Responding to Citizen Traffic Requests
Amy Marohn, PE
Traffic Engineer
Responding to Citizen Traffic Requests
Responding to Citizen Traffic Requests

Critical Elements for Successful Response

- Communication
- Data Collection

Examples/Case Studies

- Intersection Control
- Pedestrian Crosswalk
- Speeding
Citizen Requests - Intersection Control
Citizen Requests - Intersection Control

Neighborhood Traffic Issue Evaluation Criteria and Process

The purpose of this section is to provide a process to evaluate issues/requests related to traffic concerns on City streets. The primary goal is to have guidelines and procedures in place to address these concerns and provide criteria for potential low cost, low impact Improvements.

Identified Concern

The first step in initiating the process is when a Neighborhood traffic issue is identified by City Staff or received from the public or City Council.

Eligibility

In order for a neighborhood street to be eligible for low cost, low impact improvements, it needs to have the following characteristic:

- Classified as a local street (no collector or arterial streets)
- Traffic volumes less than 1,200 vehicles per day
- Posted speed of 30 mph or less

Evaluation

If the street is eligible for low cost, low impact traffic improvements, a preliminary study will be conducted using data collected including:

- Daily traffic volume data by direction
- Vehicle speed data
- Crash data

Process / Criteria

Safety Concern

Crash Data

1. >1/yr for 2 Years or 3 in One Year
   a. Yes = Proceed to 3
   b. No = Proceed to 2
2. > 5 Crash Rate >1.5 X AM Severity Rate
   a. Yes = Proceed to 3
   b. No = No Further Review
3. Check Sight Distance = Proceed to 4

Sight Distance

4. Stop Sight Distance for uncontrolled movements
   a. < 200 ft = Proceed to 6
   b. > 200 ft = Proceed to 5
5. Sight Triangles
   a. Left turn maneuver
      < 330 ft = Proceed to 6
      > 330 ft = Proceed to 5
   b. Right turn and crossing maneuvers
      < 240 ft = Proceed to 6
      > 240 ft = Proceed to 7
6. Remove Sight Distance Obstruction
   a. Yes = Remove Obstruction
   b. No = Proceed to 3
7. Check Existing Lighting = Proceed to 8

Lighting

8. Crashes at Night = 50%
   a. Yes = Proceed to 9
   b. No = Proceed to 10
9. Lighting in Place
   a. Yes = Proceed to 10
   b. No = Install Lighting
10. Check Existing Signs and Pavement Markings = Proceed to 11

Signing and Pavement Markings

11. Signing in Place
    a. Yes = Proceed to 12
    b. No = Install warning signs (curves, intersection ahead, etc)
12. Pavement Markings in Place
    a. Yes = Proceed to 13
    b. No = Install pavement markings (line marks, pavement messages, raised pavement markings)
13. Check Traffic Control = Proceed to 14

8/09/2019
Page 21
Citizen Requests - Intersection Control

Case Study: W 108th Street Corridor
Citizen Requests - Intersection Control
Citizen Requests - Intersection Control

November 6, 2015

Dear Resident,

The City was contacted by several residents living on or near W 108th Street about traffic congestion with the uncontrolled intersection along W 108th Street and requested if any additional intersection control could be added to improve safety.

In response to the inquiry, the City has conducted an analysis of the intersections on the corridor from Sibley Avenue to Dews Avenue. Although there are many locations throughout the City where the intersection at residential roadways operate safely with no posted intersection control, it does appear that there are some intersections that present challenges developing at the intersection along W 108th Street.

Based on our analysis, Traffic Engineering is recommending the installation of 20 foot stop control in the south west approach on W 108th Street at the intersection of Anchor Dr.

These signs are scheduled to be installed in the Fall of 2015 wonders and draft may depend.

The City will continue to monitor and report at these intersections after the changes are made. After the first month the City will do a follow-up evaluation to assess whether or not the changes are making improvements.

If you have any questions for me about the process of review, results and recommendations or timeline for installation, please feel free to contact me.

Sincerely,

Brian Mazur
Engineering Technician - Traffic
(651) 780-1683
brian.mazur@bloomingtonmn.gov

City of Bloomington
Minneapolis, Minnesota
Citizen Requests - Intersection Control

- Other locations/corridors studied and recommendations implemented since 2013
Citizen Requests – Pedestrian Crossings

CITY OF BLOOMINGTON
CROSSWALK PLAN
2015 UPDATE

OVERLAY & RECONSTRUCT
SEALCOAT
HINNEPIN COUNTY
CROSSWALK
STOP BAR

Engineering
Citizen Requests – Pedestrian Crossings

- Kennedy High School Driveway
  - School District - October 2014
  - Police Department - fall 2014
  - Marked crosswalk at signal at E 98th/Nicollet
  - Public Transit
  - Holiday Gas Station
Citizen Requests – Pedestrian Crossings

Figure 1: Pedestrian Activity, Kennedy H.S.

Area 1: 40 - 95
Area 2: 155 - 115
Area 3: 55
Area 4: 65 - 55

Average number of pedestrians crossing Nicollet Ave in both the eastbound and westbound direction for each area.

06/03/14-06/05/14
6:00am-6:00pm
Crosswalks - Guidance

Title:
Safety Effects of Marked versus Unmarked Crosswalks at Uncontrolled Locations: Final Report and Recommended Guidelines

Author(s):
C.V. Zegeer, J.R. Stewart, H.H. Huang, P.A. Lagerwey, J. Feaganes, B.J. Campbell

Date:
September 2005

Source/URL: FHWA Publication HRT-04-100,

Description: 114 pp.
## Crosswalks - Guidance

### Table 11. Recommendations for installing marked crosswalks and other needed pedestrian improvements at uncontrolled locations.*

<table>
<thead>
<tr>
<th>Roadway Type (Number of Travel Lanes and Median Type)</th>
<th>Vehicle ADT ≤ 9,000</th>
<th>Vehicle ADT &gt; 9,000 to 12,000</th>
<th>Vehicle ADT &gt; 12,000–15,000</th>
<th>Vehicle ADT &gt; 15,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 48.3 km/h (30 mi/h)</td>
<td>56.4 km/h (35 mi/h)</td>
<td>64.4 km/h (40 mi/h)</td>
<td>&lt; 48.3 km/h (30 mi/h)</td>
</tr>
<tr>
<td>Two lanes</td>
<td>C</td>
<td>C</td>
<td>P</td>
<td>C</td>
</tr>
<tr>
<td>Three lanes</td>
<td>C</td>
<td>C</td>
<td>P</td>
<td>C</td>
</tr>
<tr>
<td>Multilane (four or more lanes) with raised median***</td>
<td>C</td>
<td>C</td>
<td>P</td>
<td>C</td>
</tr>
<tr>
<td>Multilane (four or more lanes) without raised median</td>
<td>C</td>
<td>P</td>
<td>N</td>
<td>P</td>
</tr>
</tbody>
</table>

- **C** = Candidate sites for marked crosswalks
- **P** = Possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements
- **N** = Marked crosswalks alone are insufficient, since pedestrian crash risk may be increased by providing marked crosswalks alone
Citizen Requests – Pedestrian Crossings
Citizen Requests – Pedestrian Crossings
Citizen Requests - Speeding

- Traffic Management Coordinator
- Conducts information and data gathering
- Works closely with Traffic Unit of Bloomington Police Department
- Management Speed Radar Sign program
106th Street Speed Radar Project

Installed for a 1 year trial period in 2012

Before Conditions
• On going resident speeding complaints
• 30 mph minor collector roadway
• West end terminates into residential townhomes
• 85% speeds of 38 mph
• High number of outlier speeders (+40)

After Conditions
• 85% speeds reduced to 37 mph (-1)
• Outlier speeder reduced
• No further neighborhood complaints

Side note: vandalized after only 12 hours of operation
Responding to Citizen Traffic Requests

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Intersection Control Requests

Existing Conditions
- 4-way uncontrolled intersection
- Crash History - 1 to 2 serious crashes per year
- Speeding on “major leg” of intersection

Temporary Trial

Permanent Traffic Circle