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April 13, 2026

Ketan T. Patel
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C² Reference: 25.036

Springhill Suites – Traffic Signal Warrant Analysis for Balboa Avenue and Morena Boulevard Northbound Ramp, Morena Boulevard and Jutland Drive (PRJ-1129794)
City of San Diego, CA

Dear Ketan,

This letter summarizes the traffic signal warrant analysis prepared for the Springhill Suites project in relation to the Balboa Avenue Station Area Specific Plan (BASASP) Supplemental Development Regulations (SDRs), adopted by the City of San Diego in 2019 and by the California Coastal Commission in 2021. The analysis focuses on the two intersections identified in the SDRs as being linked to development within the Community Village land use designation.

The purpose of this analysis is to document the project’s compliance with the applicable SDRs and to clarify the extent to which the proposed development contributes to traffic conditions at the studied intersections. The signal warrant evaluation has been updated in response to City of San Diego comments to address all applicable MUTCD traffic signal warrants, consistent with Council Policy 200-06.

The signal warrant evaluation is based on warrant worksheets prepared by Kimley-Horn for the 2923 Bunker Hill Street residential project, which is subject to the same SDR requirements and evaluates the same study intersections. This approach is consistent with the City’s direction to coordinate with related projects and to utilize available data to maintain consistency as described below in detail.

The warrant analysis reflects existing traffic conditions at the study intersections, which are independent of any individual project and applicable across multiple evaluations of the same locations.

The proposed project generates minimal traffic. This level of traffic does not materially affect intersection volumes or the outcome of any MUTCD signal warrant. Accordingly, use of the previously prepared warrant worksheets is appropriate. The warrant determinations remain unchanged with inclusion of project traffic, and preparation of new warrant worksheets would not alter the conclusions.



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This approach ensures consistency across related projects while avoiding unnecessary duplication of analysis.

The intersections evaluated as part of this analysis are summarized below, along with the applicable SDR requirements:

SDR-5: No development permits shall be issued for any development project on properties designated Community Village until a traffic signal has been installed at the intersection of the Morena Boulevard northbound ramp and Balboa Avenue, unless the warrants for a traffic signal are not met as determined by the City Engineer in accordance with Council Policy 200-06.

SDR-6: No development permits shall be issued for any development project on properties designated Community Village until either a traffic signal or a roundabout is installed at the intersection of Morena Boulevard and Jutland Drive, unless the warrants for a traffic signal are not met as determined by the City Engineer in accordance with Council Policy 200-06.

Project Description

The project site is located at 4545 Mission Bay Drive in the Pacific Beach community. The proposed development proposes to demolish an existing 66-room hotel to construct a 100-room, four-story lodging facility with subterranean parking for 84 vehicle parking spaces and associated amenities that include a pool, garden patios, lounge areas, a fitness center, convenience retail, and food and beverage space. The proposed project requires a discretionary Coastal Development Permit (CDP).

The project is located within the Community Village Area of the Balboa Avenue Station Area Specific Plan (BASASP) and the Pacific Beach Community Plan area. The project site is located in Mobility Zone 2 of the Complete Communities Mobility Choices program and within both a Parking Standards Transit Priority Area and a Transit Priority Area. The site is designated Community Village and zoned CC-3-8. The proposed use is consistent with the applicable land use and zoning regulations.

Data Collection

Traffic counts were collected in the City of San Diego on Tuesday, July 8, 2025, at the following locations:

- Morena Blvd NB Ramps & Balboa Ave
- Morena Blvd & Jutland Dr

Directional 24-hour volume data were summarized in 15-minute intervals (with hourly totals) on the volume sheets for the Morena Blvd NB Ramps and Balboa Ave approach segments.

Intersection turning movement counts were also provided for vehicles, bicycles, and pedestrians at crosswalks for the AM, midday, and PM periods, with data tabulated in 15-minute intervals. Raw traffic counts are provided in **Attachment A**.

Trip Generation

Trip generation estimates were prepared using the City of San Diego Land Development Code Trip

Generation Manual (2003). The proposed Springhill Suites project is estimated to generate approximately 900 average daily trips (ADT), including 72 AM peak hour trips and 81 PM peak hour trips. To determine net new project trips, existing trips associated with the on-site motel use were accounted for using observed driveway activity. Driveway counts were conducted on September 9, 2025 under typical weekday conditions.

On the count date, the existing motel operated at approximately 94 percent occupancy, with 62 of 66 rooms occupied. A total of 287 raw daily driveway trips were recorded. The driveway peak hours were identified based on the highest four consecutive 15-minute intervals observed on the count date combining traffic from both site driveways, occurring from 8:30 AM to 9:30 AM and from 4:00 PM to 5:00 PM. During the AM peak hour, 20 trips were recorded (7 inbound, 13 outbound; 33:67 split), and during the PM peak hour, 32 trips were recorded (16 inbound, 16 outbound; 50:50 split).

The observed driveway volumes were scaled up to represent full-occupancy conditions by adjusting for the 94 percent occupancy observed on both the count date and the night prior. This adjustment results in approximately 305 daily driveway trips, including 21 AM peak hour trips (7 inbound, 14 outbound) and 34 PM peak hour trips (17 inbound, and 17 outbound) at full occupancy.

These adjusted existing driveway trips were subtracted from the gross project trip generation estimates to calculate net new trips attributable to the proposed development. Based on this analysis, net new project trips used for screening and assignment purposes are estimated to be 51 AM peak hour trips and 47 PM peak hour trips after accounting for existing on-site motel traffic.

Consistent with City guidance, no pass-by or diverted trips were assumed. The resulting net new trip estimates represent cumulative project trips and were used for trip distribution, assignment, and proportional contribution analyses. **Table 1** summarizes the daily and peak hour trip generation estimates for the project. Driveway count data and supporting summaries are provided in **Attachment B**.

Table 1 – Project Trip Generation

Land Use	Size	Trip Rate ^a	ADT ^b	% of ADT	AM Peak Hour ^c				% of ADT	PM Peak Hour			
					In:Out Split	In	Out	Total		In:Out Split	In	Out	Total
Proposed													
Motel	100 rooms	9 / room	900	8%	40:60	29	43	72	9%	40:60	32	49	81
Existing													
Motel	66 rooms	n/a	305	n/a	33:67	7	14	21	n/a	50:50	17	17	34
TOTAL NET TRIPS			595			22	29	51			15	32	47

Notes:

- Trip generation rates are based on San Diego Land Development Code - Trip Generation Manual (May 2003)
- Average Daily Traffic
- AM and PM peak hours are between 6-9am and 4-6pm, respectively.
- Existing volumes based on driveway counts conducted on 9/9/2025 and adjusted to full occupancy
- No pass-by or diverted trips were assumed, in accordance with City guidance. As a result, the trip estimates represent both driveway volumes and total cumulative project trips.



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Trip Distribution and Assignment

Trip distribution for the SpringHill Suites project follows the same framework from the signal warrant analysis prepared for the 2923 Bunker Hill Street project (PRJ-1132845). In that analysis, regional travel pattern data from a proxy site was used to evaluate likely origins and destinations of project-related trips in the surrounding area. The data was obtained from Replica, which provides location-based service data. The resulting inbound and outbound travel patterns were translated into directional distribution percentages used to assign project trips to the roadway network.

To maintain consistency with that analysis, the SpringHill Suites project applies the same directional distribution assumptions. The Bunker Hill Street project is a residential development, whereas the SpringHill Suites project is a lodging facility. While these land uses may exhibit different travel patterns - with residential trips more oriented toward employment centers and hotel trips toward commercial and tourist destinations - the Bunker Hill distribution assigns a higher proportion of project trips to the study intersections and is therefore more conservative from a signal warrant perspective. Given the small number of net new project trips, the choice of distribution does not materially affect the warrant outcomes. Separate inbound and outbound distribution percentages are shown in **Figure 1** and were used to assign project trips to the study intersections evaluated in the signal warrant analysis.

According to the data, only a small portion of project trips are assigned to Morena Boulevard at Jutland Drive, including approximately 1 percent of inbound trips traveling southbound on Morena Boulevard and approximately 0.5 percent of outbound trips traveling northbound on Morena Boulevard. At the Balboa Avenue and Morena Boulevard northbound ramp intersection, approximately 21 percent of outbound trips travel through the intersection on Balboa Avenue in the eastbound direction and approximately 1 percent travel on the eastbound right turn movement toward Morena Boulevard. Peak hour project volumes for the Springhill Suites project are shown in **Figure 2**.

Applying the trip distribution to the project trip generation would result in a negligible number of project trips at the Morena Boulevard and Jutland Drive intersection. Access to and from Jutland Drive does not provide a logical or efficient route for project traffic based on roadway connectivity, access control, and proximity to the site.

The proposed trip distribution is illustrated in **Figure 1**, which shows the relative direction and proportion of project traffic movements. Project trip assignment is shown in **Figure 2**. Given the limited number of project trips, the assignment would result in approximately 65 added daily trips with 6 AM and 7 PM peak hour trips at the Morena Boulevard northbound ramp intersection, with no project trips assigned to Morena Boulevard and Jutland Drive.

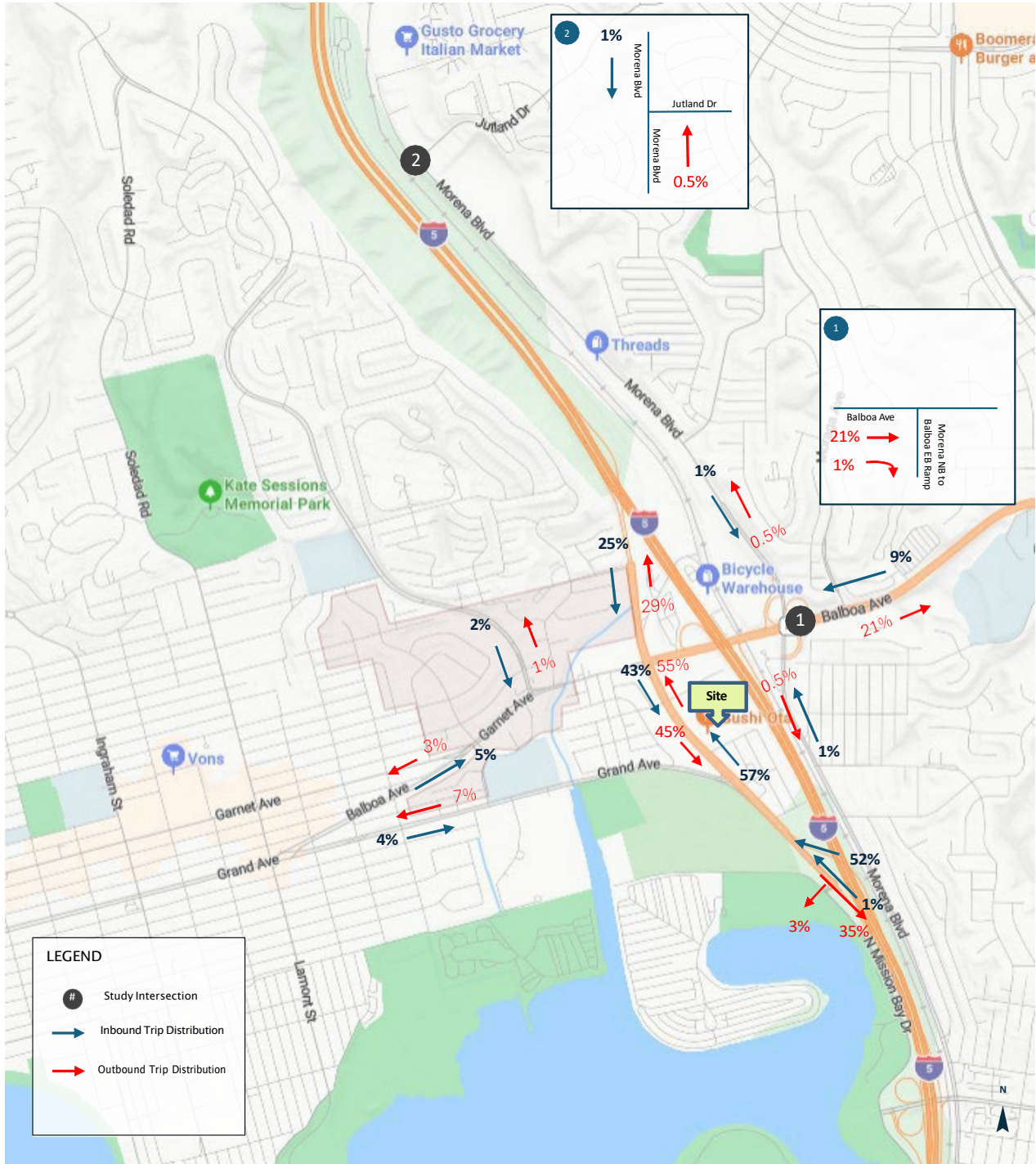


Figure 1 - Project Distribution

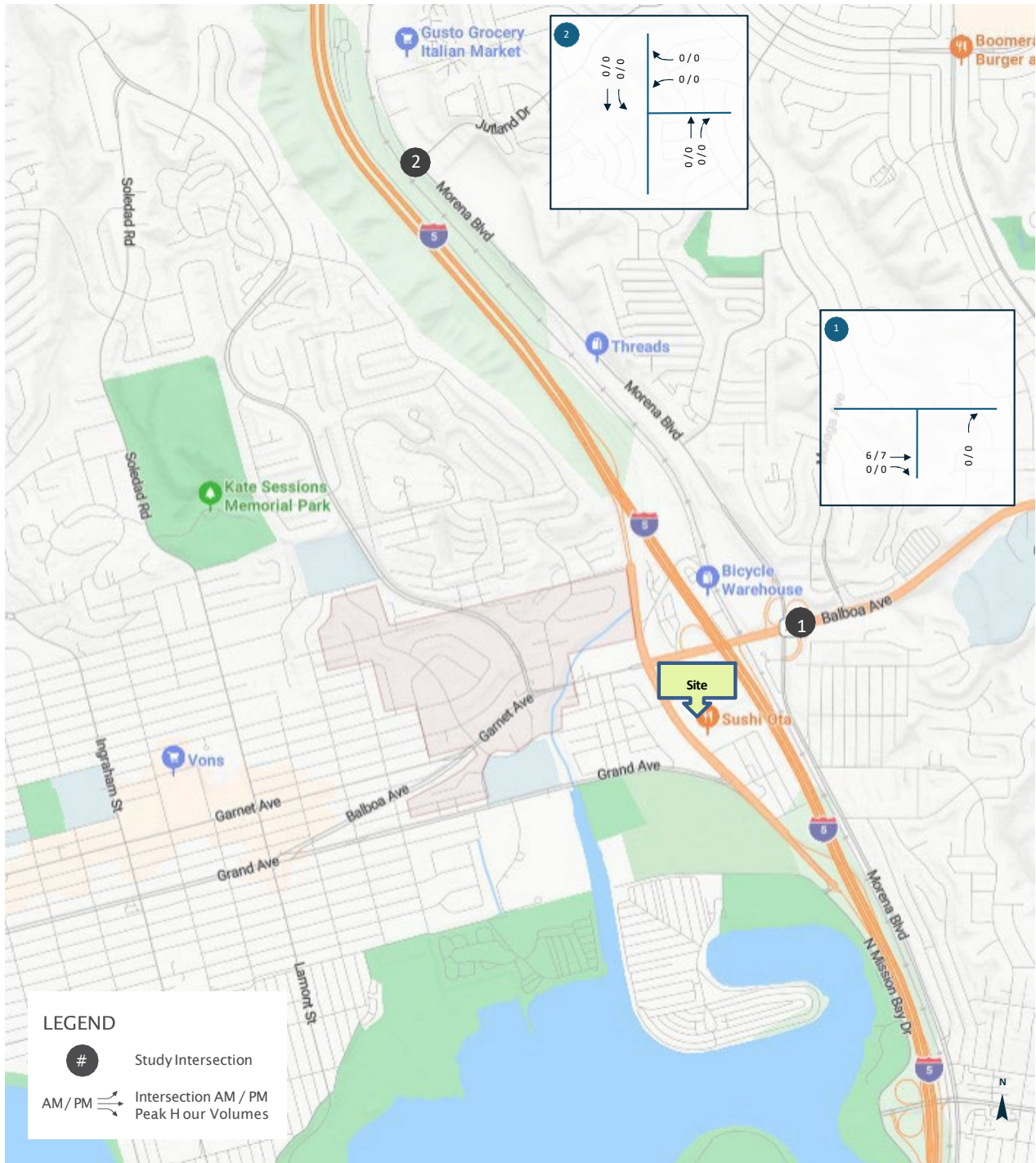


Figure 2 - Project Assignment

Signal Warrant Analysis

SDR-5: Balboa Avenue and Morena Boulevard Northbound Ramps

Intersection Context

The intersection of Balboa Avenue and the Morena Boulevard northbound on-ramp is located within the Pacific Beach Community Plan area. Balboa Avenue is classified as a five-lane major street under the Community Plan and functions as a primary east-west arterial serving both regional and local traffic.

Balboa Avenue is median-separated with distinct eastbound and westbound roadways. In the eastbound direction approaching the Morena Boulevard northbound on-ramp, Balboa Avenue provides two continuous through lanes and a dedicated right-turn-only lane serving the ramp. There is no traffic control on Balboa Avenue at this location.

The Morena Boulevard northbound on-ramp operates as a right-in, right-out connection to Balboa Avenue. The ramp approach consists of a single right-turn lane and is controlled by a YIELD sign at the ramp terminal.

A marked high-visibility pedestrian crosswalk is provided across the south leg of the intersection, crossing the Morena Boulevard northbound on-ramp. No other pedestrian crossings are present at the intersection. Per City records, the 85th percentile speed on eastbound Balboa Avenue at the Morena Boulevard northbound on-ramp is 42 mph. This operating speed is relevant to the applicability of MUTCD signal warrant criteria.

Signal Warrant Evaluation Summary

A comprehensive traffic signal warrant evaluation was conducted for the intersection of Balboa Avenue and the Morena Boulevard northbound ramps in accordance with Part 4 of the California MUTCD. All applicable traffic signal warrants were evaluated.

Based on the warrant worksheets, the following determinations apply to this intersection:

- Warrant 1 – Eight-Hour Vehicular Volume: **Met**
- Warrant 2 – Four-Hour Vehicular Volume: **Met**
- Warrant 3 – Peak Hour: **Met (PM)**
- Warrant 4 – Pedestrian Volume: Not met
- Warrant 5 – School Crossing: Not applicable
- Warrant 6 – Coordinated Signal System: Not met
- Warrant 7 – Crash Experience: Not met
- Warrant 8 – Roadway Network: Not met
- Warrant 9 – Intersection Near a Grade Crossing: Not applicable

Warrant 5 is not applicable due to the absence of qualifying school crossing conditions at this location. All other warrants were evaluated in accordance with California MUTCD criteria and determined to be either met or not met as documented in the warrant worksheets included in **Attachment C**. The Statewide Integrated Traffic Records System (SWITRS) crash data is included in **Attachment D**.



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The signal warrant analysis is based on the observed existing traffic count volumes documented in the worksheets only and does not include traffic from the Springhill or Bunker Hill projects. Based on the trip distribution and assignment, the project would contribute approximately 6 AM and 7 PM peak hour entering trips.

SDR-6: Morena Boulevard and Jutland Drive

Intersection Context

The intersection of Morena Boulevard and Jutland Drive is located within the Clairemont Community Plan area. Morena Boulevard is classified as a four-lane major street under the Community Plan and functions as a primary north-south arterial serving both regional and local traffic. Jutland Drive functions as a minor street providing local access to adjacent land uses.

Morena Boulevard at this location consists of two northbound lanes and two southbound lanes. The intersection operates under all-way stop control, with Morena Boulevard serving as the major street.

The Jutland Drive approach consists of a dedicated left-turn lane and a dedicated right-turn lane. Traffic on Jutland Drive is controlled by STOP signs at the intersection with Morena Boulevard.

Pedestrian accommodation includes curb ramps at the intersection corners; however, no marked pedestrian crosswalks are provided. Per City records, the 85th percentile speed on Morena Boulevard at Jutland Drive is 48 mph. This operating speed is relevant to the applicability and interpretation of MUTCD signal warrant criteria.

Signal Warrant Evaluation Summary

A comprehensive traffic signal warrant evaluation was conducted for the intersection of Morena Boulevard and Jutland Drive in accordance with Part 4 of the California MUTCD. All applicable traffic signal warrants were evaluated.

Based on the warrant worksheets, the following determinations apply to this intersection:

- Warrant 1 – Eight-Hour Vehicular Volume: **Met**
- Warrant 2 – Four-Hour Vehicular Volume: **Met**
- Warrant 3 – Peak Hour: **Met (PM)**
- Warrant 4 – Pedestrian Volume: Not met
- Warrant 5 – School Crossing: Not applicable
- Warrant 6 – Coordinated Signal System: Not met
- Warrant 7 – Crash Experience: Not met
- Warrant 8 – Roadway Network: Not met
- Warrant 9 – Intersection Near a Grade Crossing: Not applicable



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Warrant 5 is not applicable due to the absence of qualifying school crossing conditions at this location. All other warrants were evaluated in accordance with California MUTCD criteria and determined to be either met or not met as documented in the warrant worksheets included in **Attachment C**. The Statewide Integrated Traffic Records System (SWITRS) crash data is included in **Attachment D**.

The signal warrant analysis is based on the observed existing traffic count volumes documented in the worksheets only and does not include traffic from the Springhill or Bunker Hill projects. Project-generated traffic at this location is considered negligible.

Fair Share Contribution

The SDRs identify the need to evaluate whether traffic signal warrants are met at the two study intersections. The SDRs do not include a fair share requirement. However, a proportional comparison is provided for informational purposes to illustrate the project’s relative contribution to total entering volumes at the study locations.

This comparison is based on project peak hour trips and existing entering volumes derived from Warrant Analysis worksheets in **Attachment C**.

At Balboa Avenue and the Morena Boulevard NB Ramps, the project contributes approximately 6 AM peak hour trips and 7 PM peak hour trips, resulting in proportional contributions of 0.36% (AM) and 0.28% (PM) based on existing entering volumes. Consistent with City of San Diego practice, the higher of the two peak hour proportional contributions is used to determine fair share. In this case, the AM peak hour value of 0.36% governs the fair share evaluation.

At Morena Boulevard and Jutland Drive, no project traffic is assigned to this intersection under the current trip distribution and assignment assumptions. As a result, the project’s proportional share is 0.00 percent during both the AM and PM peak hours.

Table 3 summarizes the project proportional contribution at the study intersections

Table 3 - Fair Share Calculations

Intersection	AM				PM			
	Existing Entering Trips	Project Trips	Existing + Project Trips	Fair Share	Existing Entering Trips	Project Trips	Existing + Project Trips	Fair Share
1. Balboa Avenue at Morena Boulevard NB Ramps	1,667	6	1,673	0.36%	2,530	7	2,537	0.28%
2. Morena Boulevard and Jutland Drive	766	0	766	0.00%	1,244	0	1,244	0.00%

Please call us at 858.270.4444 or email walter.musial@c2-mobility.com with any questions or comments regarding this technical letter.

Sincerely,
the Consulting Collective C²



Walter B. Musial, PE, RSP
Principal
California Registration: TR2382

25.036 C2 Pacific Beach Hotel Warrant Analysis_2026-4-10

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ATTACHMENT SUMMARY

- Attachment A** Traffic Counts
- Attachment B** Driveway Counts
- Attachment C** Warrant Analysis Worksheets
- Attachment D** SWITRS Data



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ATTACHMENT A

Traffic Counts

VOLUME

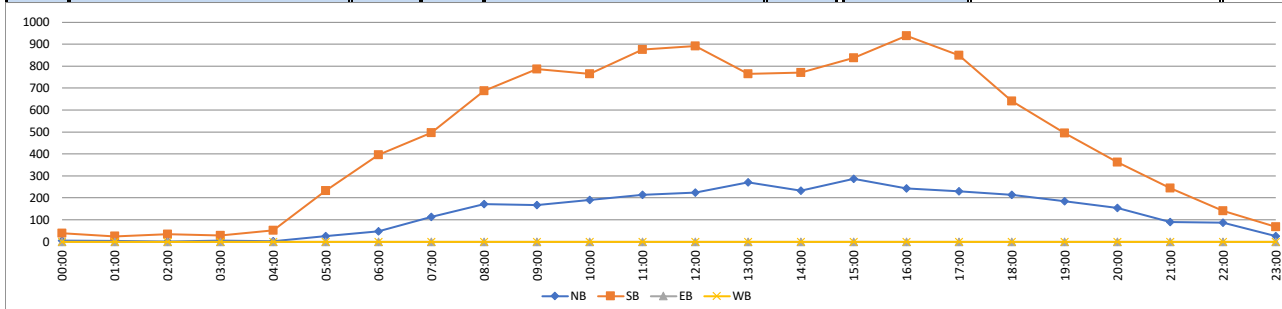
Morena Blvd NB Ramps S/O Balboa Ave

Day: Tuesday
Date: 7/8/2025

City: San Diego
Project #: CA25_040117_004

DAILY TOTALS						NB	SB	EB	WB	Total	DAILY TOTALS					
						3,188	11,420	0	0	14,608						

15-Minutes Interval												Hourly Intervals																																																																																																																																									
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Peak Period	07:00 to 09:00																																																																																																																																																				
Volume	284	1184			1468																																																																																																																																																
Peak Hour	8:00	8:00			8:00																																																																																																																																																
Peak Volume	171	687			858																																																																																																																																																
Peak Hour Factor	0.807	0.814			0.813																																																																																																																																																
Peak Period	16:00 to 18:00																																																																																																																																																				
Volume	472	1787			2259																																																																																																																																																
Peak Hour	16:15	16:00			16:15																																																																																																																																																
Peak Volume	252	938			1186																																																																																																																																																
Peak Hour Factor	0.887	0.942			0.956																																																																																																																																																
6:15	7	92			99	18:15	56	203			259																																																																																																																																										
6:30	16	114			130	18:30	58	154			212																																																																																																																																										
6:45	14	119			133	18:45	42	120			162																																																																																																																																										
7:00	18	128			146	19:00	54	129			183																																																																																																																																										
7:15	30	115			145	19:15	42	125			167																																																																																																																																										
7:30	29	121			150	19:30	47	112			159																																																																																																																																										
7:45	36	133			169	19:45	42	129			171																																																																																																																																										
8:00	33	136			169	20:00	39	109			148																																																																																																																																										
8:15	52	178			230	20:15	41	97			138																																																																																																																																										
8:30	33	162			195	20:30	38	96			134																																																																																																																																										
8:45	53	211			264	20:45	36	60			96																																																																																																																																										
9:00	37	210			247	21:00	24	66			90																																																																																																																																										
9:15	34	172			206	21:15	26	61			87																																																																																																																																										
9:30	56	179			235	21:30	19	69			88																																																																																																																																										
9:45	40	226			266	21:45	21	48			69																																																																																																																																										
10:00	48	202			250	22:00	42	57			99																																																																																																																																										
10:15	39	187			226	22:15	30	34			64																																																																																																																																										
10:30	45	178			223	22:30	10	23			33																																																																																																																																										
10:45	58	197			255	22:45	5	27			32																																																																																																																																										
11:00	56	211			267	23:00	6	19			25																																																																																																																																										
11:15	54	237			291	23:15	11	18			29																																																																																																																																										
11:30	54	213			267	23:30	6	16			22																																																																																																																																										
11:45	50	214			264	23:45	2	15			17																																																																																																																																										
TOTALS	947	4418	0	0	5365	TOTALS	2241	7002	0	0	9243																																																																																																																																										
SPLIT %	18%	82%	0%	0%	37%	SPLIT %	24%	76%	0%	0%	63%																																																																																																																																										



VOLUME

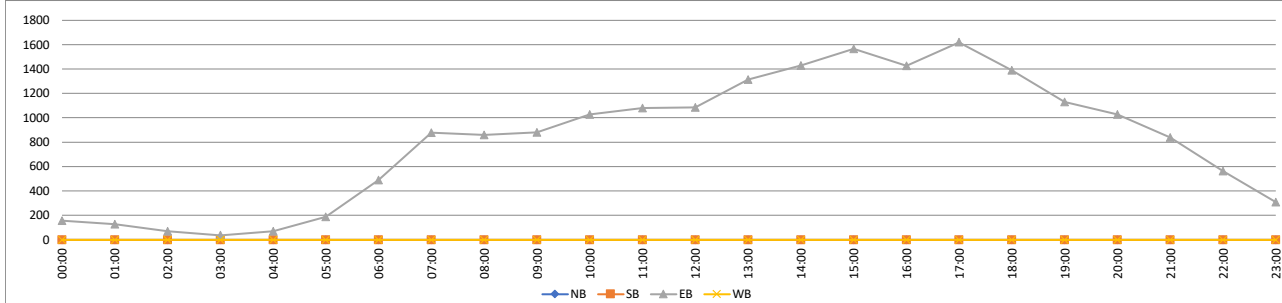
Balboa Ave E/O Morena Blvd NB Ramps

Day: Tuesday
Date: 7/8/2025

City: San Diego
Project #: CA25_040117_005

DAILY TOTALS						NB	SB	EB	WB	Total	DAILY TOTALS					
						0	0	19,556	0	19,556						

15-Minutes Interval											Hourly Intervals						
TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL
0:00			39		39	12:00			277		277	00:00	01:00		157		157
0:15			39		39	12:15			271		271	01:00	02:00		128		128
0:30			30		30	12:30			272		272	02:00	03:00		71		71
0:45			49		49	12:45			265		265	03:00	04:00		38		38
1:00			47		47	13:00			320		320	04:00	05:00		71		71
1:15			32		32	13:15			333		333	05:00	06:00		187		187
1:30			28		28	13:30			337		337	06:00	07:00		489		489
1:45			21		21	13:45			324		324	07:00	08:00		877		877
2:00			22		22	14:00			342		342	08:00	09:00		859		859
2:15			21		21	14:15			318		318	09:00	10:00		880		880
2:30			19		19	14:30			384		384	10:00	11:00		1028		1028
2:45			9		9	14:45			385		385	11:00	12:00		1079		1079
3:00			13		13	15:00			357		357	12:00	13:00		1085		1085
3:15			10		10	15:15			381		381	13:00	14:00		1314		1314
3:30			8		8	15:30			429		429	14:00	15:00		1429		1429
3:45			7		7	15:45			398		398	15:00	16:00		1565		1565
4:00			15		15	16:00			338		338	16:00	17:00		1425		1425
4:15			18		18	16:15			346		346	17:00	18:00		1620		1620
4:30			20		20	16:30			360		360	18:00	19:00		1388		1388
4:45			18		18	16:45			381		381	19:00	20:00		1129		1129
5:00			20		20	17:00			425		425	20:00	21:00		1028		1028
5:15			35		35	17:15			400		400	21:00	22:00		838		838
5:30			46		46	17:30			416		416	22:00	23:00		562		562
5:45			86		86	17:45			379		379	23:00	00:00		309		309
6:00			97		97	18:00			329		329	STATISTICS					
6:15			88		88	18:15			386		386						
6:30			137		137	18:30			355		355	Peak Period	00:00	to	12:00		
6:45			167		167	18:45			318		318	Volume			5864		5864
7:00			167		167	19:00			294		294	Peak Hour			10:45		10:45
7:15			199		199	19:15			277		277	Peak Volume			1083		1083
7:30			235		235	19:30			306		306	Peak Hour Factor			0.900		0.900
7:45			276		276	19:45			252		252	Peak Period	12:00	to	00:00		
8:00			258		258	20:00			278		278	Volume			13692		13692
8:15			201		201	20:15			266		266	Peak Hour			16:45		16:45
8:30			211		211	20:30			257		257	Peak Volume			1622		1622
8:45			189		189	20:45			227		227	Peak Hour Factor			0.954		0.954
9:00			202		202	21:00			224		224	Peak Period	07:00	to	09:00		
9:15			217		217	21:15			208		208	Volume			1736		1736
9:30			227		227	21:30			249		249	Peak Hour			7:30		7:30
9:45			234		234	21:45			157		157	Peak Volume			970		970
10:00			240		240	22:00			201		201	Peak Hour Factor			0.879		0.879
10:15			249		249	22:15			160		160	Peak Period	16:00	to	18:00		
10:30			238		238	22:30			122		122	Volume			3045		3045
10:45			301		301	22:45			79		79	Peak Hour			16:45		16:45
11:00			244		244	23:00			116		116	Peak Volume			1622		1622
11:15			275		275	23:15			84		84	Peak Hour Factor			0.954		0.954
11:30			263		263	23:30			56		56						
11:45			297		297	23:45			53		53						
TOTALS	0	0	5864	0	5864	TOTALS	0	0	13692	0	13692						
SPLIT %	0%	0%	100%	0%	30%	SPLIT %	0%	0%	100%	0%	70%						



VOLUME

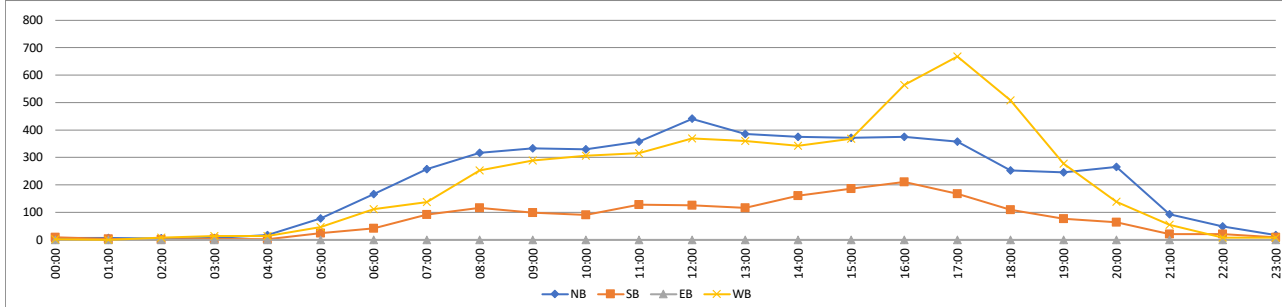
Morena Blvd & Jutland Dr

Day: Tuesday
Date: 7/8/2025

City: San Diego
Project #: CA25_040117_001

DAILY TOTALS					NB	SB	EB	WB	Total	DAILY TOTALS				
					5,107	1,877	0	5,159	12,143					

15-Minutes Interval											Hourly Intervals						
TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL
0:00	3	3	0	2	8	12:00	100	43	0	106	249	00:00 01:00	6	9	0	2	17
0:15	0	1	0	0	1	12:15	110	31	0	99	240	01:00 02:00	7	3	0	0	10
0:30	3	0	0	0	3	12:30	117	31	0	79	227	02:00 03:00	5	1	0	8	14
0:45	0	5	0	0	5	12:45	114	21	0	85	220	03:00 04:00	6	3	0	14	23
1:00	2	0	0	0	2	13:00	97	25	0	104	226	04:00 05:00	17	2	0	13	32
1:15	4	3	0	0	7	13:15	89	28	0	87	204	05:00 06:00	78	24	0	46	148
1:30	1	0	0	0	1	13:30	103	37	0	76	216	06:00 07:00	166	42	0	111	319
1:45	0	0	0	0	0	13:45	97	26	0	93	216	07:00 08:00	257	92	0	137	486
2:00	2	0	0	2	4	14:00	85	43	0	76	204	08:00 09:00	317	116	0	253	686
2:15	2	0	0	0	2	14:15	77	32	0	86	195	09:00 10:00	333	99	0	289	721
2:30	0	0	0	2	2	14:30	105	35	0	98	238	10:00 11:00	330	91	0	306	727
2:45	1	1	0	4	6	14:45	108	50	0	82	240	11:00 12:00	357	128	0	316	801
3:00	2	2	0	0	4	15:00	95	54	0	84	233	12:00 13:00	441	126	0	369	936
3:15	1	1	0	0	2	15:15	95	39	0	95	229	13:00 14:00	386	116	0	360	862
3:30	2	0	0	3	5	15:30	98	54	0	91	243	14:00 15:00	375	160	0	342	877
3:45	1	0	0	11	12	15:45	83	39	0	98	220	15:00 16:00	371	186	0	368	925
4:00	0	0	0	0	0	16:00	91	44	0	109	244	16:00 17:00	375	211	0	564	1150
4:15	5	0	0	3	8	16:15	90	58	0	157	305	17:00 18:00	358	168	0	668	1194
4:30	6	0	0	3	9	16:30	101	64	0	149	314	18:00 19:00	253	109	0	508	870
4:45	6	2	0	7	15	16:45	93	45	0	149	287	19:00 20:00	246	77	0	277	600
5:00	9	6	0	2	17	17:00	80	47	0	165	292	20:00 21:00	265	64	0	138	467
5:15	17	4	0	5	26	17:15	114	42	0	177	333	21:00 22:00	93	20	0	54	167
5:30	16	4	0	12	32	17:30	89	52	0	190	331	22:00 23:00	48	21	0	8	77
5:45	36	10	0	27	73	17:45	75	27	0	136	238	23:00 00:00	17	9	0	8	34
6:00	33	9	0	7	49	18:00	70	36	0	166	272	STATISTICS					
6:15	36	9	0	32	77	18:15	68	28	0	147	243	NB SB EB WB TOTAL					
6:30	46	11	0	34	91	18:30	52	23	0	102	177	Peak Period	00:00	to	12:00		
6:45	51	13	0	38	102	18:45	63	22	0	93	178	Volume	1879	610	1495	3984	
7:00	51	19	0	27	97	19:00	61	24	0	67	152	Peak Hour	8:45	11:00	10:45	10:45	
7:15	76	18	0	32	126	19:15	63	13	0	69	145	Peak Volume	361	128	333	805	
7:30	57	28	0	36	121	19:30	63	18	0	71	152	Peak Hour Factor	0.903	0.821	0.858	0.954	
7:45	73	27	0	42	142	19:45	59	22	0	70	151	Peak Period	12:00	to	00:00		
8:00	59	30	0	51	140	20:00	71	21	0	49	141	Volume	3228	1267	3664	8159	
8:15	83	22	0	57	162	20:15	67	11	0	45	123	Peak Hour	12:00	16:15	16:45	16:45	
8:30	75	32	0	63	170	20:30	69	14	0	18	101	Peak Volume	441	214	681	1243	
8:45	100	32	0	82	214	20:45	58	18	0	26	102	Peak Hour Factor	0.942	0.836	0.896	0.933	
9:00	88	21	0	59	168	21:00	29	7	0	12	48	Peak Period	07:00	to	09:00		
9:15	95	25	0	84	204	21:15	23	3	0	12	38	Volume	574	208	390	1172	
9:30	78	34	0	68	180	21:30	26	4	0	23	53	Peak Hour	8:00	8:00	8:00	8:00	
9:45	72	19	0	78	169	21:45	15	6	0	7	28	Peak Volume	317	116	253	686	
10:00	79	21	0	65	165	22:00	25	10	0	3	38	Peak Hour Factor	0.793	0.906	0.771	0.801	
10:15	79	17	0	92	188	22:15	12	7	0	2	21	Peak Period	16:00	to	18:00		
10:30	81	29	0	59	169	22:30	3	2	0	0	5	Volume	733	379	1232	2344	
10:45	91	24	0	90	205	22:45	8	2	0	3	13	Peak Hour	16:30	16:15	16:45	16:45	
11:00	88	32	0	74	194	23:00	6	7	0	3	16	Peak Volume	388	214	681	1243	
11:15	78	20	0	97	195	23:15	5	1	0	1	7	Peak Hour Factor	0.851	0.836	0.896	0.933	
11:30	100	39	0	72	211	23:30	3	1	0	3	7						
11:45	91	37	0	73	201	23:45	3	0	0	1	4						
TOTALS	1879	610	0	1495	3984	TOTALS	3228	1267	0	3664	8159						
SPLIT %	47%	15%	0%	38%	33%	SPLIT %	40%	16%	0%	45%	67%						



National Data & Surveying Services

Intersection Turning Movement Count

Location: Morena Blvd & Jutland Dr/4747 Morena Blvd Dwy
City: San Diego
Control: 4-Way Stop

Project ID: 25-040116-001
Date: 7/8/2025

Data - Bikes

NS/EW Streets:	Morena Blvd				Morena Blvd				Jutland Dr/4747 Morena Blvd Dwy				Jutland Dr/4747 Morena Blvd Dwy					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
	0	1	1	0	0.5	1.5	0	0	0	1	0	0	1	0	1	0	TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	1	0	0	0	0	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	1	0	0	0	1
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
9:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
9:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2	
TOTAL VOLUMES :	0	5	1	0	0	1	0	0	0	0	0	0	4	0	0	0	TOTAL	
APPROACH %'s :	0.00%	83.33%	16.67%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%		
PEAK HR :	08:45 AM - 09:45 AM																TOTAL	
PEAK HR VOL :	0	4	0	0	0	1	0	0	0	0	0	0	1	0	0	0	5	
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.417	
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
	0	1	1	0	0.5	1.5	0	0	0	1	0	0	1	0	1	0	TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	10:00 AM	0	0	0	0	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	0	0	0	0
	10:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	10:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL VOLUMES :	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	TOTAL
	APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	PEAK HR :	10:00 AM - 11:00 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
	0	1	1	0	0.5	1.5	0	0	0	1	0	0	1	0	1	0	TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	2:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2
	3:00 PM	0	0	0	0	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	2	0	0	0	2
	3:30 PM	0	0	0	0	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	0	0	0	0	
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	1	0	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	0	0	0	0	
5:00 PM	0	0	0	0	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	0	1	0	1	
5:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES :	0	3	1	0	0	5	0	0	0	0	0	0	3	0	1	0	TOTAL	
APPROACH %'s :	0.00%	75.00%	25.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	75.00%	0.00%	25.00%	0.00%	0.00%		
PEAK HR :	04:45 PM - 05:45 PM																TOTAL	
PEAK HR VOL :	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	3	
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.375	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Morena Blvd NB Ramps & Balboa Ave
City: San Diego
Control: 1-Way Yield(NB)

Project ID: 25-040116-002
Date: 7/8/2025

Data - Bikes

NS/EW Streets:	Morena Blvd NB Ramps				Morena Blvd NB Ramps				Balboa Ave				Balboa Ave					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
7:00 AM	0	0	0	0	0	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	0	0	0	0	0
7:30 AM	0	0	0	0	0	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	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	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	0	0	0	0	0
8:45 AM	0	0	0	0	0	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	1	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
9:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	TOTAL	5
APPROACH %'s :									0.00%	80.00%	20.00%	0.00%						
PEAK HR :	09:00 AM - 10:00 AM																TOTAL	
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	TOTAL	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.250	0.000	0.000	0.000	0.000	0.000		0.500

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
10:00 AM	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0
10:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	TOTAL	2
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%						
PEAK HR :	10:00 AM - 11:00 AM																TOTAL	
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	TOTAL	2
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000		0.500

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
2:00 PM	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0	4
2:45 PM	0	0	0	0	0	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	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	3	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	5
4:45 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	0	2	0	0	5
5:30 PM	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	3	0	4	0	0	0	0	0	0	8	5	0	0	10	0	0	TOTAL	30
APPROACH %'s :	42.86%	0.00%	57.14%	0.00%					0.00%	61.54%	38.46%	0.00%	0.00%	100.00%	0.00%	0.00%		
PEAK HR :	04:45 PM - 05:45 PM																TOTAL	
PEAK HR VOL :	0	0	2	0	0	0	0	0	0	6	1	0	0	2	0	0	TOTAL	11
PEAK HR FACTOR :	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.250	0.000	0.000	0.250	0.000	0.000		0.550

National Data & Surveying Services
Intersection Turning Movement Count

Location: Morena Blvd & Jutland Dr/4747 Morena Blvd Dwy
City: San Diego

Project ID: 25-040116-001
Date: 7/8/2025

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Morena Blvd		Morena Blvd		Jutland Dr/4747 Morena Blvd Dwy		Jutland Dr/4747 Morena Blvd Dwy		TOTAL
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
AM	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	1	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	0	1
9:00 AM	0	0	0	0	1	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	1	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	2	5	0	0	7
PEAK HR :	08:45 AM - 09:45 AM								
PEAK HR VOL :	0	0	0	0	1	2	0	0	3
PEAK HR FACTOR :					0.250	0.500			0.750
						0.750			
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
10:00 AM	0	0	0	0	0	1	0	0	1
10:15 AM	0	0	0	0	0	2	0	0	2
10:30 AM	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	4	0	0	0	4
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	4	3	0	0	7
PEAK HR :	10:00 AM - 11:00 AM								
PEAK HR VOL :	0	0	0	0	4	3	0	0	7
PEAK HR FACTOR :					0.250	0.375			0.438
						0.438			
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
2:00 PM	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	2	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	3	0	0	3
PEAK HR :	04:45 PM - 05:45 PM								
PEAK HR VOL :	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :						0.250			0.250
						0.250			

National Data & Surveying Services
Intersection Turning Movement Count

Location: Morena Blvd NB Ramps & Balboa Ave
City: San Diego

Project ID: 25-040116-002
Date: 7/8/2025

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Morena Blvd NB Ramps		Morena Blvd NB Ramps		Balboa Ave		Balboa Ave			
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	7:00 AM	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	1	1	0	0	0	2	
	7:45 AM	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	1	0	0	0	1	
	8:15 AM	0	0	1	0	0	0	0	1	
	8:30 AM	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	1	0	0	0	1	
	9:00 AM	0	0	0	1	0	0	0	1	
	9:15 AM	0	0	0	1	0	0	0	1	
	9:30 AM	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	1	0	0	0	1	
	TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	2	6	0	0	0	0	8	
PEAK HR :	09:00 AM - 10:00 AM								TOTAL	
PEAK HR VOL :	0	0	0	3	0	0	0	0	3	
PEAK HR FACTOR :			0.750	0.750					0.750	
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	10:00 AM	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	1	0	0	0	0	1	
	TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
	APPROACH %'s :	0	0	1	0	0	0	0	0	1
	PEAK HR :	10:00 AM - 11:00 AM								TOTAL
	PEAK HR VOL :	0	0	1	0	0	0	0	0	1
	PEAK HR FACTOR :			0.250	0.250					0.250
	PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
		EB	WB	EB	WB	NB	SB	NB	SB	
		2:00 PM	0	0	1	0	0	0	0	1
		2:15 PM	0	0	0	0	0	0	0	0
2:30 PM		0	0	1	0	0	0	0	1	
2:45 PM		0	0	0	0	0	0	0	0	
3:00 PM		0	0	0	0	0	0	0	0	
3:15 PM		0	0	1	1	0	0	0	2	
3:30 PM		0	0	0	1	0	0	0	1	
3:45 PM		0	0	0	1	0	0	0	1	
4:00 PM		0	0	0	0	0	0	0	0	
4:15 PM		0	0	0	0	0	0	0	0	
4:30 PM		0	0	0	0	0	0	0	0	
4:45 PM		0	0	0	0	0	0	0	0	
5:00 PM		0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	4	0	0	0	4		
5:30 PM	0	0	1	0	0	0	0	1		
5:45 PM	0	0	0	1	0	0	0	1		
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL	
APPROACH %'s :	0	0	4	8	0	0	0	0	12	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL	
PEAK HR VOL :	0	0	1	4	0	0	0	0	5	
PEAK HR FACTOR :			0.250	0.250					0.313	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Morena Blvd & Jutland Dr/4747 Morena Blvd Dwy
City: San Diego
Control: 4-Way Stop

Project ID: 25-040116-001
Date: 7/8/2025

Data - Totals

NS/EW Streets:	Morena Blvd				Morena Blvd				Jutland Dr/4747 Morena Blvd Dwy				Jutland Dr/4747 Morena Blvd Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	1 NR	0 NU	0.5 SL	1.5 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	1 WL	0 WT	1 WR	0 WU	
7:00 AM	1	26	24	0	1	18	0	0	0	0	0	0	26	0	1	0	97
7:15 AM	1	49	26	0	3	15	0	0	0	0	1	0	30	0	2	0	127
7:30 AM	1	32	24	0	3	25	0	0	0	0	0	0	29	0	7	0	121
7:45 AM	1	36	36	0	4	23	0	0	0	0	0	0	37	0	5	0	142
8:00 AM	2	22	35	0	1	29	0	0	0	0	0	0	46	0	4	1	140
8:15 AM	0	35	48	0	2	20	0	0	0	0	1	0	55	0	2	0	163
8:30 AM	1	25	48	1	4	28	0	0	0	0	0	0	58	0	5	0	170
8:45 AM	1	44	55	0	1	31	0	0	0	0	0	0	72	0	10	0	214
9:00 AM	0	38	50	0	1	20	0	0	0	0	0	0	52	0	7	0	168
9:15 AM	0	40	55	0	3	22	0	0	0	0	0	0	79	0	5	0	204
9:30 AM	1	30	47	0	2	32	0	0	0	0	0	0	65	0	5	0	180
9:45 AM	1	20	51	0	0	19	0	0	0	0	0	0	72	0	5	1	169
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	10	397	499	1	25	282	0	0	0	0	2	0	621	0	56	2	1895
	1.10%	43.77%	55.02%	0.11%	8.14%	91.86%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	91.46%	0.00%	8.25%	0.29%	
PEAK HR :	08:45 AM - 09:45 AM																TOTAL
PEAK HR VOL :	2	152	207	0	7	105	0	0	0	0	0	0	268	0	25	0	766
PEAK HR FACTOR :	0.500	0.864	0.941	0.000	0.583	0.820	0.000	0.000	0.000	0.000	0.000	0.000	0.848	0.000	0.625	0.000	0.895
		0.903				0.824								0.872			
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	1 NR	0 NU	0.5 SL	1.5 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	1 WL	0 WT	1 WR	0 WU	TOTAL
10:00 AM	0	27	52	0	4	17	0	0	0	0	1	0	60	0	5	0	166
10:15 AM	1	27	51	0	2	15	0	0	0	0	1	0	89	0	3	0	188
10:30 AM	0	24	57	0	1	28	0	0	0	0	0	0	55	0	4	0	169
10:45 AM	1	24	66	0	1	23	0	0	0	0	1	0	86	0	4	0	206
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	2	102	226	0	8	83	0	0	0	0	2	0	290	0	16	0	729
	0.61%	30.91%	68.48%	0.00%	8.79%	91.21%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	94.77%	0.00%	5.23%	0.00%	
PEAK HR :	10:00 AM - 11:00 AM																TOTAL
PEAK HR VOL :	2	102	226	0	8	83	0	0	0	0	2	0	290	0	16	0	729
PEAK HR FACTOR :	0.500	0.944	0.856	0.000	0.500	0.741	0.000	0.000	0.000	0.000	0.500	0.000	0.815	0.000	0.800	0.000	0.885
		0.907				0.784				0.500				0.832			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	1 NR	0 NU	0.5 SL	1.5 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	1 WL	0 WT	1 WR	0 WU	TOTAL
2:00 PM	1	24	60	0	3	40	0	0	0	0	0	0	73	1	2	0	204
2:15 PM	0	23	54	0	6	26	0	0	0	0	0	0	81	0	4	1	195
2:30 PM	1	35	69	0	5	30	0	0	0	0	0	0	95	0	3	0	238
2:45 PM	0	31	77	0	9	41	0	0	0	0	0	0	78	0	4	0	240
3:00 PM	1	31	63	0	2	52	0	0	0	0	0	0	79	0	5	0	233
3:15 PM	0	28	65	2	4	35	0	0	0	0	0	0	94	0	1	0	229
3:30 PM	0	33	63	2	6	48	0	0	0	0	0	0	87	0	4	0	243
3:45 PM	0	19	64	0	2	36	1	0	0	0	0	0	97	0	1	0	220
4:00 PM	0	17	72	2	11	33	0	0	0	0	0	0	107	0	2	0	244
4:15 PM	0	26	64	0	8	50	0	0	0	0	0	0	153	0	4	0	305
4:30 PM	0	26	75	0	11	53	0	0	0	1	0	0	146	0	3	0	315
4:45 PM	0	24	69	0	5	40	0	0	0	0	0	0	146	0	3	0	287
5:00 PM	0	22	58	0	5	42	0	0	0	0	0	0	158	0	7	0	292
5:15 PM	0	32	82	0	6	36	0	0	0	0	0	0	175	0	2	0	333
5:30 PM	0	24	65	0	6	46	0	0	0	0	1	0	184	0	6	0	332
5:45 PM	0	24	50	1	5	22	0	0	0	0	0	0	134	0	2	0	238
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	3	419	1050	7	94	630	1	0	0	1	1	0	1887	1	53	1	4148
	0.20%	28.33%	70.99%	0.47%	12.97%	86.90%	0.14%	0.00%	0.00%	50.00%	50.00%	0.00%	97.17%	0.05%	2.73%	0.05%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	102	274	0	22	164	0	0	0	0	1	0	663	0	18	0	1244
PEAK HR FACTOR :	0.000	0.797	0.835	0.000	0.917	0.891	0.000	0.000	0.000	0.000	0.250	0.000	0.901	0.000	0.643	0.000	0.934
		0.825				0.894				0.250				0.896			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Morena Blvd NB Ramps & Balboa Ave
City: San Diego
Control: 1-Way Yield(NB)

Project ID: 25-040116-002
Date: 7/8/2025

Data - Totals

NS/EW Streets:	Morena Blvd NB Ramps				Morena Blvd NB Ramps				Balboa Ave			Balboa Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND			WESTBOUND				
AM	0	0	1	0	0	0	0	0	0	2	1	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
7:00 AM	0	0	18	0	0	0	0	0	0	149	128	0	0	0	0	295
7:15 AM	0	0	30	0	0	0	0	0	0	169	115	0	0	0	0	314
7:30 AM	0	0	29	0	0	0	0	0	0	206	121	0	0	0	0	356
7:45 AM	0	0	36	0	0	0	0	0	0	240	133	0	0	0	0	409
8:00 AM	0	0	33	0	0	0	0	0	0	225	136	0	0	0	0	394
8:15 AM	0	0	46	6	0	0	0	0	0	155	172	0	0	0	0	379
8:30 AM	0	0	32	1	0	0	0	0	0	179	161	0	0	0	0	373
8:45 AM	0	0	52	1	0	0	0	0	0	137	210	0	0	0	0	400
9:00 AM	0	0	37	0	0	0	0	0	0	165	210	0	0	0	0	412
9:15 AM	0	0	34	0	0	0	0	0	0	183	172	0	0	0	0	389
9:30 AM	0	0	55	1	0	0	0	0	0	172	178	0	0	0	0	406
9:45 AM	0	0	38	2	0	0	0	0	0	196	224	0	0	0	0	460
TOTAL VOLUMES :	0	0	440	11	0	0	0	0	0	2176	1960	0	0	0	0	4587
APPROACH %'s :	0.00%	0.00%	97.56%	2.44%					0.00%	52.61%	47.39%	0.00%				
PEAK HR :	09:00 AM - 10:00 AM															TOTAL
PEAK HR VOL :	0	0	164	3	0	0	0	0	0	716	784	0	0	0	0	1667
PEAK HR FACTOR :	0.000	0.000	0.745	0.375	0.000	0.000	0.000	0.000	0.000	0.913	0.875	0.000	0.000	0.000	0.000	0.906
	0.746								0.893							
NOON	0	0	1	0	0	0	0	0	0	2	1	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
10:00 AM	0	0	48	0	0	0	0	0	0	192	202	0	0	0	0	442
10:15 AM	0	0	39	0	0	0	0	0	0	210	187	0	0	0	0	436
10:30 AM	0	0	45	0	0	0	0	0	0	193	178	0	0	0	0	416
10:45 AM	0	0	58	0	0	0	0	0	0	243	197	0	0	0	0	498
TOTAL VOLUMES :	0	0	190	0	0	0	0	0	0	838	764	0	0	0	0	1792
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	52.31%	47.69%	0.00%				
PEAK HR :	10:00 AM - 11:00 AM															TOTAL
PEAK HR VOL :	0	0	190	0	0	0	0	0	0	838	764	0	0	0	0	1792
PEAK HR FACTOR :	0.000	0.000	0.819	0.000	0.000	0.000	0.000	0.000	0.000	0.862	0.946	0.000	0.000	0.000	0.000	0.900
	0.819								0.910							
PM	0	0	1	0	0	0	0	0	0	2	1	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
2:00 PM	0	0	63	0	0	0	0	0	0	279	207	0	0	0	0	549
2:15 PM	0	0	45	0	0	0	0	0	0	273	192	0	0	0	0	510
2:30 PM	0	0	66	0	0	0	0	0	0	318	191	0	0	0	0	575
2:45 PM	0	0	59	0	0	0	0	0	0	326	181	0	0	0	0	566
3:00 PM	0	0	68	0	0	0	0	0	0	289	181	0	0	0	0	538
3:15 PM	0	0	74	0	0	0	0	0	0	307	225	0	0	0	0	606
3:30 PM	0	0	82	0	0	0	0	0	0	347	221	0	0	0	0	650
3:45 PM	0	0	62	1	0	0	0	0	0	336	210	0	0	0	0	609
4:00 PM	0	0	62	0	0	0	0	0	0	276	211	0	0	0	0	549
4:15 PM	0	0	68	0	0	0	0	0	0	278	244	0	0	0	0	590
4:30 PM	0	0	61	0	0	0	0	0	0	299	251	0	0	0	0	611
4:45 PM	0	0	52	0	0	0	0	0	0	329	237	0	0	0	0	618
5:00 PM	0	0	71	0	0	0	0	0	0	354	207	0	0	0	0	632
5:15 PM	0	0	50	0	0	0	0	0	0	350	246	0	0	0	0	646
5:30 PM	0	0	64	0	0	0	0	0	0	352	218	0	0	0	0	634
5:45 PM	0	0	44	0	0	0	0	0	0	335	173	0	0	0	0	552
TOTAL VOLUMES :	0	0	991	1	0	0	0	0	0	5048	3395	0	0	0	0	9435
APPROACH %'s :	0.00%	0.00%	99.90%	0.10%					0.00%	59.79%	40.21%	0.00%				
PEAK HR :	04:45 PM - 05:45 PM															TOTAL
PEAK HR VOL :	0	0	237	0	0	0	0	0	0	1385	908	0	0	0	0	2530
PEAK HR FACTOR :	0.000	0.000	0.835	0.000	0.000	0.000	0.000	0.000	0.000	0.978	0.923	0.000	0.000	0.000	0.000	0.979
	0.835								0.962							



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ATTACHMENT B

Driveway Counts

24 Hour Driveway Counts

LOCATION: 4545 Mission Bay Drive
 TOTAL _____
 CITY: San Diego, CA

DATE: 9/9/2025
 DAY: Tuesday

Time	AM PERIOD					
	15 Minute Counts			Hourly		
	In	Out	TOTAL	In	Out	Total
0:00	2	1	3	5	3	8
0:15	1	0	1	3	2	5
0:30	0	0	0	2	2	4
0:45	2	2	4	2	2	4
1:00	0	0	0	0	1	1
1:15	0	0	0	5	3	8
1:30	0	0	0	6	4	10
1:45	0	1	1	6	4	10
2:00	5	2	7	6	4	10
2:15	1	1	2	1	2	3
2:30	0	0	0	0	2	2
2:45	0	1	1	1	2	3
3:00	0	0	0	1	1	2
3:15	0	1	1	1	1	2
3:30	1	0	1	1	0	1
3:45	0	0	0	1	0	1
4:00	0	0	0	1	0	1
4:15	0	0	0	2	2	4
4:30	1	0	1	2	2	4
4:45	0	0	0	1	3	4
5:00	1	2	3	1	3	4
5:15	0	0	0	1	4	5
5:30	0	1	1	1	5	6
5:45	0	0	0	1	4	5
6:00	1	3	4	1	6	7
6:15	0	1	1	1	5	6
6:30	0	0	0	3	6	9
6:45	0	2	2	4	9	13
7:00	1	2	3	5	7	12
7:15	2	2	4	4	8	12
7:30	1	3	4	3	7	10
7:45	1	0	1	4	9	13
8:00	0	3	3	3	12	15
8:15	1	1	2	5	13	18
8:30	2	5	7	7	13	20
8:45	0	3	3	5	9	14
9:00	2	4	6	6	12	18
9:15	3	1	4	4	11	15
9:30	0	1	1	2	10	12
9:45	1	6	7	3	12	15
10:00	0	3	3	4	7	11
10:15	1	0	1	6	7	13
10:30	1	3	4	5	10	15
10:45	2	1	3	6	9	15
11:00	2	3	5	4	10	14
11:15	0	3	3			
11:30	2	2	4			
11:45	0	2	2			

AM TOTAL

37	66	103
----	----	-----

Time	PM PERIOD					
	15 Minute Counts			Hourly		
	In	Out	TOTAL	In	Out	Total
12:00	1	0	1	5	5	10
12:15	2	2	4	5	7	12
12:30	1	0	1	5	8	13
12:45	1	3	4	7	9	16
13:00	1	2	3	8	6	14
13:15	2	3	5	8	7	15
13:30	3	1	4	8	4	12
13:45	2	0	2	10	4	14
14:00	1	3	4	8	7	15
14:15	2	0	2	10	5	15
14:30	5	1	6	10	8	18
14:45	0	3	3	8	9	17
15:00	3	1	4	11	7	18
15:15	2	3	5	11	9	20
15:30	3	2	5	15	10	25
15:45	3	1	4	15	14	29
16:00	3	3	6	16	16	32
16:15	6	4	10	17	13	30
16:30	3	6	9	14	13	27
16:45	4	3	7	14	11	25
17:00	4	0	4	14	8	22
17:15	3	4	7	16	11	27
17:30	3	4	7	15	9	24
17:45	4	0	4	13	8	21
18:00	6	3	9	10	10	20
18:15	2	2	4	6	7	13
18:30	1	3	4	5	6	11
18:45	1	2	3	7	4	11
19:00	2	0	2	9	4	13
19:15	1	1	2	11	7	18
19:30	3	1	4	10	7	17
19:45	3	2	5	10	8	18
20:00	4	3	7	12	6	18
20:15	0	1	1	9	3	12
20:30	3	2	5	11	3	14
20:45	5	0	5	10	2	12
21:00	1	0	1	9	2	11
21:15	2	1	3	10	4	14
21:30	2	1	3	9	3	12
21:45	4	0	4	8	3	11
22:00	2	2	4	5	3	8
22:15	1	0	1	3	1	4
22:30	1	1	2	4	2	6
22:45	1	0	1	3	1	4
23:00	0	0	0	2	1	3
23:15	2	1	3			
23:30	0	0	0			
23:45	0	0	0			

PM TOTAL

109	75	184
-----	----	-----

TOTAL

146	141	287
-----	-----	-----

AM Peak Hour (8:30-9:30 AM) 7 13 20
 Occupancy Adjusted 7 14 21

PM Peak Hour (4:00PM-5:00PM) 16 16 32
 Occupancy Adjusted 17 17 34

Note: Adjusted using occupancy rate of 94% based on data from existing facility



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ATTACHMENT C

Warrant Analysis Worksheets

Figure 4C-101(CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 07/08/2025
 CALC MW DATE 1/30/2026
 CHK AR DATE 1/30/2026

DIST _____ CO _____ RTE _____ PM _____

Major St: Balboa Ave
 Minor St: Morena Blvd NB Ramps

Critical Approach Speed 42 (85th Percentile) mph
 Critical Approach Speed _____ mph

Speed limit or critical speed on major street traffic > 40 mph..... }
 or } **RURAL (R)**
 In built up area of isolated community of < 10,000 population..... }
 URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES NO
 (Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume **100% SATISFIED** YES NO
80% SATISFIED YES NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				10:45 AM	11:45 AM	12:45 PM	1:45 PM	2:45 PM	3:45 PM	4:45 PM	5:45 PM	Hour
	U	R	U	R									
	1		2 or More										
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	1,719	1,795	1,767	1,919	2,078	2,100	2,295	1,929	
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	222	217	258	243	283	254	237	216	

Condition B - Interruption of Continuous Traffic **100% SATISFIED** YES NO
80% SATISFIED YES NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				10:45 AM	11:45 AM	12:45 PM	1:45 PM	2:45 PM	3:45 PM	4:45 PM	5:45 PM	Hour
	U	R	U	R									
	1		2 or More										
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	1,719	1,795	1,767	1,919	2,078	2,100	2,295	1,929	
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	222	217	258	243	283	254	237	216	

Combination of Conditions A & B SATISFIED YES NO

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Major-street and minor-street volumes shall be for the same 8 hours for each condition; however, the 8 hours satisfied in Condition A shall not be required to be the same 8 hours satisfied in Condition B.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101(CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES NO

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	Hour					
	One	2 or More	1:45 PM	2:45 PM	3:45 PM	4:45 PM
Both Approaches - Major Street		<input checked="" type="checkbox"/>	1,919	2,078	2,100	2,295
Higher Approach - Minor Street	<input checked="" type="checkbox"/>		243	283	254	237

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

**WARRANT 3 - Peak Hour
(Part A or Part B must be satisfied)**

SATISFIED YES NO

PART A

SATISFIED YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B

SATISFIED YES NO

APPROACH LANES	Hour	
	One	2 or More 4:45 PM
Both Approaches - Major Street		<input checked="" type="checkbox"/> 2,295
Higher Approach - Minor Street	<input checked="" type="checkbox"/>	237

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

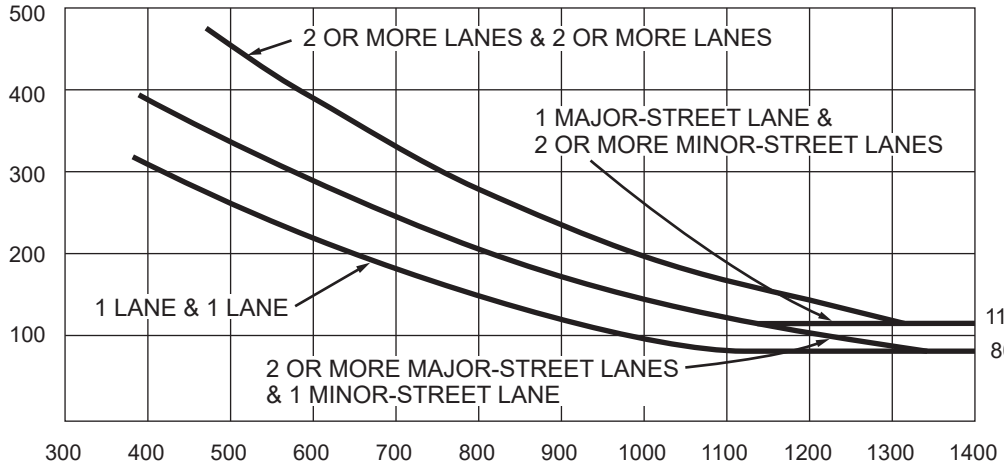
The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume

Warrant Met

**MORENA BLVD
 NB RAMP**

MINOR
 STREET
 MORE
 CRITICAL
 APPROACH -
 VPH



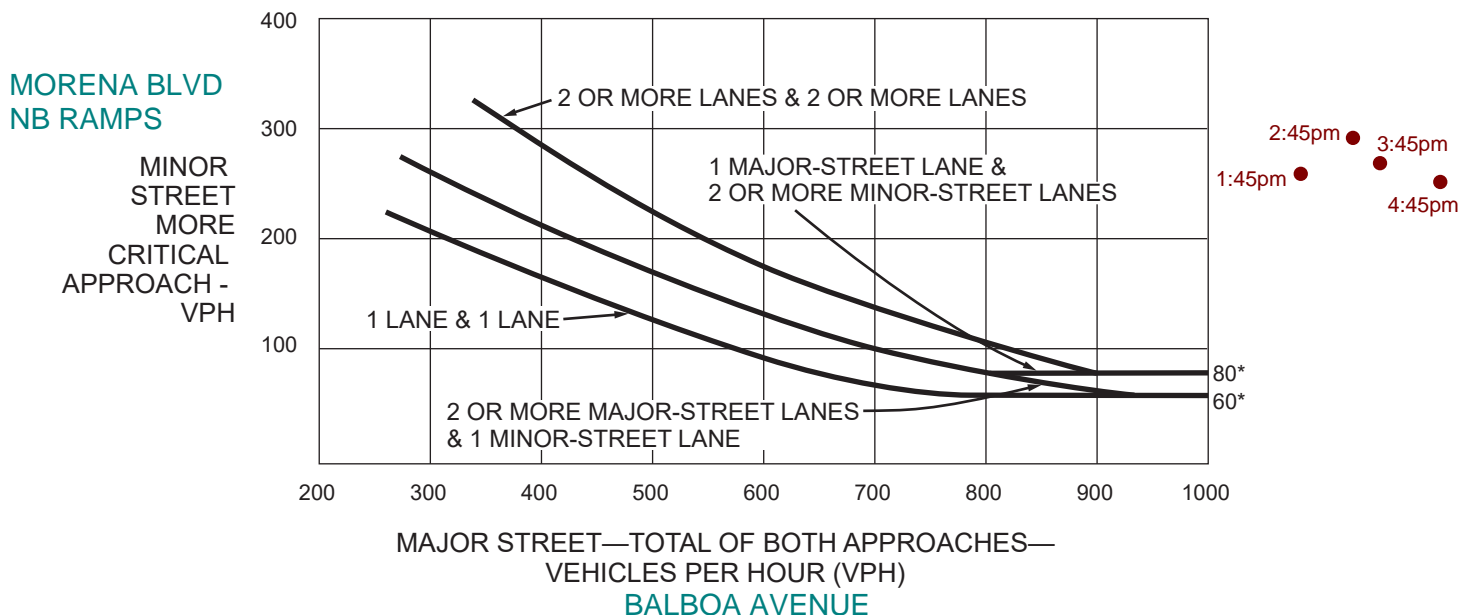
1:45pm
 2:45pm
 3:45pm
 4:45pm

MAJOR STREET—TOTAL OF BOTH APPROACHES—
 VEHICLES PER HOUR (VPH)
BALBOA AVENUE

*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR **ABOVE 40 MPH ON MAJOR STREET**)



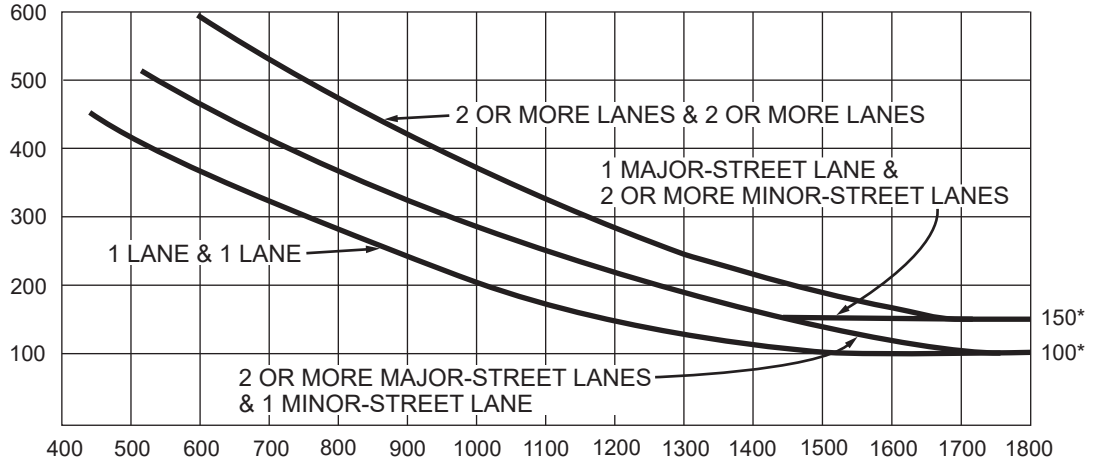
*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Warrant Met

MORENA BLVD
 NB RAMP

MINOR
 STREET
 MORE
 CRITICAL
 APPROACH -
 VPH



4:45pm

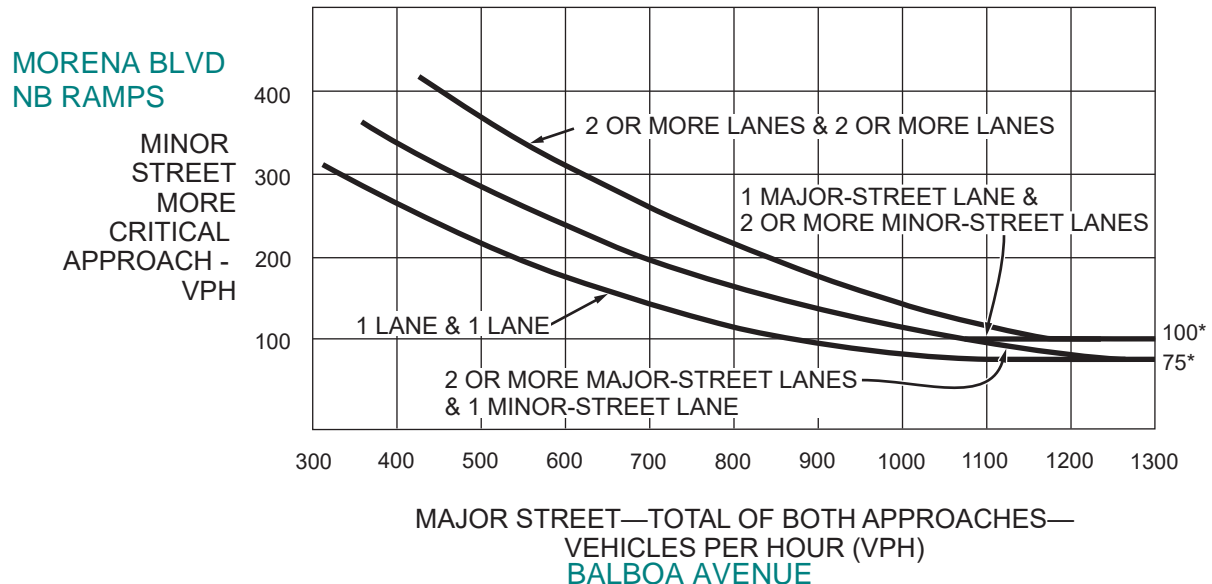
MAJOR STREET—TOTAL OF BOTH APPROACHES—
 VEHICLES PER HOUR (VPH)

BALBOA AVENUE

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



4:45pm

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 3 of 5)

**WARRANT 4 - Pedestrian Volume
(Parts 1 and 2 Must Be Satisfied)**

SATISFIED YES NO

Part 1 (Parts A or B must be satisfied)

Hours -->		10:00 AM	2:00 PM	3:00 PM	4:45 PM
A.	Vehicles per hour for any 4 hours	1,602	1,967	2,116	2,295
	Pedestrians per hour for any 4 hours	1	2	4	5

**Figure 4C-5 or Figure 4C-6
SATISFIED YES NO**

Hours -->		4:45 PM	5:00 PM	5:15 PM	5:30 PM
B.	Vehicles per hour for any 1 hour	566	561	594	574
	Pedestrians per hour for any 1 hour	0	0	4	1

**Figure 4C-7 or Figure 4C-8
SATISFIED YES NO**

Part 2

SATISFIED YES NO

<u>AND</u> , The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

**WARRANT 5 - School Crossing
(Parts A and B Must Be Satisfied)**

Warrant Not Applicable

SATISFIED YES NO

**Part A
Gap/Minutes and # of Children**

SATISFIED YES NO

Gaps vs Minutes	Minutes Children Using Crossing	
	Number of Adequate Gaps	
School Age Pedestrians Crossing Street / hr		

Hour

Gaps < Minutes YES NO

AND Children > 20/hr YES NO

<u>AND</u> , Consideration has been given to less restrictive remedial measures.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
--	------------------------------	-----------------------------

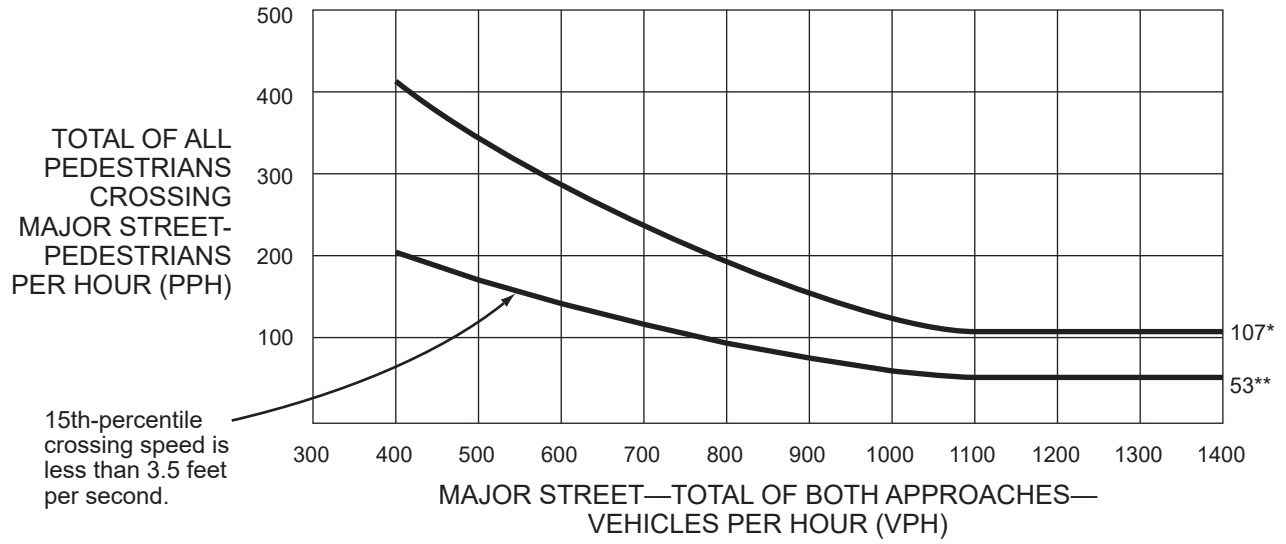
Part B

SATISFIED YES NO

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The proposed signal will not restrict the progressive movement of traffic.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

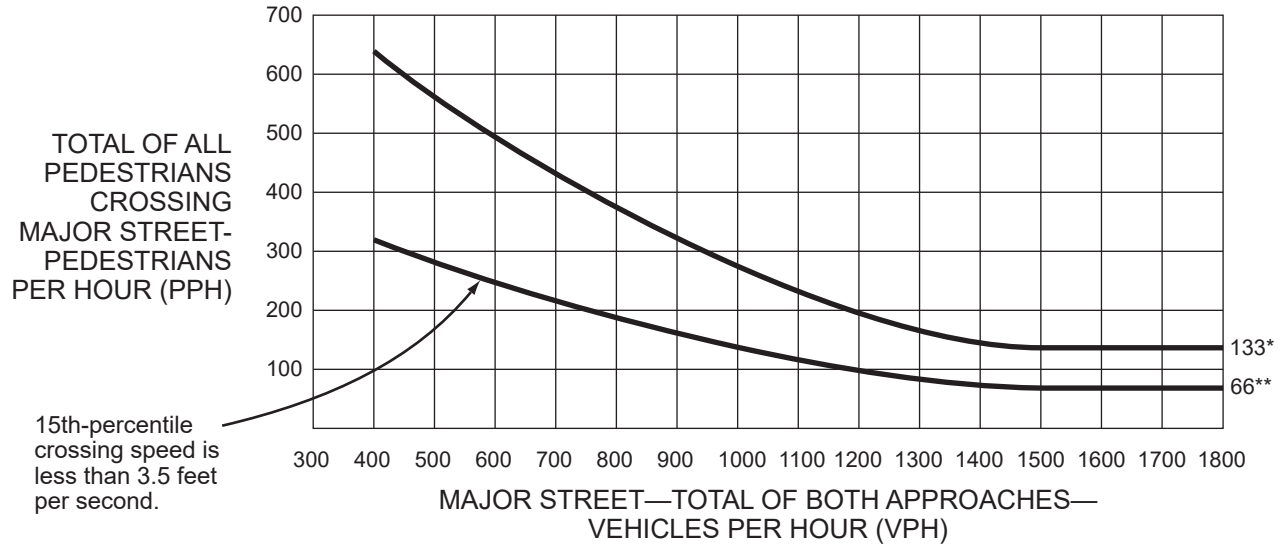
Figure 4C-5. Warrant 4, Pedestrian Four-Hour Volume Warrant Not Met



* 107 pph applies as the lower threshold volume
** 53 pph applies as the lower threshold volume if the 15th-percentile crossing speed is less than 3.5 feet per second

Figure 4C-6. Warrant 4, Pedestrian Peak Hour

Warrant Not Met

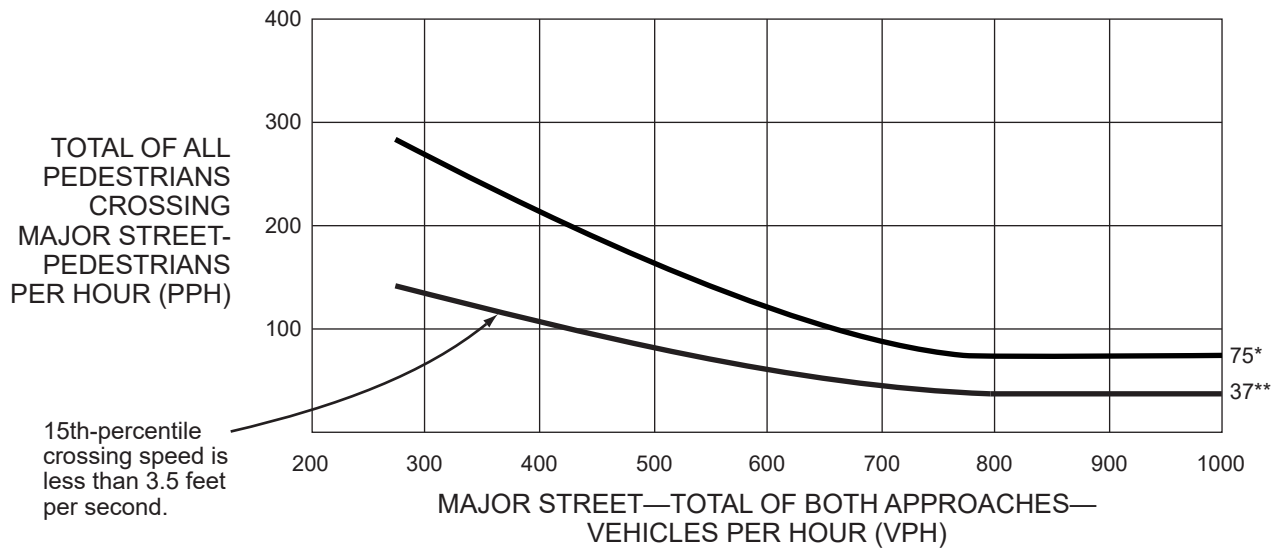


- * 133 pph applies as the lower threshold volume
- ** 66 pph applies as the lower threshold volume if the 15th-percentile crossing speed is less than 3.5 feet per second

Warrant Not Met

Figure 4C-7. Warrant 4, Pedestrian Four-Hour Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40*** MPH ON MAJOR STREET)



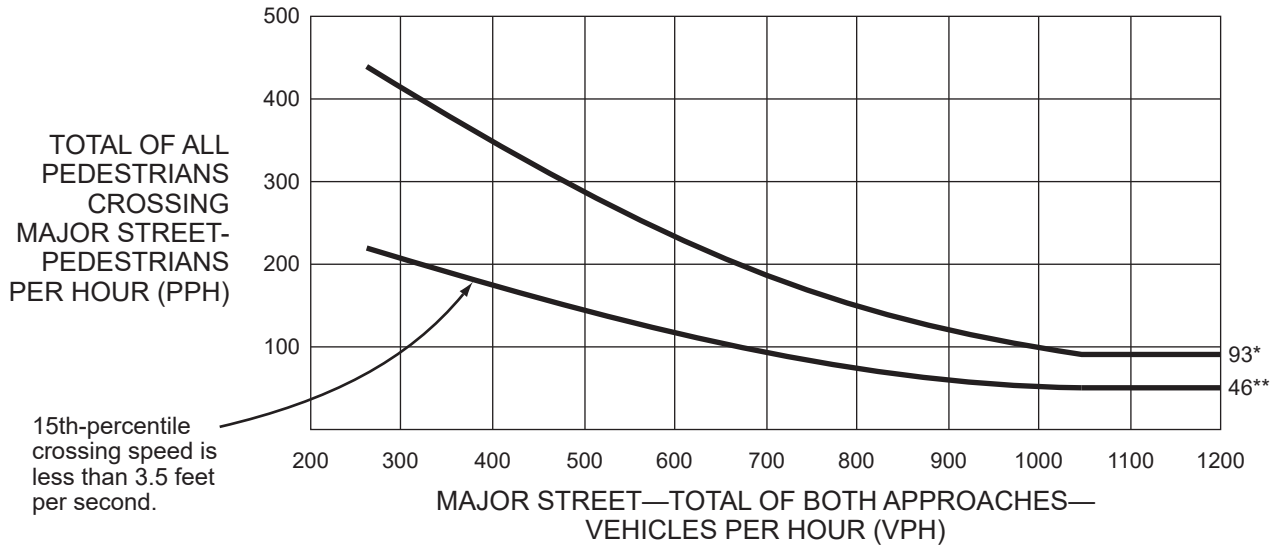
- * 75 pph applies as the lower threshold volume
- ** 37 pph applies as the lower threshold volume if the 15th-percentile crossing speed is less than 3.5 feet per second
- *** Refer to FHWA's List of Known Errors for error in the parenthesis below the figure title. Refer to Section 1A.04 for more details.

Warrant Not Applicable

Warrant Not Met

Figure 4C-8. Warrant 4, Pedestrian Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40*** MPH ON MAJOR STREET)



15th-percentile crossing speed is less than 3.5 feet per second.

- * 93 pph applies as the lower threshold volume
- ** 46 pph applies as the lower threshold volume if the 15th-percentile crossing speed is less than 3.5 feet per second
- *** Refer to FHWA's List of Known Errors for error in the parenthesis below the figure title. Refer to Section 1A.04 for more details.

Figure 4C-101(CA). Traffic Signal Warrants Worksheet (Sheet 4 of 5)

**WARRANT 6 - Coordinated Signal System
 (All Parts Must Be Satisfied)**

SATISFIED YES NO

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes <input type="checkbox"/> No <input type="checkbox"/>
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<u>OR</u> , On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		

**WARRANT 7 - Crash Experience Warrant
 (All Parts Must Be Satisfied)**

SATISFIED YES NO

Fewer than 2 collisions per year reported 2020 - 2025

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.		Yes <input type="checkbox"/> No <input type="checkbox"/>
REQUIREMENTS	Number of crashes reported within a 12 month period susceptible to correction by a traffic signal, and involving injury or damage exceeding the requirements for a reportable crash.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
5 OR MORE		
REQUIREMENTS	CONDITIONS	✓
ONE CONDITION SATISFIED MINIMUM REPORTED CRASHES	Table 4C-2, Angle crashes and pedestrian crashes	
	<u>OR</u> , Table 4C-2, Fatal-and-injury angle crashes and pedestrian crashes	
	<u>OR</u> , Table 4C-3, Angle crashes and pedestrian crashes	
	<u>OR</u> , Table 4C-3, Fatal-and-injury angle crashes and pedestrian crashes	
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume	
	<u>OR</u> , Warrant 1, Condition B - Interruption of Continuous Traffic	
	<u>OR</u> , Warrant 4, Pedestrian Volume Condition Ped Vol ≥ 80% of Figure 4C-5 through Figure 4C-8	

**WARRANT 8 - Roadway Network
 (All Parts Must Be Satisfied)**

SATISFIED YES NO

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES	✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour _____ Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.		Yes <input type="checkbox"/> No <input type="checkbox"/>
	<u>OR</u> During Each of Any 5 Hrs. of a Sat. or Sun _____ Veh/Hr		
CHARACTERISTICS OF MAJOR ROUTES		MAJOR ROUTE A	MAJOR ROUTE B
Hwy. System Serving as Principal Network for Through Traffic			
Rural or Suburban Highway Outside Of, Entering, or Traversing a City			
Appears as Major Route on an Official Plan		✓	No
Any Major Route Characteristics Met, Both Streets			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 5 of 5)

Warrant Not Applicable

**WARRANT 9 - Intersection Near a Grade Crossing
 (Both Parts A and B Must Be Satisfied)**

SATISFIED YES NO

<p><u>PART A</u></p> <p>A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p><u>PART B</u></p> <p>There is one minor street approach lane at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9.</p> <p>Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p> <hr style="border-top: 1px dashed black;"/> <p><u>OR, There are two or more minor street approach lanes at the track crossing</u> - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10.</p> <p>Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

- 1- Number of Rail Traffic per Day _____ Adjustment factor from table 4C-2 _____
- 2- Percentage of High-Occupancy Buses on Minor Street Approach _____ Adjustment factor from table 4C-3 _____
- 3- Percentage of Tractor-Trailer Trucks on Minor Street Approach _____ Adjustment factor from table 4C-4 _____

NOTE: If no data is available or known, then use AF = 1 (no adjustment)

Figure 4C-101(CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 07/08/2025
 CALC MW DATE 1/30/2026
 CHK AR DATE 1/30/2026

DIST _____ CO _____ RTE _____ PM _____

Major St: Morena Blvd
 Minor St: Jutland Dr

Critical Approach Speed 45 (speed limit) mph
 Critical Approach Speed _____ mph

Speed limit or critical speed on major street traffic > 40 mph..... }
 or } **RURAL (R)**
 In built up area of isolated community of < 10,000 population..... }
 URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES NO
 (Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume **100% SATISFIED** YES NO
80% SATISFIED YES NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				10:00 AM	11:00 AM	12:00 Noon	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Hour
	U	R	U	R									
	1		2 or More										
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	421	485	567	502	535	557	586	526	
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	306	316	369	360	342	368	564	668	

Condition B - Interruption of Continuous Traffic **100% SATISFIED** YES NO
80% SATISFIED YES NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				10:00 AM	11:00 AM	12:00 Noon	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Hour
	U	R	U	R									
	1		2 or More										
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	421	485	567	502	535	557	586	526	
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	306	316	369	360	342	368	564	668	

Combination of Conditions A & B SATISFIED YES NO

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes <input type="checkbox"/> No <input type="checkbox"/>

Major-street and minor-street volumes shall be for the same 8 hours for each condition; however, the 8 hours satisfied in Condition A shall not be required to be the same 8 hours satisfied in Condition B.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101(CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES NO

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More	2:45 PM	3:45 PM	4:45 PM	5:45 PM	Hour
Both Approaches - Major Street		<input checked="" type="checkbox"/>	593	570	562	379	
Higher Approach - Minor Street		<input checked="" type="checkbox"/>	352	513	681	551	

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

**WARRANT 3 - Peak Hour
(Part A or Part B must be satisfied)**

SATISFIED YES NO

PART A

SATISFIED YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B

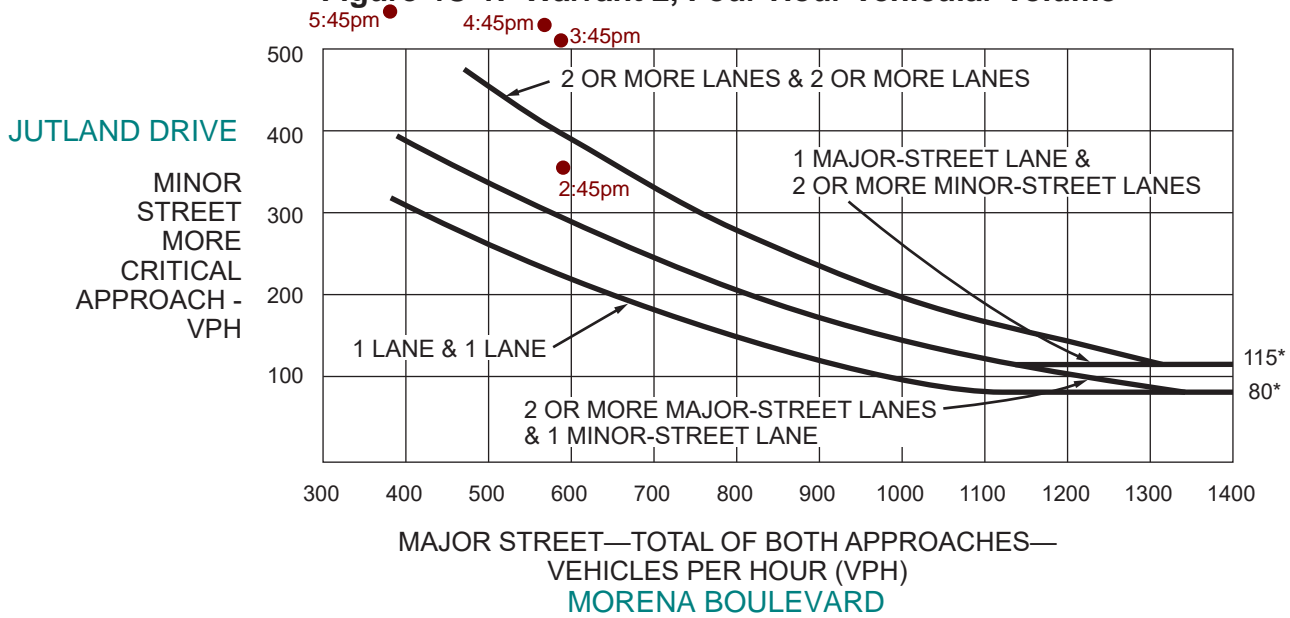
SATISFIED YES NO

APPROACH LANES	One	2 or More	4:45 PM	Hour
Both Approaches - Major Street		<input checked="" type="checkbox"/>	562	
Higher Approach - Minor Street		<input checked="" type="checkbox"/>	681	

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

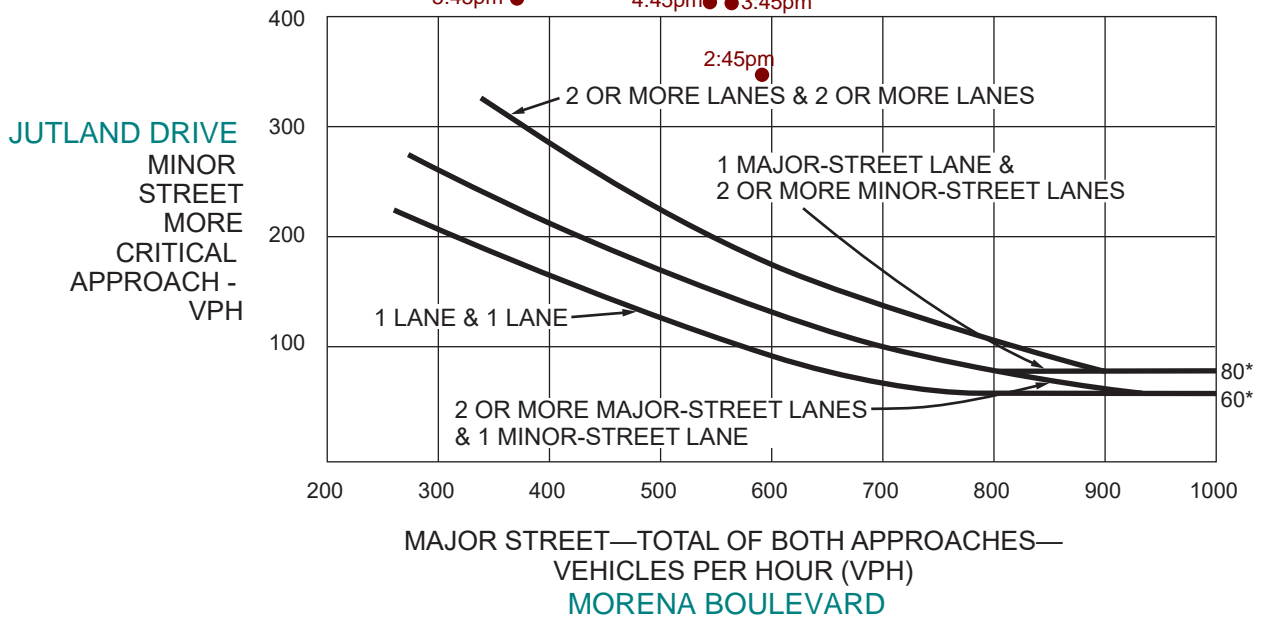
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume Warrant Not Met



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET) Warrant Met



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

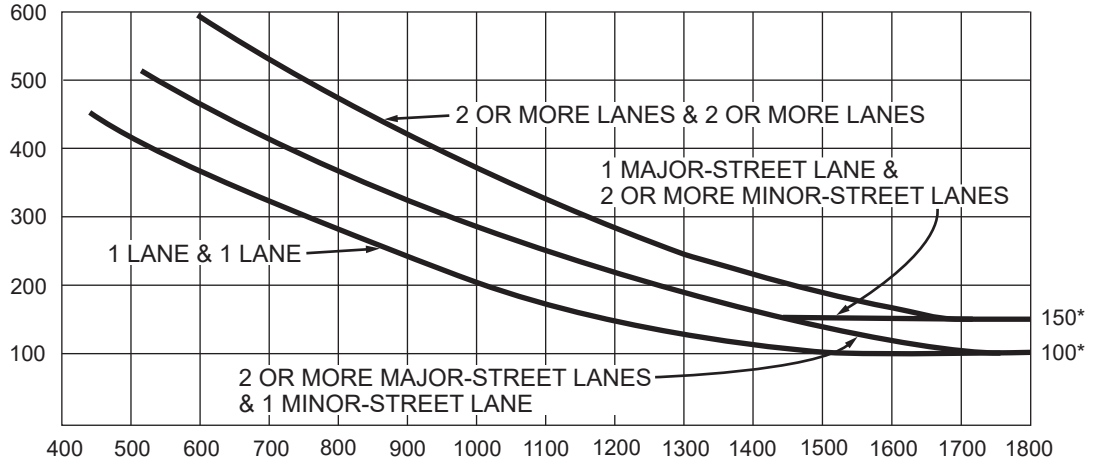
4:45pm ●

Figure 4C-3. Warrant 3, Peak Hour

Warrant Met

JUTLAND DRIVE

MINOR STREET MORE CRITICAL APPROACH - VPH



MAJOR STREET—TOTAL OF BOTH APPROACHES—VEHICLES PER HOUR (VPH)

MORENA BOULEVARD

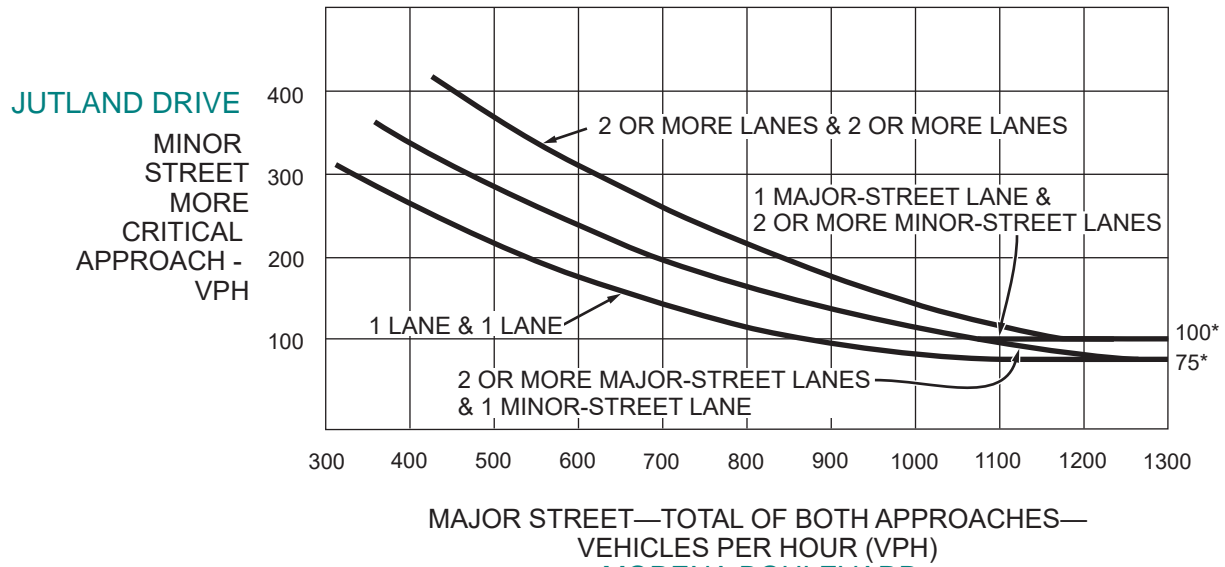
*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

Warrant Met

4:45pm ●

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 3 of 5)

**WARRANT 4 - Pedestrian Volume
 (Parts 1 and 2 Must Be Satisfied)**

SATISFIED YES NO

Part 1 (Parts A or B must be satisfied)

Hours -->		10:00	3:00	4:00	5:00
A.	Vehicles per hour for any 4 hours	421	557	586	526
	Pedestrians per hour for any 4 hours	7	0	2	1

**Figure 4C-5 or Figure 4C-6
 SATISFIED YES NO**

Hours -->		4:45	5:00	5:15	5:30
B.	Vehicles per hour for any 1 hour	138	127	156	141
	Pedestrians per hour for any 1 hour	0	0	1	0

**Figure 4C-7 or Figure 4C-8
 SATISFIED YES NO**

Part 2

SATISFIED YES NO

<u>AND</u> , The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/> No <input type="checkbox"/>
<u>OR</u> , The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes <input type="checkbox"/> No <input type="checkbox"/>

**WARRANT 5 - School Crossing
 (Parts A and B Must Be Satisfied)**

Warrant Not Applicable

SATISFIED YES NO

**Part A
 Gap/Minutes and # of Children**

SATISFIED YES NO

Gaps vs Minutes	Minutes Children Using Crossing	
	Number of Adequate Gaps	
School Age Pedestrians Crossing Street / hr		

Hour

Gaps < Minutes YES NO

AND Children > 20/hr YES NO

<u>AND</u> , Consideration has been given to less restrictive remedial measures.	Yes <input type="checkbox"/> No <input type="checkbox"/>
--	--

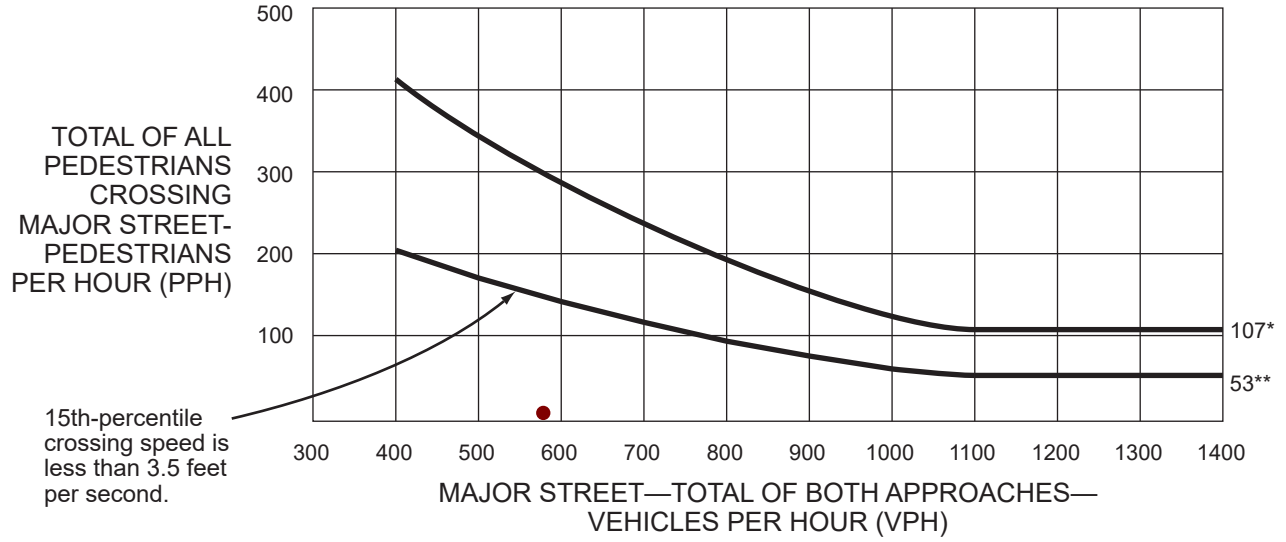
Part B

SATISFIED YES NO

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/> No <input type="checkbox"/>
<u>OR</u> , The proposed signal will not restrict the progressive movement of traffic.	Yes <input type="checkbox"/> No <input type="checkbox"/>

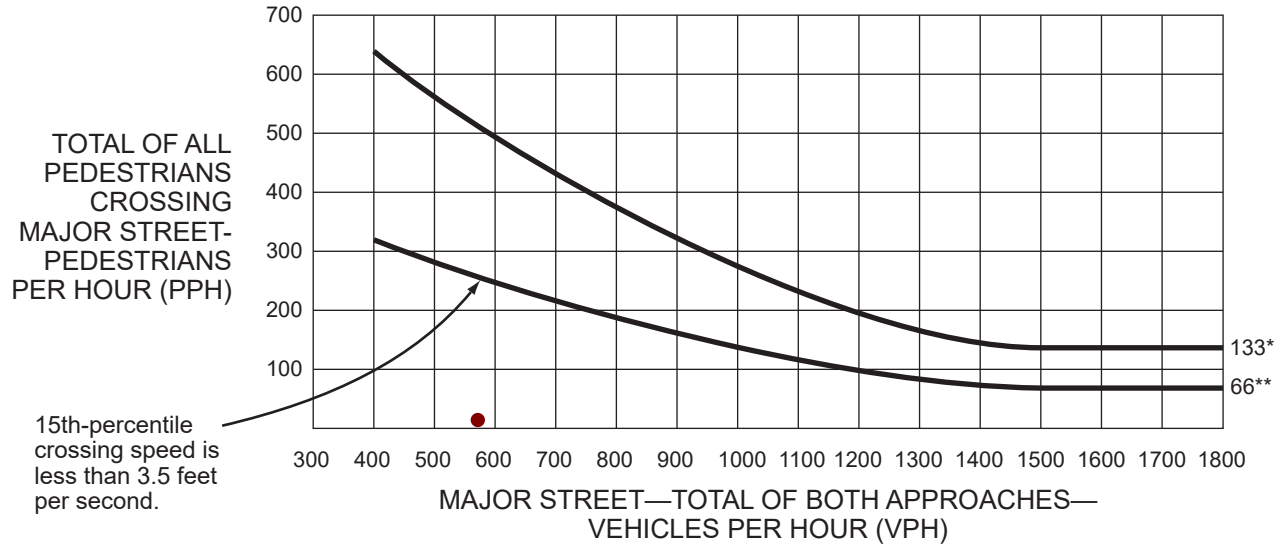
The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-5. Warrant 4, Pedestrian Four-Hour Volume Warrant Not Met



- * 107 pph applies as the lower threshold volume
- ** 53 pph applies as the lower threshold volume if the 15th-percentile crossing speed is less than 3.5 feet per second

Figure 4C-6. Warrant 4, Pedestrian Peak Hour Warrant Not Met

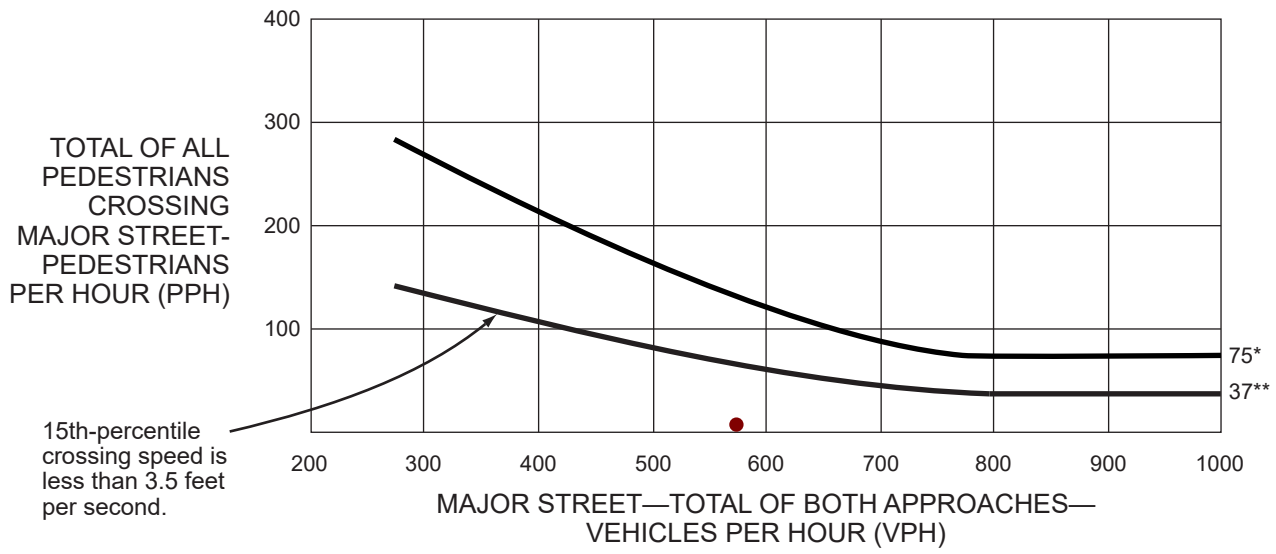


15th-percentile crossing speed is less than 3.5 feet per second.

- * 133 pph applies as the lower threshold volume
- ** 66 pph applies as the lower threshold volume if the 15th-percentile crossing speed is less than 3.5 feet per second

Figure 4C-7. Warrant 4, Pedestrian Four-Hour Volume (70% Factor) Warrant Not Met

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40*** MPH ON MAJOR STREET)



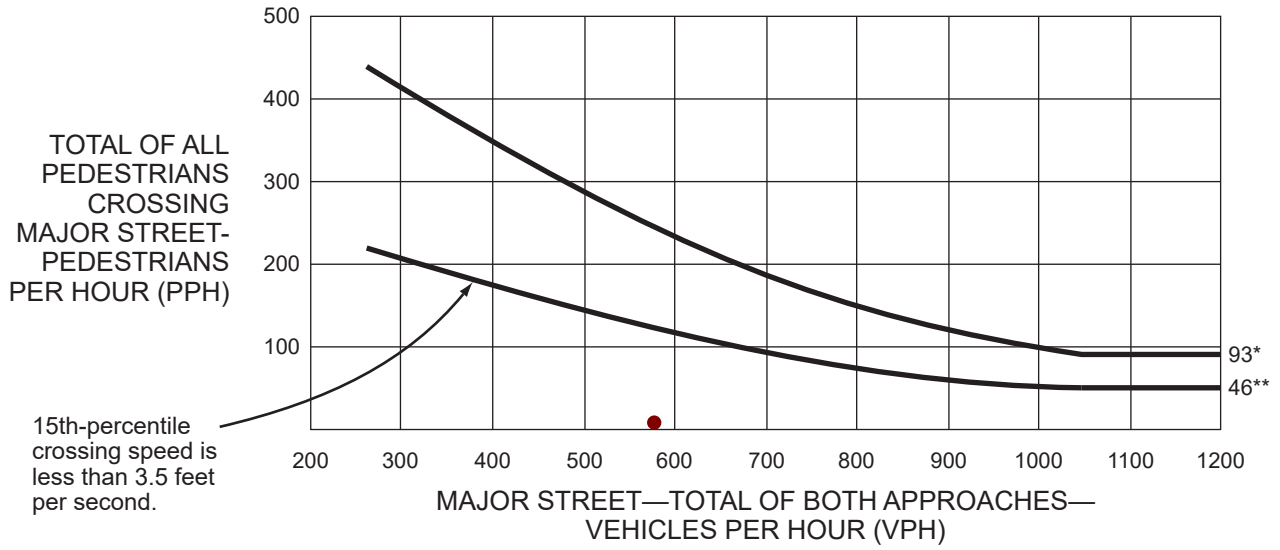
* 75 pph applies as the lower threshold volume

** 37 pph applies as the lower threshold volume if the 15th-percentile crossing speed is less than 3.5 feet per second

*** Refer to FHWA's List of Known Errors for error in the parenthesis below the figure title. Refer to Section 1A.04 for more details.

Figure 4C-8. Warrant 4, Pedestrian Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40*** MPH ON MAJOR STREET) **Warrant Not Met**



- * 93 pph applies as the lower threshold volume
- ** 46 pph applies as the lower threshold volume if the 15th-percentile crossing speed is less than 3.5 feet per second
- *** Refer to FHWA's List of Known Errors for error in the parenthesis below the figure title. Refer to Section 1A.04 for more details.

Figure 4C-101(CA). Traffic Signal Warrants Worksheet (Sheet 4 of 5)

**WARRANT 6 - Coordinated Signal System
 (All Parts Must Be Satisfied)**

SATISFIED YES NO

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes <input type="checkbox"/> No <input type="checkbox"/>
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<u>OR</u> , On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		

**WARRANT 7 - Crash Experience Warrant
 (All Parts Must Be Satisfied)**

SATISFIED YES NO

Fewer than 2 collisions per year reported 2020 - 2025

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.		Yes <input type="checkbox"/> No <input type="checkbox"/>
REQUIREMENTS	Number of crashes reported within a 12 month period susceptible to correction by a traffic signal, and involving injury or damage exceeding the requirements for a reportable crash.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
5 OR MORE		
REQUIREMENTS	CONDITIONS	✓
ONE CONDITION SATISFIED MINIMUM REPORTED CRASHES	Table 4C-2, Angle crashes and pedestrian crashes	
	<u>OR</u> , Table 4C-2, Fatal-and-injury angle crashes and pedestrian crashes	
	<u>OR</u> , Table 4C-3, Angle crashes and pedestrian crashes	
	<u>OR</u> , Table 4C-3, Fatal-and-injury angle crashes and pedestrian crashes	
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume	
	<u>OR</u> , Warrant 1, Condition B - Interruption of Continuous Traffic	
	<u>OR</u> , Warrant 4, Pedestrian Volume Condition Ped Vol ≥ 80% of Figure 4C-5 through Figure 4C-8	

**WARRANT 8 - Roadway Network
 (All Parts Must Be Satisfied)**

SATISFIED YES NO

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES	✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour _____ Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.		Yes <input type="checkbox"/> No <input type="checkbox"/>
	<u>OR</u> During Each of Any 5 Hrs. of a Sat. or Sun _____ Veh/Hr		
CHARACTERISTICS OF MAJOR ROUTES		MAJOR ROUTE A	MAJOR ROUTE B
Hwy. System Serving as Principal Network for Through Traffic			
Rural or Suburban Highway Outside Of, Entering, or Traversing a City			
Appears as Major Route on an Official Plan		✓	No
Any Major Route Characteristics Met, Both Streets			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 5 of 5)

Warrant Not Applicable

**WARRANT 9 - Intersection Near a Grade Crossing
 (Both Parts A and B Must Be Satisfied)**

SATISFIED YES NO

<p><u>PART A</u></p> <p>A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p><u>PART B</u></p> <p>There is one minor street approach lane at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9.</p> <p>Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p> <hr style="border-top: 1px dashed black;"/> <p><u>OR, There are two or more minor street approach lanes at the track crossing</u> - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10.</p> <p>Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

- 1- Number of Rail Traffic per Day _____ Adjustment factor from table 4C-2 _____
- 2- Percentage of High-Occupancy Buses on Minor Street Approach _____ Adjustment factor from table 4C-3 _____
- 3- Percentage of Tractor-Trailer Trucks on Minor Street Approach _____ Adjustment factor from table 4C-4 _____

NOTE: If no data is available or known, then use AF = 1 (no adjustment)



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ATTACHMENT D

SWITRS Data

Primary Rd		MORENA BL		Distance(ft)	Direction	Secondary Rd		GARNET AV		NCIC	3711	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy															
City		SAN DIEGO		County	SAN DIEGO		Population	7	Rpt Dist	Beat	113	Type	CalTrans Dist	Badge	SD7390	Crash Date	20210909	Time	1200	Day	THU											
Primary Crash Factor		UNSAFE SPEED		Violation	22350		Crash Type	REAR END		Severity	INJURY		# Killed	0	# Injured	1	Tow Away?	N	Process Date	20210928												
Weather1		CLEAR		Weather2			Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2			Spec Cond	0															
Hit and Run				Motor Veh Involved With	OTHER MV		Lighting	DAYLIGHT		Ped Action			Cntrl Dev	FNCTNG		Loc Type	Ramp/Int															
Latitude		Longitude		Local Rpt #		21205995		Case ID		9327543																						
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	49	M	A	HNBD	PROC ST	N	A	0700	-	2007	-	-	-	A	22350	E	M	G													
2	DRVR	49	M	W	HNBD	STOPPED	N	D	2200	-	2018	-	-	-	E	-	-	M	G		DRVR	COMP	PN	49	M	1	M	G	0			

Primary Rd		BALBOA		Distance(ft)	Direction	Secondary Rd		MORENA BL		NCIC	3711	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy														
City		SAN DIEGO		County	SAN DIEGO		Population	7	Rpt Dist	Beat	113	Type	CalTrans Dist	Badge	SD1529	Crash Date	20220603	Time	0830	Day	FRI										
Primary Crash Factor		LANE CHANGE		Violation	21658A		Crash Type	HIT OBJECT		Severity	INJURY		# Killed	0	# Injured	1	Tow Away?	Y	Process Date	20220629											
Weather1		CLOUDY		Weather2			Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2			Spec Cond	0														
Hit and Run				Motor Veh Involved With	FIXED OBJ		Lighting	DAYLIGHT		Ped Action			Cntrl Dev	FNCTNG		Loc Type	Ramp/Int														
Latitude		Longitude		Local Rpt #		22203205		Case ID		9460344																					
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	24	F	W	HNBD	RGT TURN	E	A	0100	-	2014	-	-	-	-	-	-	-	L	G		DRVR	OTH	VIS	24	F	1	L	G	0	

Primary Rd		BALBOA AV		Distance(ft)	Direction	Secondary Rd		MORENA BL		NCIC	3711	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy															
City		SAN DIEGO		County	SAN DIEGO		Population	7	Rpt Dist	Beat	113	Type	CalTrans Dist	Badge	SD1666	Crash Date	20231112	Time	1450	Day	SUN											
Primary Crash Factor		TOO CLOSE		Violation	21703		Crash Type	REAR END		Severity	INJURY		# Killed	0	# Injured	1	Tow Away?	N	Process Date	20240131												
Weather1		CLEAR		Weather2			Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2			Spec Cond	0															
Hit and Run				Motor Veh Involved With			Lighting	DAYLIGHT		Ped Action			Cntrl Dev	NT PRS/FCTR		Loc Type	Ramp/Int															
Latitude		Longitude		Local Rpt #		23206602		Case ID		9642721																						
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	24	F	W	HNBD	PROC ST	W	A	0100	-	2012	-	3	A	21703	E	M	C														
2	BICY	47	M	W		PROC ST	W	L	0400	-	-	-	-	E	F	-	-				BICY	SEVERE	47	M	1	P	A	0				

Primary Rd		MORENA BL		Distance(ft)	Direction	Secondary Rd		BALBOA AV		NCIC	3711	State Hwy?	Y	Route	Postmile Prefix	Postmile	Side of Hwy														
City		SAN DIEGO		County	SAN DIEGO		Population	7	Rpt Dist	Beat	114	Type	CalTrans Dist	Badge	SD1605	Crash Date	20241101	Time	2018	Day	FRI										
Primary Crash Factor		IMPROP TURN		Violation	22107		Crash Type	OTHER		Severity	INJURY		# Killed	0	# Injured	1	Tow Away?	N	Process Date	20241121											
Weather1		CLEAR		Weather2			Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2			Spec Cond	0														
Hit and Run				Motor Veh Involved With	NON-CLSN		Lighting	DARK - NO ST LTS		Ped Action			Cntrl Dev	FNCTNG		Loc Type	Ramp/Int														
Latitude		Longitude		Local Rpt #		24206647		Case ID		9753257																					
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	55	M	W	HBD-NUI	RGT TURN	E	C	0200	-	1957	-	-	E	-	-	-	P	W		DRVR	OTH	VIS	55	M	1	P	W	0		

<i>Primary Rd</i> MORENA BL	<i>Distance(ft)</i> 30	<i>Direction</i> S	<i>Secondary Rd</i> JUTLAND DR	<i>NCIC</i> 3711	<i>State Hwy?</i> N	<i>Route</i>	<i>Postmile Prefix</i>	<i>Postmile</i>	<i>Side of Hwy</i>																
<i>City</i> SAN DIEGO	<i>County</i> SAN DIEGO	<i>Population</i> 7	<i>Rpt Dist</i>	<i>Beat</i> 113	<i>Type</i> CalTrans Dist	<i>Badge</i> SD7795	<i>Crash Date</i> 20200907	<i>Time</i> 0155	<i>Day</i> MON																
<i>Primary Crash Factor</i>	IMPROP TURN	<i>Violation</i> 22107	<i>Crash Type</i>	HIT OBJECT	<i>Severity</i> INJURY	<i># Killed</i> 0	<i># Injured</i> 1	<i>Tow Away?</i> Y	<i>Process Date</i> 20210121																
<i>Weather1</i> CLEAR	<i>Weather2</i>	<i>Rdwy Surface</i> DRY	<i>Rdwy Cond1</i> NO UNUSL CND	<i>Rdwy Cond2</i>	<i>Spec Cond</i> 0																				
<i>Hit and Run</i>	<i>Motor Veh Involved With</i> FIXED OBJ	<i>Lighting</i> DARK - ST LTS	<i>Ped Action</i>	<i>Cntrl Dev</i> NT PRS/FCTR	<i>Loc Type</i>	<i>Ramp/Int</i>																			
<i>Latitude</i>	<i>Longitude</i>	<i>Local Rpt #</i> 20044486	<i>Case ID</i> 9151570																						
PARTY INFO							VICTIM INFO																		
<i>Party Type</i>	<i>Age</i>	<i>Sex</i>	<i>Race</i>	<i>Sobriety1</i>	<i>Sobriety2</i>	<i>Move Pre</i>	<i>Dir</i>	<i>SW Veh</i>	<i>Chp Veh</i>	<i>Make</i>	<i>Year</i>	<i>Sp Info</i>	<i>OAF1 Viol</i>	<i>OAF2</i>	<i>Safety Equip</i>	<i>Role</i>	<i>Ext Of Inj</i>	<i>Age</i>	<i>Sex</i>	<i>Seat Pos</i>	<i>Safety Equip</i>	<i>Ejected</i>			
1F	DRVR	998	M	H	HBD-UI	PHYS	PROC ST	N	A	0100	-	2003	-	-	E	M	L	-	DRVR	SEVERE	998	M	1	L G	0