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

Major Street:Freedom ParkwayMinor Street:Tuscany BoulevardStudy Dates:8/22/2023-8/24/2023

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).

7390 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

### 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

0 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

0 Crash(es)

(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

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	X	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.

0 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

Satisfied Yes

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 If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular

No

No

volumes warrants are 70 percent of the values provided in Items 1 and 2.

ГРН —

Freedom Parkway E/O Tuscany	Boulevard
Freedom Parkway W/O Tuscany	Boulevard

85-th	% :	Speed:
85-th	% :	Speed:

MPH	43
MPH	43

Hours	Northbound Tuscany Boulevard			Southbound None			Eastbound Freedom Parkway			Westbound Freedom Parkway						
	Veh	Peds	Bikes	Total	Veh	Peds	Bikes	Total	Veh	Peds	Bikes	Total	Veh	Peds	Bikes	Total
7:00-8:00	160			160	0			0	260			260	129			129
8:00-9:00	161			161	0			0	245			245	113			113
14:00-15:00	94			94	0			0	253			253	133			133
15:00-16:00	148			148	0			0	279			279	232			232
16:00-17:00	96			96	0			0	259			259	213			213
17:00-18:00	156			156	0			0	299			299	275			275
18:00-19:00	97			97	0			0	250			250	150			150
19:00-20:00	84			84	0			0	233			233	115			115

D. 80%	6 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		Yes	X	No		
C.1	Major Street satisfied to 80% of the minimum values	X	Yes		No		
C.2	Minor Street satisfied to 80% of the minimum values		Yes	X	_No		
	rs to consider in the Engineering Study for Multi-Way STOP Installation (Section 2B.07 05 iteria that may be considered in an engineering study include:  The need for control left-turn conflicts;	)					
D	Are left-turn collisions occurring?  The need to control vehicle/pedestrian conflicts near locations that generate	-	Yes	X	_No		
B.	high pedestrian volumes;		Location	16			
	Locations near or adjacent to intersection that generate pedestrians.	Monte Bella Elementary School Monte Bella Community Park					
	Can the installation of the Multi-Way Stop eliminate vehicle/pedestrian conflicts			•			
	at the intersection?	X	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	X	_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	X	_No		
	Major Street(Functional Class):  Minor Arterial						
	Minor Street(Functional Class): Residential						
	Would the installation of a Multi-Way STOP improve traffic operational characteristics of the intersection or the major street?	X	Yes		_No		
Multi-	Way Stop Installation recommended at Freedom Parkway and Tuscany Boulevard 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 was conducted by a Registed Traffic Engineer within the State of California and Approved by the City of Salinas.

Engineer's Stamp



Multi-Way STOP Analysis - Prepared by Jaime O. Rodriguez, T.E. - Traffic Patterns