volume exceeds 140 (200 * 70%) — SATISFIED = NO

Peak Hour Period		Hr 1 7-8	Hr 2 8-9	Hr 3 1-2	Hr 4 2-3	Hr 5 3-4	Hr 6 4-5	Hr 7 5-6	Hr 8 6-7	TOTAL VOL.	AVG. VOL.
Major Street	Vehicles	83	85	75	117	94	70	78	57	659	82
Minor Street	Vehicles	112	77	37	109	32	23	28	12	430	54
	Pedestrians	2	3	1	16	8	12	0	0	42	5
	Subtotal	114	80	38	125	40	35	28	12	472	59
				TOTAL AVERAGE HOURLY VOLUME							141

D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80% of the minimum values. Criterion C.3 is excluded from this condition. — SATISFIED = NO

Number of correctable accidents exceeds 4 (5 * 80%) — SATISFIED = NO
Combined average vehicle volume exceeds 240 (300 * 80%) — SATISFIED = NO
Combined average minor volume exceeds 160 (200 * 80%) — SATISFIED = NO

OPTION:

Other criteria that may be considered include:

E. The need to control left-turn conflicts — YES

F. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes; — YES

G. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop; and — NO

H. An intersection of two residential neighborhod collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection. — NO

Appendix G

Traffic Signal Warrants Worksheet

CALIFORNIA MUTCD 2012 EDITION

Traffic Signal Warrants Worksheet

Jurisdiction: **CITY OF PERRIS** CALC JN DATE 12/7/2022

Major Street: **B STREET** CHK RK DATE 12/7/2022

Minor Street: **MONTANOSO LANE**

Traffic Condition: **EXISTING CONDITIONS**

Critical speed of major street = **36** mph

Roadway Class: Urban (U)

Major Approach Lanes = **1**

Minor Approach Lanes = **1**

WARRANT 1 - Eight Hour Vehicular Volume

Condition A - Minimum Vehicle Volume

100% SATISFIED = **NO**

80% SATISFIED = **NO**

Minimum Major Approach Volume = 500

Minimum Minor Approach Volume = 150

	Minimum Requirements (80% shown in Brackets)												
	U	R	U	R	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	%
Approach Lanes	1		2 or More		**7-8**	**8-9**	**12-1**	**1-2**	**2-3**	**3-4**	**4-5**	**5-6**	Satisfy
Both Approaches	500	350	600	420									
Major Street	(400)	(280)	(480)	(336)	**205**	**180**	**79**	**120**	**240**	**114**	**90**	**100**	**NONE**
Highest Approach	150	105	200	140									
Minor Street	(120)	(84)	(160)	(112)	**20**	**24**	**12**	**11**	**14**	**29**	**6**	**8**	**NONE**

Condition B - Interruption of Continuous Traffic

100% SATISFIED = **NO**

80% SATISFIED = **NO**

Minimum Major Approach Volume = 750

Minimum Minor Approach Volume = 75

	Minimum Requirements (80% shown in Brackets)												
	U	R	U	R	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	%
Approach Lanes	1		2 or More		**7-8**	**8-9**	**12-1**	**1-2**	**2-3**	**3-4**	**4-5**	**5-6**	Satisfy
Both Approaches	750	525	900	630									
Major Street	(600)	(420)	(720)	(504)	**205**	**180**	**79**	**120**	**240**	**114**	**90**	**100**	**NONE**
Highest Approach	75	53	100	70									
Minor Street	(60)	(42)	(80)	(56)	**20**	**24**	**12**	**11**	**14**	**29**	**6**	**8**	**NONE**

Traffic Signal Warrants Worksheet

Combination of Conditions A & B SATISFIED = **NO**

REQUIREMENT	WARRANT	FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME	**NO**
	2. INTERRUPTION OF CONTINUOUS TRAFFIC	**NO**

WARRANT 2 - Four Hour Vehicular Volume SATISFIED = **NO**

Record hourly vehicular volumes for four hours.

APPROACH LANES	Number of Lanes	2-3	7-8	8-9	3-4
Both Approaches - Major Street	1	240	205	180	114
Highest Approach - Minor Street	1	14	20	24	29

WARRANT 3 - Peak Hour **PART A or PART B SATISFIED = NO**

PART A **SATISFIED = NO**

(All parts 1, 2, and 3 below must be satisfied)

1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach; AND **N**

2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND **N**

3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches. **N**

PART B **SATISFIED = NO**

Approach Lanes	Number of Lanes	2-3	7-8	8-9	3-4
Both Approaches - Major Street	1	240	205	180	114
Highest Approach - Minor Street	1	14	20	24	29

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume vehicle minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above the applicable curves in MUTCD Figure 4C-3 or 4C-4.

Traffic Signal Warrants Worksheet

WARRANT 4 - Pedestrian Volume
(All Parts Must Be Satisfied)

100% SATISFIED = NO

REQUIREMENT	Fulfilled
Pedestrian volume crossing the major street is 100 or more for each of any four hours OR is 190 or more during any one hour;	**N**
AND, There are less than 60 gaps per hour in the major street traffic stream of adequate length for pedestrians to cross;	**N**
AND, The distance to the nearest traffic signal along the major street is greater than 90m (300ft);	**--**
AND, The new traffic signal will not seriously disrupt progressive traffic flow on the major street.	**N**

The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion, or other evidence of the need for right-of-way assignment must be shown.

WARRANT 5 - School Crossing
(All Parts Must Be Satisfied)

100% SATISFIED = NO

PART A

SATISFIED = NO

EACH OF TWO HOURS ---------->		7-8	2-3
Gaps vs Minutes	Minutes Children Using Crossing	**60**	**60**
	Number of Adequate Gaps	**60**	**60**
School Age Pedestrians Crossing Street		**3**	**32**

GAPS < MINUTES SATISFIED = NO

CHILDREN > 20/HR SATISFIED = NO

PART B

Is Nearest Controlled Crossing More Than 180 m (600 ft) away? **Y**

Traffic Signal Warrants Worksheet

WARRANT 6 - Coordinated Signal System **100% SATISFIED = NO**
(All Parts Must Be Satisfied)

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	FULFILLED
>300 m (1000 ft)	North 0 ft South 0 ft East 0 ft West 0 ft	NO
On one way isolated streets or streets with one way traffic significance and adjacent signals are so far apart that necessary platooning and speed control would be lost.		NO
On 2-way streets where adjacent signals do not provide necessary platooning and speed control proposed signals could constitute a progressive signal syste.		

WARRANT 7 - Crash Warrant **100% SATISFIED = NO**
(All Parts Must Be Satisfied)

REQUIREMENTS	WARRANT	FULFILLED
One Warrant Satisfied 80%	Warrant 1 - Minimum Vehicular Volume OR Warrant 2 - Interruption of Continuous Traffic	N
Signal will not seriously disrupt prgressive traffic flow.		N
Adequate Trial of Less Restrictive Remedies Has Failed to Reduce Accident Frequency		N
Acc. Within a 12 Month Period Susceptible for Corr. & Involving Injury or ≥ $500 Damage		N
MINIMUM REQUIREMENTS	NUMBER OF ACCIDENTS	
5 or More	0	

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Traffic Signal Warrants Worksheet

WARRANT 8 - Roadway Network **100% SATISFIED = NO**
(All Parts Must Be Satisfied)

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES			FULFILLED
1000 Veh/Hr	Durring Typical Weekday Peak Hour	**265**	Veh/Hr.	**NO**
	OR			
	During Each of Any 5 Hrs. of a Sat. and/or Sun	**0**	Veh/Hr.	

CHARACTERISTICS OF MAJOR ROUTES	MAJOR ST.	MINOR ST.	
Hwy System Serving as Principal Network for Through Traffic	**N**	**N**	
Rural or Suburban Highway Outside Of, Entering, or Traversing a City	**N**	**N**	
Appears as Major Route on an Official Plan	**N**	**N**	
Any Major Route Characteristics Met, Both Streets			**NO**

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Traffic Signal Warrants Worksheet

Jurisdiction: **CITY OF PERRIS** CALC JN DATE 12/7/2022

Major Street: **B STREET** CHK RK DATE 12/7/2022

Minor Street: **ELLIS AVENUE**

Traffic Condition: **EXISTING CONDITIONS**

Critical speed of major street = **34** mph

Roadway Class: Urban (U)

Major Approach Lanes = **1**

Minor Approach Lanes = **1**

WARRANT 1 - Eight Hour Vehicular Volume

Condition A - Minimum Vehicle Volume

100% SATISFIED = **NO**

80% SATISFIED = **NO**

Minimum Major Approach Volume = 500

Minimum Minor Approach Volume = 150

	Minimum Requirements (80% shown in Brackets)												
	U	R	U	R	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	%
Approach Lanes	1		2 or More		**7-8**	**8-9**	**1-2**	**2-3**	**3-4**	**4-5**	**5-6**	**6-7**	Satisfy
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	**83**	**85**	**75**	**117**	**94**	**70**	**78**	**57**	**NONE**
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	**112**	**77**	**37**	**109**	**32**	**23**	**28**	**12**	**NONE**

Condition B - Interruption of Continuous Traffic

100% SATISFIED = **NO**

80% SATISFIED = **NO**

Minimum Major Approach Volume = 750

Minimum Minor Approach Volume = 75

	Minimum Requirements (80% shown in Brackets)												
	U	R	U	R	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	%
Approach Lanes	1		2 or More		**7-8**	**8-9**	**1-2**	**2-3**	**3-4**	**4-5**	**5-6**	**6-7**	Satisfy
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	**83**	**85**	**75**	**117**	**94**	**70**	**78**	**57**	**NONE**
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	**112**	**77**	**37**	**109**	**32**	**23**	**28**	**12**	**NONE**

Traffic Signal Warrants Worksheet

Combination of Conditions A & B SATISFIED = **NO**

REQUIREMENT	WARRANT	FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME	**NO**
	2. INTERRUPTION OF CONTINUOUS TRAFFIC	**NO**

WARRANT 2 - Four Hour Vehicular Volume SATISFIED = **NO**

Record hourly vehicular volumes for four hours.

APPROACH LANES	Number of Lanes	2-3	7-8	8-9	3-4
Both Approaches - Major Street	1	117	83	85	94
Highest Approach - Minor Street	1	109	112	77	32

WARRANT 3 - Peak Hour **PART A or PART B SATISFIED = NO**

PART A **SATISFIED = NO**

(All parts 1, 2, and 3 below must be satisfied)

1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach; AND — **N**

2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND — **Y**

3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches. — **N**

PART B **SATISFIED = NO**

Approach Lanes	Number of Lanes	2-3	7-8	8-9	3-4
Both Approaches - Major Street	1	117	83	85	94
Highest Approach - Minor Street	1	109	112	77	32

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume vehicle minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above the applicable curves in MUTCD Figure 4C-3 or 4C-4.

Traffic Signal Warrants Worksheet

WARRANT 4 - Pedestrian Volume
(All Parts Must Be Satisfied)

100% SATISFIED = NO

REQUIREMENT	Fulfilled
Pedestrian volume crossing the major street is 100 or more for each of any four hours OR is 190 or more during any one hour;	**N**
AND, There are less than 60 gaps per hour in the major street traffic stream of adequate length for pedestrians to cross;	**N**
AND, The distance to the nearest traffic signal along the major street is greater than 90m (300ft);	**--**
AND, The new traffic signal will not seriously disrupt progressive traffic flow on the major street.	**N**

The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion, or other evidence of the need for right-of-way assignment must be shown.

WARRANT 5 - School Crossing
(All Parts Must Be Satisfied)

100% SATISFIED = NO

PART A

SATISFIED = NO

EACH OF TWO HOURS ---------->		7-8	2-3
Gaps vs Minutes	Minutes Children Using Crossing	**60**	**60**
	Number of Adequate Gaps	**60**	**60**
School Age Pedestrians Crossing Street		**5**	**25**

GAPS < MINUTES SATISFIED = NO

CHILDREN > 20/HR SATISFIED = NO

PART B

Is Nearest Controlled Crossing More Than 180 m (600 ft) away? **Y**

Traffic Signal Warrants Worksheet

WARRANT 6 - Coordinated Signal System **100% SATISFIED = NO**
(All Parts Must Be Satisfied)

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	FULFILLED
>300 m (1000 ft)	North 0 ft South 0 ft East 0 ft West 0 ft	NO
On one way isolated streets or streets with one way traffic significance and adjacent signals are so far apart that necessary platooning and speed control would be lost.		NO
On 2-way streets where adjacent signals do not provide necessary platooning and speed control proposed signals could constitute a progressive signal syste.		

WARRANT 7 - Crash Warrant **100% SATISFIED = NO**
(All Parts Must Be Satisfied)

REQUIREMENTS	WARRANT	FULFILLED
One Warrant Satisfied 80%	Warrant 1 - Minimum Vehicular Volume OR Warrant 2 - Interruption of Continuous Traffic	N
Signal will not seriously disrupt prgressive traffic flow.		N
Adequate Trial of Less Restrictive Remedies Has Failed to Reduce Accident Frequency		N
Acc. Within a 12 Month Period Susceptible for Corr. & Involving Injury or ≥ $500 Damage		N
MINIMUM REQUIREMENTS	NUMBER OF ACCIDENTS	
5 or More	0	

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Traffic Signal Warrants Worksheet

WARRANT 8 - Roadway Network **100% SATISFIED = NO**
(All Parts Must Be Satisfied)

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES			FULFILLED
1000 Veh/Hr	Durring Typical Weekday Peak Hour	**226**	Veh/Hr.	**NO**
	OR			
	During Each of Any 5 Hrs. of a Sat. and/or Sun	**0**	Veh/Hr.	

CHARACTERISTICS OF MAJOR ROUTES	MAJOR ST.	MINOR ST.	
Hwy System Serving as Principal Network for Through Traffic	**N**	**N**	
Rural or Suburban Highway Outside Of, Entering, or Traversing a City	**N**	**N**	
Appears as Major Route on an Official Plan	**N**	**N**	
Any Major Route Characteristics Met, Both Streets			**NO**

12/7/2022

Appendix H

Federal Highway Administration (FHWA)
Marked Crosswalk Criteria

Table 1 provides initial countermeasure options for various roadway conditions. Each matrix cell indicates possibilities that may be appropriate for designated pedestrian crossings. Not all of the countermeasures listed in the matrix cell should necessarily be installed at a crossing.

For multi-lane roadway crossings with vehicle AADTs exceeding 10,000, a marked crosswalk alone is typically insufficient (Zegeer, 2005). Under such conditions, more substantial crossing improvements (such as the refuge island, PHB, and RRFB) are also needed to prevent an increase in pedestrian crash potential.

Table 1. Application of pedestrian crash countermeasures by roadway feature.

Roadway Configuration	Posted Speed Limit and AADT (B Street X-Walk)								
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
2 lanes (1 lane in each direction)	● 2 ○ 4 5 6	● 5 6 7 9	○ 5 6 ● ●	● 4 5 6	● 5 6 7 9	○ 5 6 ● ●	● 4 5 6 7 9	○ 5 6 7 9	○ 5 6 ●
3 lanes with raised median (1 lane in each direction)	● 2 3 4 5	● ● 5 7 9	○ ● 5 ● ●	○ 3 4 5 7 9	○ ● 5 ● ●	○ ● 5 ● ●	○ ● 4 5 7 9	○ ● 5 ● ●	○ ● 5 ●
3 lanes w/o raised median (1 lane in each direction with a two-way left-turn lane)	● 2 3 4 5 6 7 9	● ● 5 6 7 9	○ ● 5 6 ●	○ 3 4 5 6 7 9	○ ● 5 6 ● ●	○ ● 5 6 ●	○ ● 4 5 6 7 9	○ ● 5 6 ●	○ ● 5 6 ●
4+ lanes with raised median (2 or more lanes in each direction)	● ● 5 7 8 9	● ● 5 7 8 9	○ ● 5 8 ●	○ ● 5 7 8 9	○ ● 5 ● 8 ●	○ ● 5 8 ●	● ● 5 ● 8 ●	○ ● 5 8 ●	○ ● 5 8 ●
4+ lanes w/o raised median (2 or more lanes in each direction)	● ● 5 6 7 8 9	○ ● 5 ○ 7 8 9	○ ● 5 ○ 8 ●	○ ● 5 ○ 7 8 9	○ ● 5 ○ ● 8 ●	○ ● 5 ○ 8 ●	○ ● 5 ○ ● 8 ●	○ ● 5 ○ 8 ●	○ ● 5 ○ 8 ●

Given the set of conditions in a cell,

- # Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
- ● Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
- ○ Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.*

The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs
2 Raised crosswalk
3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
4 In-Street Pedestrian Crossing sign
5 Curb extension
6 Pedestrian refuge island
7 Rectangular Rapid-Flashing Beacon (RRFB)**
8 Road Diet
9 Pedestrian Hybrid Beacon (PHB)**

Refer to Chapter 4, 'Using Table 1 and Table 2 to Select Countermeasures,' for more information about using multiple countermeasures.

***It should be noted that the PHB and RRFB are not both installed at the same crossing location.*

This table was developed using information from: Zegeer, C.V., J.R. Stewart, H.H. Huang, P.A. Lagerwey, J. Feaganes, and B.J. Campbell. (2005). Safety effects of marked versus unmarked crosswalks at uncontrolled locations: Final report and recommended guidelines. FHWA, No. FHWA-HRT-04-100, Washington, D.C.; FHWA. Manual on Uniform Traffic Control Devices, 2009 Edition. (revised 2012). Chapter 4F, Pedestrian Hybrid Beacons. FHWA, Washington, D.C.; FHWA. Crash Modification Factors (CMF) Clearinghouse. http://www.cmfclearinghouse.org/; FHWA. Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE). http://www.pedbikesafe.org/PEDSAFE/; Zegeer, C., R. Srinivasan, B. Lan, D. Carter, S. Smith, C. Sundstrom, N.J. Thirsk, J. Zegeer, C. Lyon, E. Ferguson, and R. Van Houten. (2017). NCHRP Report 841: Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments. Transportation Research Board, Washington, D.C.; Thomas, Thirsk, and Zegeer. (2016). NCHRP Synthesis 498: Application of Pedestrian Crossing Treatments for Streets and Highways. Transportation Research Board, Washington, D.C.; and personal interviews with selected pedestrian safety practitioners.

Table 1 provides initial countermeasure options for various roadway conditions. Each matrix cell indicates possibilities that may be appropriate for designated pedestrian crossings. Not all of the countermeasures listed in the matrix cell should necessarily be installed at a crossing.

For multi-lane roadway crossings with vehicle AADTs exceeding 10,000, a marked crosswalk alone is typically insufficient (Zegeer, 2005). Under such conditions, more substantial crossing improvements (such as the refuge island, PHB, and RRFB) are also needed to prevent an increase in pedestrian crash potential.

Table 1. Application of pedestrian crash countermeasures by roadway feature.

Roadway Configuration	Posted Speed Limit and AADT (Ellis Avenue X-Walk)								
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
2 lanes (1 lane in each direction)	❶ 2 4 5 6	❶ 5 6 7 9	① 5 6 ❼ ❾	❶ 4 5 6	❶ 5 6 7 9	① 5 6 ❼ ❾	❶ 4 5 6 7 9	① 5 6 7 9	① 5 6 ❾
3 lanes with raised median (1 lane in each direction)	❶ 2 3 4 5 7 9	❶ ❸ 5 7 9	① ❸ 5 ❼ ❾	① 3 4 5 7 9	① ❸ 5 ❼ ❾	① ❸ 5 ❼ ❾	① ❸ 4 5 7 9	① ❸ 5 ❼ ❾	① ❸ 5 ❾
3 lanes w/o raised median (1 lane in each direction with a two-way left-turn lane)	❶ 2 3 4 5 6 7 9	❶ ❸ 5 6 7 9	① ❸ 5 6 ❾	① 3 4 5 6 7 9	① ❸ 5 6 ❼ ❾	① ❸ 5 6 ❾	① ❸ 4 5 6 7 9	① ❸ 5 6 ❾	① ❸ 5 6 ❾
4+ lanes with raised median (2 or more lanes in each direction)	❶ ❸ 5 7 8 9	❶ ❸ 5 7 8 9	① ❸ 5 8 ❾	① ❸ 5 7 8 9	① ❸ 5 ❼ 8 9	① ❸ 5 8 ❾	① ❸ 5 ❼ 8 9	① ❸ 5 8 ❾	① ❸ 5 8 ❾
4+ lanes w/o raised median (2 or more lanes in each direction)	❶ ❸ 5 6 7 8 9	① ❸ 5 ❻ 7 8 9	① ❸ 5 ❻ 8 ❾	① ❸ 5 ❻ 7 8 9	① ❸ 5 ❻ ❼ 8 9	① ❸ 5 ❻ 8 ❾	① ❸ 5 ❻ ❼ 8 9	① ❸ 5 ❻ 8 ❾	① ❸ 5 ❻ 8 ❾

Given the set of conditions in a cell,

- \# Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
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- ○ Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.*

The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs
2 Raised crosswalk
3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
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5 Curb extension
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7 Rectangular Rapid-Flashing Beacon (RRFB)**
8 Road Diet
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Refer to Chapter 4, 'Using Table 1 and Table 2 to Select Countermeasures,' for more information about using multiple countermeasures.

***It should be noted that the PHB and RRFB are not both installed at the same crossing location.*

This table was developed using information from: Zegeer, C.V., J.R. Stewart, H.H. Huang, P.A. Lagerwey, J. Feaganes, and B.J. Campbell. (2005). Safety effects of marked versus unmarked crosswalks at uncontrolled locations: Final report and recommended guidelines. FHWA, No. FHWA-HRT-04-100, Washington, D.C.; FHWA. Manual on Uniform Traffic Control Devices, 2009 Edition. (revised 2012). Chapter 4F, Pedestrian Hybrid Beacons. FHWA, Washington, D.C.; FHWA. Crash Modification Factors (CMF) Clearinghouse. http://www.cmfclearinghouse.org/; FHWA. Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE). http://www.pedbikesafe.org/PEDSAFE/; Zegeer, C., R. Srinivasan, B. Lan, D. Carter, S. Smith, C. Sundstrom, N.J. Thirsk, J. Zegeer, C. Lyon, E. Ferguson, and R. Van Houten. (2017). NCHRP Report 841: Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments. Transportation Research Board, Washington, D.C.; Thomas, Thirsk, and Zegeer. (2016). NCHRP Synthesis 498: Application of Pedestrian Crossing Treatments for Streets and Highways. Transportation Research Board, Washington, D.C.; and personal interviews with selected pedestrian safety practitioners.