THE RURAL MUNICIPALITY OF EAST ST. PAUL

POLICY & PROCEDURES MANUAL

Reference	*Classification*
Public Works Department	Policy
Subject	*Pages*
Implementation and Removal of Stop Signs	
Authority	*Effective Date*
	December 17, 2003
Approved	*Index*
December 17, 2003 Res #610/2003	PUB - 110

POLICY STATEMENT

The purpose of this policy is to define the criteria for the installation and removal of Stop Signs that will serve to prevent collisions, promote utilization of intersection capacity, protect arterial and other through streets and protect pedestrians.

BACKGROUND

In reviewing various documents and adopted policies, it is generally understood that Stop Signs are not intended as speed control devices and their usage is to be limited to the control or right-of-way conflict. Proper use of stop-control is through review of the traffic volumes, number of conflicts (turning movements), physical conditions of the intersection (sightlines), emergency response routes (fire, ambulance, police) and collision history of the intersection (reported collisions). Unwarranted placement of stop signs can create a host of undesirable traffic safety conditions and may actually increase travel speeds between intersections as drivers try to make up lost time.

GENERAL POLICY

There are several instances where stop-control is required to ensure that traffic operations are kept manageable and are required to provide acceptable levels of safety to the road users. These are:

- Traffic Volumes: Usually the heavier volume of traffic should be given the right-of-way.
- Approach Speed: Usually the higher speed traffic should be given the right-of-way.
- Roadway Type: When a minor roadway intersects a major roadway, the major roadway should be given the right-of-way.
- Service Roads: Service roads should always have stop-control to the intersecting roadway.

- Sign Placement: If stop signs are required due to volumes, collisions, etc. along a street that is not part of the primary roadway system, the signs are to be placed in a manner that will not stimulate travel along the street and lead to its ultimate development as a through carrier. An example would be if traffic operations along a local residential street provide better levels of service than the traffic operations along a local collector, whereby traffic volumes would be diverted to the local residential rather than being maintained on the collector.

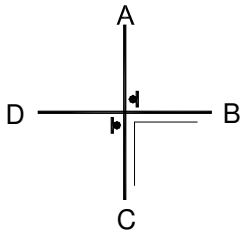
DETAILED POLICY

The following is a list of general guidelines that may be used to initially identify if an intersection requires stop-control and are solely based on volumes passing through the intersection. This assessment does not take into account the collision history, intersection geometrics, or Emergency response routes.

1. Four-Leg Intersections, RightAngle Turns

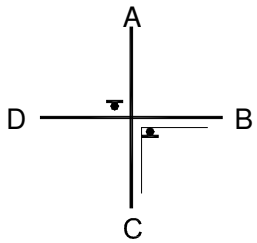
- Where the Average Annual Daily Traffic (AADT) volume on A + C > B + D, stop B and D.

FIGURE 1



- Where the AADT volume on A + C < B + D, stop A and C.

FIGURE 2



2. Three-Legged Intersections

A stop sign should be installed on Leg A unless the traffic volumes indicate a preference for stopping Leg C.

A stop sign may be placed on leg C if:

- Leg C traffic AADT volume is less than 20% of Leg A traffic AADT volume and,
- For a right-turn roadway intersection (Figure 3) the left-turn volume for Leg A, (A to C) is less than 10% of the total approach volume on Leg A; or
- For a left-turn intersection (Figure 4) the through volume on Leg B (B to C) is less than 10% of the total approach volume on Leg B.

FIGURE 3

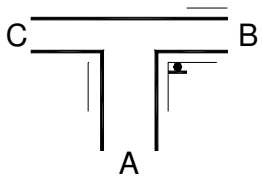
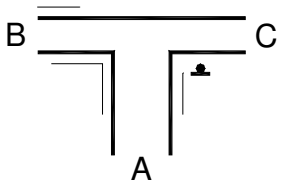


FIGURE 4



3. **Multi-Way Stop Signs**

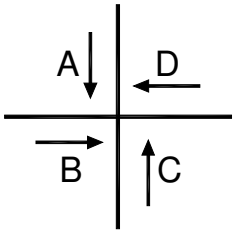
The following conditions may warrant a multi-way stop sign installation:

- Where the volume of traffic on the intersecting roadways are approximately equal,
- Where traffic signals are warranted, the multi-way stop may be considered as an interim measure to control traffic while arrangements are being made for the signal installation,
- As a temporary measure when reversing the stop conditions on intersecting roadways,
- When the minimum 24-hour traffic volume warrants for a four-way stop are met, as shown on Figure 5:

  - **Figure 5**

A + B + C + D = ~ 5,000 vpd.
A + B or C + D = ~ 2,400 vpd.

FIGURE 5

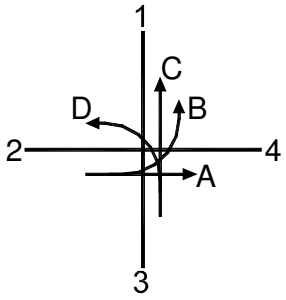


PLUS:

Assume Approach 3 is the third highest leg (based on Volumes) at the intersection, then:

2 (C + D) > A + B

FIGURE 6

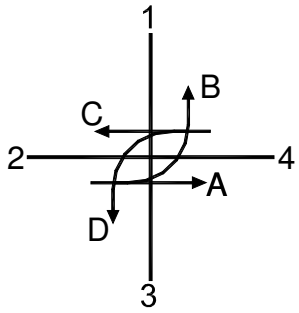


OR:

Assume legs 2 and 4 are major approaches, then:

2D > A or 2B > C

FIGURE 7



4. REMOVAL OF MULTI-WAY STOP SIGNS

Should removal of stop sign be warranted at a currently stop-controlled intersection, the following steps should be taken to mitigate confusion and driver error:

- On the minor road, install oversize stop signs with a caution tab. The caution tab should read "CAUTION: CROSS TRAFFIC DOES NOT STOP" and should remain in-place for a period of ninety (90) days.
- On the major road, remove the unwarranted stop sign(s), stop ahead signs(s), accompanying posts and any obsolete pavement markings

5. PROCEDURE

1. All existing stop signs shall remain in place as of the date of adotion of this policy until such time as council by way of resolution makes any changes.

2. In the event the council wishes to conduct a review of the stop signs located at any intersection(s) within the R.M. of East St. Paul, they shall pass a resolution requesting the municipal engineers to conduct a study of the intersection(s) in question.

3. Any requests from the residents of the municipality for changes to stop signs at any intersection(s) shall be presented to council for a decision as to whether council wishes to have the municipal engineers conduct a study of the intersection(s).

4. Upon the passing of a resolution of council requesting a study of an intersection(s), the municipal engineer shall carry out a study, which would include obtaining the necessary traffic counts for the intersection(s), and prepare a report for council.

5. The study of the intersection(s) by the municipal engineer shall be based on the above policy as well as any other factors that are relevant such as collision history, intersection geometrics and/ or emergency response routes.

6. The report from the engineer shall contain recommendations on the installation and/or removal of stop signs. Where applicable, the report shall also include any recommendation to deal with traffic calming that may be appropriate for the intersection(s) and/or the streets and roads leading to to intersection(s).

7. Upon receiving the report of the municipal engineer, the council shall review the report and make a decision to either leave the stop signs as they exist or make any changes to the stop-controls at the intersection(s) in question that they feel is appropriate. Any decision to change stop signs shall be done so by passing a resolution to that effect.

8. Stop signs shall be placed at any newly created intersections in accordance with this policy.