

**CITY OF COSTA MESA
PUBLIC SERVICES
TRANSPORTATION SERVICES**

Multi-way Stop Control Warrant

Major St. **BROADWAY** 24 hr vol 2906 8 hr vol 1799 % of 8 hr vol **81** %

Minor St. **WESTMINSTER** 24 hr vol 620 8 hr vol 427 % of 8 hr vol **19** %

Calculated by DJ Date: 2/2/09 Totals 3526 2226

Balance of traffic approach volumes is one of the most important considerations in establishing multi-way stop control. A multi-way stop control may be considered warranted if 1, 2, or 3 below are met and the approach volume balance is 60/40 or better for major street vs. minor street respectively. If a severe accident or delay problem exists, intersections farther out of balance may be considered on an individual basis.

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

Signal is justified, Yes _____ **No** **X**

B. An accident problem, as indicated by 5 or more reported accidents in a 12-month period that are susceptible to correction by a multi-way stop installation. Such accidents include right- and left-turn collisions as well as right angle collisions.

Number of accidents susceptible to correction in a 12-month period **1**

C. Minimum volumes:

1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and:
(Average vehicular volume/hour **225**)

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

Veh. 427 + Peds 50 + Bicycles 50 = 527 / 8 = **66**
Average Delay on Minor Street NA

3. If the 85-percentile approach speed of the major street traffic exceeds 40 miles per hour, the minimum vehicular volume warrant is 70 percent of the above requirements (C.1 and C.2).

Major St. 85% Speed 35.3 m.p.h. Applicable: Yes _____ **No** **X**.

D. Other considerations: 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.

Conclusion:

- Numerical warrant is met, Yes _____ **No** **X**.
- Accident and or sidestreet delay problem exists calling for re-evaluation of the 60/40 volume split requirement. Yes _____ **No** **X**.
- Criteria B, C.1, and C.2 all exceed 80% of minimum values. Yes _____ **No** **X**