

STOP Sign Applications(Two-Way STOP & Multi-Way STOP) Analysis

Major Street: California Street
 Minor Street: East San Luis Street
 Study Dates: 5/21/2024-5/23/2024

Two-Way STOP Installation Criteria based on Guidance from California MUTCD 2014 Edition - Rev 7 (Section 2B.06 02)

A. Traffic Volume

The vehicular traffic volumes on the through street or highway exceed **6,000 vehicles per day(vph)**.

2105 vph

B. Restricted View

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

Reason: Yes No
 Restricted View Exist
 Reason: Parking on Major Street

C. Crash History

Crash records indicate that **three or more** crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or

3 Crash(es)

that **five or more** such crashes have been reported within a **2-year period**. (Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway)

5 Crash(es)

Multi-Way STOP Installation Criteria based on Guidance from California MUTCD 2014 Edition - Rev 7 (Section 2B.07 04)

A. Traffic Volume

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

Interim Multi-Way STOP?

Has a traffic signal warrant study been conducted for this intersection that recommends installation of a traffic control signal? If no, Interim Multi-Way Stop not recommended

Yes No

B. Crash History

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

3 Crash(es)

C. Minimum Volumes

- C1 The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
- C2 The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hours for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
- C3 If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volumes warrants are 70 percent of the values provided in Items 1 and 2.

Satisfied

No

No

N/A

California Street N/O East San Luis Street 85-th % Speed: 33 MPH
 California Street S/O East San Luis Street 85-th % Speed: 32 MPH

Hours	Northbound California Street				Southbound California Street				Eastbound East San Luis Street				Westbound East San Luis Street			
	Veh	Peds	Bikes	Total	Veh	Peds	Bikes	Total	Veh	Peds	Bikes	Total	Veh	Peds	Bikes	Total
7:00-8:00	44			44	98			98	27	15	0	42	13	13	1	26
8:00-9:00	92			92	111			111	35	4	0	39	29	15	0	44
12:00-13:00	74			74	53			53	40	3	1	43	19	4	1	24
13:00-14:00	77			77	76			76	46	9	1	56	25	6	2	32
14:00-15:00	111			111	77			77	53	6	2	61	27	11	1	38
15:00-16:00	124			124	79			79	68	30	1	99	35	5	2	42
16:00-17:00	107			107	84			84	65	5	0	70	39	1	1	41
17:00-18:00	109			109	74			74	68	6	3	77	25	5	1	30

D. 80% Minimum Values

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

- B. Crash history satisfied to 80% of the minimum values
- C.1 Major Street satisfied to 80% of the minimum values
- C.2 Minor Street satisfied to 80% of the minimum values

Yes No
 Yes No
 Yes No

Factors to consider in the Engineering Study for Multi-Way STOP Installation (Section 2B.07 05)

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

- A. The need for control left-turn conflicts;
Are left-turn collisions occurring? Yes No
- B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
Locations near or adjacent to intersection that generate pedestrians. Yes No
- Can the installation of the Multi-Way Stop eliminate vehicle/pedestrian conflicts at the intersection? Yes No
- C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
Are there sight lines issues? Yes No
- D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection Yes No

Major Street(Functional Class):

Minor Street(Functional Class):

Would the installation of a Multi-Way STOP improve traffic operational characteristics of the intersection or the major street? Yes No

Multi-Way Stop Installation recommended at California Street and East San Luis Street

Yes No

CERTIFICATION:

This Multi-Way STOP Analysis was determined in accordance with the recommendations set forth by the California - Manual on Uniform Traffic Control Devices (MUTCD) - 2014 Edition - Rev 7 and approved by Adriana Robles, P.E., City Engineer.

Engineer's Stamp



Multi-Way STOP Analysis - Prepared by
Gerardo Rodriguez

Multi-Way STOP Analysis - Approved by
Adriana Robles, P.E.