

Addressing Citizen Requests For Traffic Safety Concerns

LRRB Report 2017RIC05

Technical Report Documentation Page

1. Report No.	2.	3. Recipients Accession No.
MN/RC - 2017RIC05		
4. Title and Subtitle		5. Report Date
Addressing Citizen Requests for Tra	ffic Safety Concerns	December 2017
		6.
7. Author(s)		8. Performing Organization Report No.
Renae Kuehl, Tom Sachi, Michael M	S arti	
9. Performing Organization Name and Address		10. Project/Task/Work Unit No.
SRF Consulting Group, Inc.		
One Carlson Parkway North, Suite 1	50	11. Contract (C) or Grant (G) No.
Minneapolis, MN 55477-4443		1002305-T5
12. Sponsoring Organization Name and Address		13. Type of Report and Period Covered
Minnesota Department of Transporta	ation	Final Report
Research Services & Library		
395 John Ireland Boulevard Mail Sto	pp 330	14. Sponsoring Agency Code
St. Paul, Minnesota 55155		

15. Supplementary Notes

Report: http://mndot.gov/research/reports/2017/2017RIC05.pdf

Tracking Form: http://mndot.gov/research/reports/2017/2017RIC05trackingsheet.xlsx

16. Abstract (Limit: 200 words)

The purpose of this guidebook is to provide local agency staff with a best practice approach to addressing citizen's common requests for traffic safety concerns (i.e. signing and pavement markings, not larger scale infrastructure or planning projects). This guidebook focuses on the importance of communication with citizens when responding to traffic safety concerns or requests. It also provides guidance on logging requests, steps for following up on a request, standard responses, and an explanation of why a requested strategy may or may not be the appropriate solution. Because of the differences between urban vs. rural environments, city vs. county agencies and staff availability, there is no one size fits all approach. This document provides general guidance that can be modified to meet each agency's needs. Each request should be investigated to ensure the safety of all modes of transportation.

The responses and evaluation process will vary based on each agencies' policy, but the general situations and approaches provided in this guidebook will serve as a base for agencies to get started.

17. Document Analysis/Descriptors		18.Availability Statemen	nt
Traffic Safety Citizens Requests Stop Sign Speed Limit Crosswalk	Ineffective signs Warning Signs School zone signs Turn Restrictions Recording requests	from: National Technical Informations Services, Springfield, Virginia 221	
19. Security Class (this report)	20. Security Class (this page)	21. No. of Pages	22. Price
Unclassified	Unclassified	46	

TABLE OF CONTENTS

Introduction/Purpose of this Document	1
Importance of Communication	3
Tips to create an open dialogue with citizens:	3
Tools to Submit a Request	4
How to Address Social Media	
Assign a Point Person to Collect all Requests	5
Steps to Address Typical Requests	7
Commonly Identified Concerns	7
Step 1: Problem Identification	8
Step 2: Evaluation	8
Step 3: Response/Follow-up	9
Petitions	9
Petitions Policies	

Typically Requested	
Traffic Safety Devices	13
a. Stop Signs	14
b. Speed Limit	17
c. Crosswalks	20
d. Warning signs	22
e. School Zone	24
f. Parking Restriction Signs	26
g. Intersection Control — Turn Restrictions	28
Keeping Record of Requests	31
Case Studies	33
Example Response Template Letters/Emails	37

Acknowledgments

We wish to thank the Minnesota Local Road Research Board (LRRB) and its Research Implementation Committee (RIC) for the financial support to make this important guidebook a reality. The Technical Advisory Panel that steered this project was helpful in identifying key issues and concerns related to addressing citizen's requests for traffic safety concerns and the resources needed at the local level. They also were very generous with their time in attending meetings, reviewing and providing content, images and oversight for this final document.

The authors would like to thank the following individuals and organizations for their contributions to this document:

Technical Advisory Panel

Steve Bot (Chair), City of St. Michael

Lon Aune, Marshall County

Dave Bennett, City of Northfield

Deb Heiser, City of St. Louis Park

Bruce Holdhusen, MnDOT

Maury Hooper, Hennepin County

Steve Lillehaug, City of Shakopee

Mark Maloney, City of Shoreview Randy Newton, City of Eden Prairie

Mike Nielson, City of Sartell/WSB & Assoc.

Mark Nolan, City of Edina

Tim Plath, City of Eagan

Mark Ray, City of Crystal Sarah Tracv.

Dakota County

Andrew Witter,

Sherburne County Rick West, Otter Tail County

Mark Vizecky, MnDOT State Aid

INTRODUCTION/ PURPOSE OF THIS DOCUMENT



The purpose of this guidebook is to provide local agency staff with a best practice approach to addressing citizen's common requests for traffic safety concerns (i.e. signing and pavement markings, not larger scale infrastructure or planning projects). This guidebook focuses on the importance of communication with citizens when responding to traffic safety concerns or requests. It also provides guidance on logging requests, steps for following up on a request, standard responses, and an explanation of why a requested strategy may or may not be the appropriate solution. Because of the differences between urban vs. rural environments, city vs. county agencies and staff availability, there is no one size fits all approach. This document provides general guidance that can be modified to meet each agency's needs. Each request should be investigated to ensure the safety of all modes of transportation.

The responses and evaluation process will vary based on each agencies' policy, but the general situations and approaches provided in this guidebook will serve as a base for agencies to get started.

IMPORTANCE OF COMMUNICATION



Communication is essential in working with citizens to understand and respond to their requests. When a citizen submits a request, they expect a timely response and solution. Engaging with the citizen soon after the request is submitted will help them feel that their voice has been heard and their concern is being taken seriously. It is imperative that the response given to each citizen is consistent and timely, regardless of the evaluation process used.

Tips to create an open dialogue with citizens:

- Take the time to listen to the citizen to understand where the request is coming from, and try to find the true reason for their concern. Sometimes a citizen may request something because it's the only option they are aware of, not realizing that it may not be the appropriate solution. Confirm the understanding of what the true concern is by asking clarifying questions. Example: A citizen might request a stop sign at an intersection, but the true issue may be perceived speeding.
- Showing genuine empathy in their request can help you identify the concern or help ease their concerns by knowing someone is looking into it. If resources are tight, simply performing additional follow up emails and phone calls to see if the concern is continually occurring may help direct where resources should be allotted to.

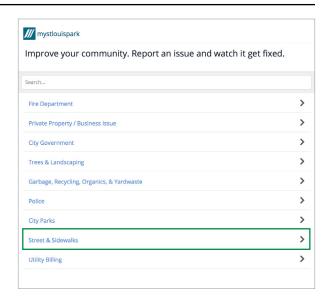
- If you are emailing or leaving a message with the citizen, consider mentioning "I will wait until I hear back from you before investigating further". This will engage them in the process.
 Sometimes the effort of talking through the issue with the citizen and helping them understand the situation is enough to satisfy their needs and no further investigation is necessary.
- If possible, meet the resident at the location of their concern to observe and review the concern with them.
- Engaging in a two-way conversation with the citizen to understand the concern thoroughly will help confirm your understanding and reinforce with the citizen that you have received their request and are taking action.
- Once you determine your course of action to investigate the concern, notify the citizen of the plan.

- Let the citizen know the anticipated timeframe for your evaluation. If the timing changes, give the citizen periodic updates throughout the process so they know you are working on it.
- Once a decision is made about how to address the situation, notify the citizen. If the decision is made to not implement the strategy they requested, be sure you take the time to explain why and offer other possible alternatives. Frame your response with an approach such as, "I can't implement what you requested, but here's what I CAN do...". Focus on what you CAN do and what the citizen can possibly do. Examples: Conduct traffic counts, perform site visits (to identify the problem yourself), police monitoring/speed, etc.
- Provide resources (website, brochures, videos, etc.) specific to the topic to educate the citizen on the issue they are concerned about (details in section 4).

Tools to Submit a Request

Each agency may have different ways that citizens can submit a traffic safety request. It is important to ensure requests submitted in various forms are all recorded and responded to in a consistent manner. (Examples of record keeping forms are available in section 5). Various tools that agencies provide for citizens to submit a request could include:

- Phone call
- Email
- Online form/social media
- Cell phone application
- Paper form
- Feedback at public meetings
- Request from a council member
- Feedback from police officers



Example website for submitting requests; City of St. Louis Park

How to Address Social Media

Social media pages are not intended or recommended for official agency business/traffic safety discussions. If a citizen posts a complaint about traffic safety related issues on social media, direct the person in charge of managing the social media account to respond to the comment by asking the citizen to contact the appropriate agency staff member and provide his or her contact information. This will hopefully direct complaints on social media to the appropriate person and encourage citizens to engage with agency directly if the issue is important to them. Additionally, by having the citizen respond directly to a person instead of a faceless/nameless social media page, it is likely to generate a more civil discussion to address the true issue.

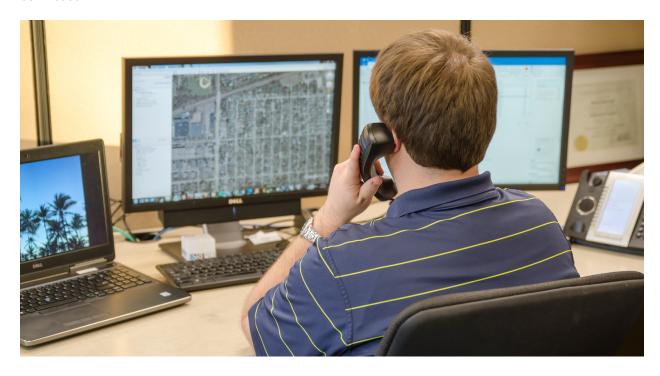


City of Edina Facebook Page

Assign a Point Person to Collect all Requests

By ensuring all requests (i.e. through every platform described above) are directed to one person, a consistent response and response time will be provided to the citizen, and no requests will be missed.

Ensure other agency departments are aware of the program/person and can direct concerns accordingly.



STEPS TO ADDRESS TYPICAL REQUESTS



Commonly Identified Concerns

The five categories below cover the most common topics that local agencies receive complaints about that typically end up generating requests for various traffic control devices.

- Speeding
 - Perceived speeding
 - Actual speeding
- Volume
 - Cut through traffic
 - Trucks
 - Number of vehicles
- Safety
 - Crosswalks/School Crossings
 - Crosswalk compliance
 - Lack of available gaps from a side street
 - Crashes
 - School zone
 - Uncontrolled intersections
- Sightlines
 - Vegetation blocking view/fences/walls

Information on how these concerns are related to specific traffic signs and striping is detailed in section 4. This guidebook is focused on guidance provided in the Minnesota Manual on Uniform Traffic Control Devices (MMUTCD).

Requests that require more detailed work (Not typically resolved with a sign or quick fix. Requires a different process that needs a more extensive planning project or study)

- Traffic calming (medians, width reduction, speed bumps)
- Bike lanes/bike safety
- Development related traffic
- Pedestrian Network

While each situation is unique, most requests can be addressed by following these general steps:

Step 1: Problem Identification

- Record the request in a spreadsheet or database, ensure consistency in methodology with every request.
- 2. Identify/understand the problem the citizen is addressing, repeat issue back to them to confirm your understanding. Try to get to the true issue. Identify why/if the problem is unique. A phone call or site visit to meet the citizen at the location of the concern is more effective in identifying the issue.
- 3. Questions to ask the citizen:
 - What is your concern?
 - Why are you concerned?
 - Is there a specific day of the week you have the concern?
 - Is there a certain time of day that you notice the concern?

- Is there a specific vehicle that is causing the concern or multiple vehicles?
- Is there a certain event or development that causes the concern?
- How often does this happen?
- Have you noticed anything that helps reduce the concern (for example, a vehicle parked on the street)?
- Have you talked with your neighbors about the concern?
- Do others in your neighborhood have the same concern?
- Do they have a petition (if your agency requires one)?
- 4. After completing items 1–3 above, sometimes the concern and issue is clear and no additional evaluation is needed. Offer what you can do to help. If more work is needed, move to step 2.

Step 2: Evaluation

Evaluation Steps:

- 1. Schedule a site inspection to determine if other factors are leading to the issue. (i.e. sight distance, lack of gaps, etc.)
 - a. Arrange for and collect necessary data (traffic volumes, crash data, etc.)
 - b. Conduct an evaluation to determine if the traffic safety device is warranted, if necessary
 - c. Address advantages/disadvantages of installing the traffic safety device.
 - d. Review findings from the evaluations and determine a recommendation.

- 2. If the requested traffic safety device is obviously not the appropriate remedy for the issue, provide the citizen with the appropriate reasons why and offer what you can do.
- 3. Offer potential mitigation to the problem using the following tools:
 - Installing temporary, low cost options to see if the concern is minimized. (i.e. yard signs, speed boards, enforcement, etc..)
 - b. Offer the citizen things they can do to help their cause (i.e. park on street to reduce speeds)

Step 3: Response/Follow-up

If the evaluation will take more than a month, send periodic updates to the citizen. Give an expected timeline. If it needs to go to council, notify the citizen of meeting date.

- 1. Determine an appropriate response based on the data collected.
- If the decision is to make a change, make sure you understand your agency's decisions makers (Council/Board, safety committee, Engineer, etc.) and processes. Be sure to consult with them before making your final decision.
- 3. Document the decision. Documentation is key to consistency to ensure the decision makers follow the same steps and process each time a similar request is made. This should be done for both denials and for installations. This also allows the agency to have records of past decisions made for reference and for new staff that take over the role in the future.

- Additionally from a legal standpoint, detailed documentation is needed for traffic control changes to show a basis of the decision, which helps limit a liability claim against the city or county.
- 4. Once a decision is made the citizen should be notified. If the decision is made not to implement the strategy requested, be sure you take the time to explain why and offer other possible alternatives. Frame the response with an approach like "I can't implement what you requested, but here's what I CAN do...". Focus on what you (the agency) CAN do. Examples: police monitoring/speed boards to help educate drivers of their potentially dangerous driving behaviors, yard signs etc.
- 5. Provide resources (website, brochures, videos, etc.) specific to the topic to educate the citizen on the issue they are concerned about (details in section 4).

Petitions

If the agency that is receiving requests has a petition process, this section can help formulate a response. Some things agencies should understand about a petition process:

- Petitions are not a traffic management decision and are not binding.
- Petitions are more plausible for nonstatutory requests in regards to lighting and parking requests that affect a minimal amount of people versus traffic control decision.
- Locations for stop signs should be decided based on an engineering study and not a petition.

Things to be aware of when considering a petition process:

- More than just the petitioner is impacted by a traffic decision. The full neighborhood should be aware of what is being petitioned for.
- An effective process is to have the agency write the petition to ensure all appropriate information regarding potential impacts and costs are being shared with people who are being asked to sign it.
- With a petition, residents may expect results.
 Expectations must be set to be clear that a petition is not a guaranteed decision document.
- Be clear on who will pay for improvements (i.e. some requests may be paid for by the residents)

 If the agency is not writing the petition, it is encouraged to have the agency send out information to citizens about upcoming petitions to ensure the appropriate information is being shared regarding potential impacts and costs.

Policies

Agencies may have a policy regarding certain traffic safety requests that can be referenced prior to taking any evaluation steps. While not every agency has a policy in place, this section can help identify policy benefits and drawbacks. It is important to ensure the policy is adopted by the highest level governing body within the agency to reduce potential fault. Policies should maintain compliance with guidance in the MMUTCD, to maintain uniformity across jurisdictions. Additionally, ensure each policy has accurate and up to date supporting documentation and addresses why the policy is in place. If possible, include language to allow for engineering judgment when applying policies.

Benefits:

- Minimize unnecessary work if sign request is covered in policy (i.e. children at play signs not allowed within an agency based on a policy decision)
- Policy can help give the decision maker a stronger platform to make the decision
- Likely that research and evaluation has been already completed to determine the specific policy.
- Can help reduce cost of staff time and resources, thereby improving efficiency.
- Can help with liability claims



Drawbacks:

- Concerns could get overlooked if a blanket policy is applied too generally
- If you have a policy and don't follow it, you can become liable. You are committed to following it.
- Any policy deviation should go through the appropriate approval channels and should be documented
- Need to ensure that the policy has been adopted by the highest agency to avoid conflicting policies among agencies that overlap.

Traffic Safety Advisory Committees

Some agencies that receive numerous requests from citizens have formed a "Traffic Safety Advisory Committee (TSAC)" to help assist with reviewing and making recommendations to the council on citizen requests. A typical Traffic Safety Advisory Committee (TSAC) reviews community traffic safety issues and proposed solutions, provides guidance to City staff on traffic safety issues, advises the City Council on traffic safety issues and conducts public meetings on traffic safety issues as directed by the City Council.

A typical TSAC's responsibilities are:

- Consider citizen concerns regarding traffic and parking on city streets
- Consider pedestrian and bicycle traffic safety issues
- Serve as a forum to evaluate proposals for traffic control devices, signage, and striping
- Serve as a forum to investigate and develop citywide traffic education and communication programs

Example agencies with TSAC's:

- Apple Valley http://www.ci.apple-valley. mn.us/index.aspx?NID=100
- Edina https://www.edinamn.gov/734/Traffic-Safety-Committee
- Prior Lake http://www.cityofpriorlake.com/
 TSAC.php
- Roseville https://www.cityofroseville.com/1823/Traffic-Safety-Committee



TYPICALLY REQUESTED TRAFFIC SAFETY DEVICES

There are many traffic safety devices that citizens request, the most common ones include:



a. Stop Signs



b. Speed Limit



c. Crosswalks



d. Warning Signs (Children At Play, Etc.)



e. School Speed Zone



f. Parking Restriction Signs



g. Intersection Control (no right-turn on red, no left turns, do not block intersection)

This section will provide information about each of the most commonly requested traffic safety concerns. For each traffic safety device, a summary of general information, research on effectiveness, evaluation approach, things to be aware of and educational tools are provided.

a. Stop Signs

This section is identified for stop signs, but the guidance may also apply to a yield sign.



General Information

- Stop signs are intended to assign right-of-way for drivers and are not speed control devices.
- Increasing the number of stop signs does not necessarily reduce crashes. (4)
- Improperly applied or installed stop signs have poor compliance rates and may create driver confusion.
- Poor compliance rate could lead to further safety issues based on driver behavior and driver expectancy. (10)
- Stop signs may be appropriate for gap or sight distance issues. (10)



Effectiveness

- Volumes: Depends on the makeup of traffic, number of stop signs, and the available adjacent routes. Stop signs generally do not result in a net reduction of traffic.
- Speeds: Unlikely to reduce speeds, and depending on the saturation of stop signs, improperly installed signs can often lead to increases in speed between intersections to reduce lost time stopping at the stop sign. (3 & 10)
- Safety: If installed in a location that does not warrant a stop sign or where motorists are likely to ignore the sign, the stop sign can lead to an increase in crashes due to driver behavior. (3 & 10) If sight distance is poor due to a permanent installation blocking driver's line of sight, stop signs can have a positive effect on safety. (10)
- Can add unnecessary delay to the roadway network.

Evaluation

- Schedule a site inspection to determine if other factors are leading to the issue. (i.e. sight distance, lack of gaps, etc.)
- If a lack of gaps is the issue, collect traffic data to determine if stop signs are warranted.
- Provide stop/yield sign warrant analysis

Reasons to Install

- The proposed stop sign will alleviate an existing safety concern.
- The intersection traffic volumes meet stop control warrants and are determined to be necessary.

Things To Be Aware Of

- If a stop sign is installed, there will be an increase in acceleration and deceleration, potentially resulting in noise impacts to the surrounding citizens. (3)
- Due to likely low compliance, there could be safety issues.

- Adding unnecessary and unwarranted stop signs will likely have a low effectiveness at solving the identified problem.
- Additional stop signs can make the intersection feel like it is busier
- More signs to maintain

Alternative Implementation Options

- If speed is the actual issue that is prompting the stop sign request, see the next section for ideas on addressing speeding.
- If sightlines are the issue, determine the cause. Things such as trimming bushes or moving a fence post may be effective.
- Increase compliance patrols with the police department.
- Have neighbors institute a "Neighborhood Speed Watch" program, which may encourage peer pressure to reduce speeds. (10)
- Install a yield sign, if appropriate
- Installing a stop sign could create a false sense of security



Education Tools

VIDEOS:

- "Stop Signs: Why Do We Have Them on Residential Roads?" – Street interviews with citizens to get an understanding of what they think of the effectiveness of stop signs
- All-Way Stop Signs A Brief Analysis enhance citizens' understanding of all-way stops and the requirements that regulate their use
- <u>Traffic Control: What Works</u> Enhances the understanding of why you don't install stop signs everywhere and why location selection is important.
- City of Crystal: Where to Locate a Twoway stop sign – Enhance understanding of when/where to install signs.

RESOURCES/FOOTNOTES

- Manual on Uniform Traffic Control Devices

 Section 2B Provides warrant analysis for stop signs.
- 2. Example procedures for responding to stop sign requests:
- 3. Stop Control Policy (City of Lakeville)
- 4. <u>Traffic Safety Committee</u> (City of Edina)
- 5. <u>Street and Traffic Control Policy</u> (City of Moorhead)
- Minnesota's Best Practices for Traffic Sign Maintenance/Management Handbook – Page F-4, AP-8
- 7. Traffic Management Plan (City of Blaine)
- 8. Response procedure summary (pages 3-7)
- 9. Table of stop sign effectiveness broken by traffic concern (page 8)
- 10. Detailed summary on the effects, advantages/disadvantages on stop signs (page 17).

- 11. NCITE Neighborhood Traffic Control Handbook Includes a list of traffic control techniques and their effects on traffic volume, speed, environmental issues and safety. (Stop signs on page 15-1)
- 12. City of Minnetonka Provides language regarding the improper installation of stop signs and why they are not a speed control device.
- 13. <u>Virginia DOT/TRB</u> evaluated the effectiveness of AWSC for residential traffic management.
- 14. WSDOT Traffic Management Guide Page 28;
- 15. Stop, Yield, and No Control at Intersections
- 16. Multi-way Stops -The Research Shows the MMUTCD is Correct!

b. Speed Limit



General Information

- Speed limits are set by state statutes (169.14) and all agencies must follow the state statute. (1)
- Decisions on changing speeds are based on speed studies that require state DOT commissioner's approval. Be sure to take the time to read and understand the statute, as there are other variations to speed limits included. (1) (8)
- In Minnesota, the statutory speed in an urban district is generally 30 mph. (169.14) (1)
- Speeding may be a result of drivers using the areas as a cut through, with speed limits not being the issue. Further investigation would be important to determine if diverters, traffic circles, or enforcement is necessary.



Effectiveness

- Volumes: Speed limit changes generally do not result in a net reduction of traffic. (2) (9)
- **Speeds:** Unlikely to reduce speeds as motorists drive roadways at a speed they are comfortable with. Drivers select their safe speed based on their perception of actual roadway conditions (i.e. road width, pedestrian presence, parked vehicles, obstructions). (3 & 12)
- Safety: Actual crash data shows that crash rates do not decrease with a speed decrease. If there is an actual speeding issue, lowered speeds could result in safer streets.
- · High levels of enforcement, when present, may result in more vehicles driving the speed limit if an actual speeding issue is occurring.
- Increased on-street parking can be an effective way to reduce speeds in residential areas.

Evaluation

- Schedule a site inspection to review the issue with the citizen.
- Review crash history, roadway geometry, and land use within the area.
- Perform speed data collection via road tubes or radar detection (i.e. speed trailer/board) to determine what the speeds are. Identify the, average speed, 85th percentile speed, and 10 mph pace.

Reasons to Install

 If the collected speed information indicates drivers are driving the roadway at a different speed than that is set, a speed limit change can be submitted to the commissioners office for review. Note, this sometimes results in a speed increase rather than decrease.

Things To Be Aware Of

- Speed related complaints are typically identified by someone's perception of a vehicle speeding, not an actual speed issue.
- Speeding issues where the request it to install speed table/speed humps are larger scale issues involving much more time and money to evaluate. Also, speeds tend to only be affected near the humps, not necessarily in between.
- A change in speed limits likely have a low effectiveness at solving the identified concern.
- Speed limits within neighborhoods are likely already at the minimum based on state law.
- Often citizens request for a sign to be installed in residential areas that reflects the unposted statutory speed limit. However, posting speed limits advertises that a given speed is acceptable even though it is desired that drivers drive slower.
- Roadway narrowing to reduce speeds can be effective, but can be an expensive measure. (12)
- Often the speed offenders are people that live in the neighborhood. (12)

Alternative Implementation Options

- Meet with the citizen and identify vehicle speeds using a radar gun to determine if it is only a perception, not an issue.
- Encourage the citizen to talk with their neighbors in person, as they are typically the offenders. (12) Use a community event such as "Night to Unite" to have the discussion. Avoid using social media.
- If speed is the key issue, install a temporary speed trailer to monitor traffic speeds, speed trailers can bring attention to drivers that their speeds are too high.
- Install temporary yard signs (similar to political signs i.e. drive like your children live here), green children signs/figures or toys in yard when children are playing. It is key to put these items away when children are not present. Be sure to consider right-of-way impacts when putting up signs (i.e. if on shoulder of a roadway)
- Citizens can help their cause by parking on street (can help reduce speeds)
- Increase compliance patrols with the police department.



Education Tools

VIDEOS:

- <u>Speed Perception</u> City of Crystal Video shows a vehicle driving at different speeds on neighborhood streets. This shows the difficulty in determine the speeds of vehicles based on just the eye test.
- Speed Limits: Why do we have them? -LRRB - Shows the research behind setting speed limits and the need for consistency.
- Also shows that the design of the roadway will influence speeds more than a speed limit sign.
- Setting Speed Limits: Video shows how to determine speeds limits for roadways.
- Cal DMV rules of the Road Shows that certain areas have a minimum speed limit without signed speed limits.

RESOURCES/FOOTNOTES

- 1. Minnesota State Statute
- 2. Manual on Uniform Traffic Control Devices -Section 2B
- 3. Minnesota's Best Practices for Traffic Sign Maintenance/Management Handbook -Page F-3, AP-9
- 4. FHWA Methods and Practices for Setting Speed Limits - Page 9
- 5. FHWA Engineering Speed Limits
- 6. <u>USLIMITS2 FHWA Tool to Determine</u> **Speed Limits**

- 7. FHWA Speed Management Reference
- 8. MnDOT Speed Brochure
- 9. <u>Blaine Traffic Management Plan</u> Page 8
- 10. NCITE Neighborhood Traffic Control Handbook Page 13-1
- 11. WSDOT Traffic Management Guide Page 29
- 12. Multi-way Stops -The Research Shows the MMUTCD is Correct!

c. Crosswalks



General Information

- Minnesota State Statute 169.21 provides details regarding the state law on crosswalks.
- Crosswalks are painted to guide pedestrians to cross the roadway. (2)
- Crosswalk signing is implemented to bring attention to drivers of areas with a likelihood of a pedestrian crossing.
- Crosswalks and crosswalk signs are not a safety device, they are provided as guidance for pedestrians on where to cross.
- They are used to indicate a pedestrian crossing to drivers. (2)
- Often crosswalks are used in conjunction with other measures (slower speed roadway design, short crossing distances, lighting, enhanced crosswalk signs) to enhance safety for pedestrians.

Effectiveness

- Volumes: Crosswalks generally do not result in a net reduction of traffic. (6)
- **Speeds:** Crosswalks generally do not result in a net reduction of speeds. (6)
- **Safety:** Crosswalk markings alone typically do not result in a decrease of crashes, and if done at a high risk area (high volume, more than three lanes) can actually results in higher crash rates because it gives pedestrians a false sense of safety that the driver will stop for them. (2)
- When installed with additional safety measures, crosswalks are effective at improving safety.
- Crosswalks are most effective on two-lane, low volume roads.
- Increasing crosswalk effectiveness can be accomplished using crosswalk enhancements found in the Minnesota's Best Practices for Pedestrian/Bicycle Safety or the Pedestrian Crossings: Uncontrolled Locations handbooks.

Evaluation

- Schedule a site inspection to review the issue with the citizen.
- Perform crosswalk data collection. Identify how many crossings and compliance rate of vehicles at the requested location. If there are 20 pedestrians crossings an hour or more, consideration should be given for installing a crosswalk. (3)
- If the current crosswalk exists, determine compliance rate to identify if further enhancements may be necessary.

Things To Be Aware Of

- · Crosswalks should not be installed on high volume and/or four-lane roadways with a dual threat possibility without additional safety measures. This leads to unexpected drive behavior where one driver stops and another does not, resulting in a pedestrian crash. (2) If additional efforts are included with installation (reduced crossing distance, median islands, significant lighting improvements, flashing lights) longer distance crossings could be considered.
- Agencies often get requests to upgrade existing crosswalks with additional treatments such as in-street pedestrian sign or flashers.
- Mid-block crosswalks are discouraged
- Consider the proximity to other crosswalks before installing a new one.
- Crosswalks are hard to maintain

Alternative Implementation Options

- If compliance is the issue, enforcement from local police may be necessary.
- · Plastic bollards to reduce roadway width and crossing distance may bring more attention to the crosswalk.
- Temporary installation of crosswalk measures may test options to determine if they are effective before permanent installation.



Education Tools

VIDEOS:

- RRFB Video shows the potential improvement in crosswalk compliance with an enhanced crosswalk
- RRFB on Campus shows the potential improvement in crosswalk compliance with an enhanced crosswalk

RESOURCES/FOOTNOTES

- 1. Minnesota State Statute
- 2. Minnesota Best Practices for Pedestrian/ Bicycle Safety - Pages 3-8 include information regarding safety and a flow chart to determine best practices. Additionally, a table is included to determine when crosswalks are to be installed along certain roadway types.
- 3. Pedestrian Crossings: Uncontrolled Locations – Provides a flowchart for best practices and provides effectiveness for specific uncontrolled crossing treatments.
- 4. Minnesota Guidance for Installation of Pedestrian Crosswalks on Minnesota State Highways
- 5. Safe Routes to School
- 6. Blaine Traffic Management Plan Page 21

d. Warning signs



Examples

- Children at Play
- Animal Crossing Warning
- Deaf/Blind/Autistic Person
- Playground
- Blind Driveway
- No Outlet/Dead End
- Trail Crossings
- Etc.

General Information

- Some of these signs are not in the MMUTCD because of their lack of effectiveness.
- "Children at Play" signs may provide the wrong message that playing in the street is safe.
- "Children at Play" and Deaf/Blind/Autistic Person types of signs should not be installed and more commonly being removed by agencies.
- Animal crossing signs may provide the wrong impression that animals will only be crossing in that location.
- The message on the sign should be clear so the driver knows what to do when they see the sign, and so that driver response is consistent across all drivers.

Effectiveness

- Depending on the sign, there is a mix of results. "Children at Play" signs may lead children to believe playing in the street is safe, which could result in more pedestrian crashes.
- If applied correctly, (i.e. blind driveway, dead end, trail crossings) the signs installation can be effective in improving safety as drivers become more aware of vehicles they cannot see.
- Animal crossing signs may make drivers more aware, but will likely not change driver behavior.
- Deaf/Blind/Autistic Person and Playground signs are not effective, as they do not represent a warning issue that drivers will always see, leading to drivers ignoring the warning sign.

Evaluation

- Site visits should be completed to determine if sight distance is issue in regards to Blind Driveway and Trail Crossing sign requests.
- Dead End/No Outlet locations can be reviewed on a case by case basis.

Things To Be Aware Of

- Signs should be installed sparingly and in locations that provide a benefit all day, every day to ensure the correct message is being conveyed. These are typically Blind Driveway, Dead End/No Outlet, and Trail Crossing signs.
- Signs that do not give a warning of continued, unexpected occurrences are not encouraged to be implemented.
- Typical application of "No Outlet" signs is when you cannot see the end of the street.
- "No Outlet" signs can be added as a small sign on top of a street name sign.

Alternative Implementation Options

- Install temporary yard signs (i.e. drive like your children live here).
- Remove plants/trees that obstruct sightlines.





Education Tools

VIDEOS

- Traffic Control: What Works
- "Ineffective Specialty Signs" video will be available on the LRRB YouTube page in Spring/Summer 2018

RESOURCES/FOOTNOTES

- Blaine Traffic Management Plan Page 8 and Page 16
- Minnesota's Best Practices for Traffic Sign <u>Maintenance/Management Handbook</u> – Page F- 6, F9, F11, F13-14, F18, AP4
- 3. NCITE Neighborhood Traffic Control Handbook Page 5-1;
- 4. <u>Blaine Traffic Management Plan</u>– Page 16
- 5. MnDOT Deer Crossing Guidance
- 6. <u>Effectiveness of "Children At Play"</u> warning signs

e. School Speed Zone



General Information

- School zones should follow the guidelines set out by MnDOT. (2)
- School speed zones are typically defined by a supplemental plaque defined by "when children are present", "when flashing" or for specific time periods during the school day.
- Typically installed near schools with crosswalks.
- Help educate drivers about the potential for school children.
- Enforcement of speeds will yield better compliance.

Effectiveness

- Volumes: No change in volume
- **Speeds:** Lower speeds with enforcement and potential sign enhancements
- **Safety:** Potentially improved driver behavior in school zones.



Evaluation

- An engineering study is required by the agency to establish a school speed zone based on guidelines prescribed by MnDOT.
- A review of speeds within the study area, pedestrian facilities, and sight lines should also be completed.

Things To Be Aware Of

- Cost of the study may not be feasible for the district/City
- Construction, maintenance and operation costs
- "When Children Present" sub-plaques may not be effective. Consider replacing with a sub-plaque that lists the school times or says "When Flashing" and add a flashing light if experiencing compliancy issues for better enforcement.

Alternative Implementation Options

- More school crossing guards, especially adult guards.
- Speed enforcement





Education Tools

RESOURCES/FOOTNOTES

- 1. School Zone Layout and things to consider within a school zone.
- School Speed Zone Limits MnDOT Guidelines for developing a school speed limit
- A Guide to Establishing Speed Limits in <u>School Zones</u> – MnDOT Guidelines for developing a school speed zone study.
- 4. <u>Safe Routes To School</u> Shows a school zone layout and gives levels of effectiveness of the improvements
- 5. MN MMUTCD Part 7 7E a

f. Parking Restriction Signs



General Information

- There are many parking restrictions included in state stature 169.34.⁽¹⁾
- All parking designations should follow MMUTCD guidance
- Typically installed to improve sight lines or provide adequate traveling width, not prohibit certain vehicles from parking in front of certain homes.
- Vehicles are allowed to park on public streets.
 Home owners do not own the roadway in front of their house.
- Parking cannot be reserved on public streets without permit programs.
- Encourage neighborhood parking issues to be discussed between neighbors, but offer mediation if the discussion could lead to significant confrontation.
- Parking permit programs can be implemented, however, costs are usually passed onto citizens. These programs require resources that agencies may not be able to fund themselves.

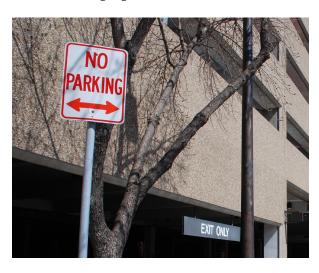
- Specific on-street handicap parking may be possible, depending on the agency.
- Parking restrictions are handled on a case by case basis and must take into account all of those that are affected by potential changes.

Effectiveness

Volumes: No change in volume

• **Speeds:** Minimal effect on speeds

• **Safety:** Can reduce crashes at intersections with existing sight line issues.



Evaluation

- A parking study could be performed.
- If the request is dealing with sightlines, a site visit may be necessary and a sightline study performed.
- Permit parking could be implemented, however, this requires approval from the neighborhood citizens, including considerations for paying for permits. This also increases administrative time for the agency to manage distribution of parking permits.
- Impacts to local businesses should be accounted for.

Things To Be Aware Of

- Citizens do not own the roadway in front of their home, as it is a public space. A permit situation could be worked out, but would require full neighborhood participation.
- All signs require ongoing maintenance which increases maintenance costs and staff time.
- Some communities implement parking restrictions when nuisance parking (example: local business parking takes over on-street parking in residential areas, etc) is experienced. These need to be addressed on a case by case basis, typically involving a localized survey of the neighborhood.
- Install parking restriction signs in a way that is clear for drivers to understand and is enforceable by law enforcement.



Alternative Implementation Options

- Encourage citizens to talk amongst their neighbors to discuss issues. This may be best facilitated with a neighborhood block party or meeting.
- Depending on location, parking meters may be applicable to solve parking turnover issues.
- Implement and even/odd parking program aimed at ensuring vehicles are moved every day.
- Overnight parking restrictions
- Winter parking restrictions

Education Tools

RESOURCES/FOOTNOTES

- 1. State Stature 169.34
- 2. Blaine Traffic Management Plan Page 19
- 3. NCITE Neighborhood Traffic Control Handbook Page 14-1;
- 4. City of Minneapolis Permit Parking Program Information
- 5. City of St. Paul Permit Parking Program Information

g. Intersection Control – Turn Restrictions



General Information

- Typically installed to reduce cut through traffic or prohibit turning movements along a mainline that are difficult during the peak periods or unsafe.
- Can also be installed to improve traffic flow or provide safer pedestrian facilities.
- "Do Not Block Intersection" signs are also a common request. A further traffic study may be necessary to determine if a "Do Not Block Intersection" signing is required.
- Installing the signs without providing a viable alternative route will lead to poor compliance.
- Typically, enforcement is necessary to ensure compliance.
- If done to resolve a cut through volume issue, a similar issue could be expected on adjacent roadways.
- In order to improve compliance, other physical barriers may be necessary (i.e. median barriers, channelization)

Effectiveness

- Volumes: Volumes are expected to be reduced on the street with restrictions, however, adjacent streets will see an increase in volumes.
- **Speeds:** Speeds could be reduced with a reduction of vehicles performing a cut through.
- Safety: Can improve safety at access points or main streets but alternative routes could see an increase in crashes.
- Prohibiting right-turns on red at traffic signals improves safety for pedestrians.

Evaluation

A traffic study, including crash analysis, could be performed to determine to potential restriction. Alternative routes and options will need to be considered.

Things To Be Aware Of

- May lead to unnecessary levels of traffic on other streets and additional delays throughout the roadway network.
- If the signs are disobeyed, there may be an increase in traffic delays, congestion, and crashes.
- It's important to provide public education on a turn restriction change and why.

Alternative Implementation Options

• Wayfinding signage directing vehicles along the main route





Educational Tools

RESOURCES/FOOTNOTES

- 1. <u>Blaine Traffic Management Plan</u> Page 14
- 2. NCITE Neighborhood Traffic Control Handbook Page 8-1;
- 3. WSDOT Traffic Management Guide -Page 40

KEEPING RECORD OF REQUESTS

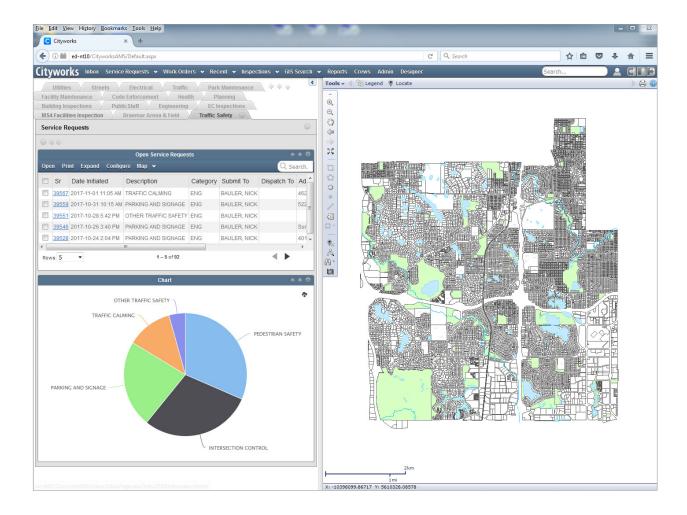
DATE RECEIVED	NUM	CLASS.	ADDRESS	LOCATION	REQUEST / ISSUES	REQUESTOR / ADDRESS / E-MAIL	PHONE	TSC DATE (REF TO OTHERS)	ETC DATE	CC DATE	PENDING/ COMPLETE
1/4/2016	1			Grandview Starbucks Drive-through	Starbucks Drive-Through queue backs up onto city street, blocks traffic			D	D	D	Complete
1/6/2016	2			7200 France Condos (?)	Speed bump on property is VERY high, could cause damage			D	D	D	Complete
1/12/2016	<u>3</u>			Ridge and Dale, Ridge and Woodhill	Stop sign controls at the intersections to slow traffic and deal with intersection sight line issues			B (02/03/16)	B (02/18/16)	B (03/15/16)	Complete
1/12/2016	4			Vernon Road	Traffic on Vernon Road is well above speed limit, mid afternoon to early evening.			D	D	D	Complete
1/13/2016	<u>5</u>			Valley View road Parking Bays	U turns interfering with traffic near HS during drop off times			Refered to High School Transportation Study			Complete
1/14/2016	6			49th Street, at Maple road	Speed issues on 49th Street			D	D	D	Complete
1/19/2016	<u>7</u>			65th Street between France Avenue and Valley View Road	Trucks are too close to driveway for 6500 France construction project.			D	D	D	Complete
1/21/2016	<u>8</u>			Summit and Interlachen	Signage for emergency personnel, marking Summit because emergency personnel had turned onto Summit, but had not turned into a driveway off of Summit. Wants to sign Summit Avenue off of Interlachen only Chad and Dave have discussed with her			D	D	D	Complete
2/1/2016	9			Hazelton and France	Unable to reach Byerly's believes that the orange directional signage prohibits the movement			D	D	D	Complete
2/1/2016	<u>10</u>			70th Street, between France and Xerxes	Believes that the 70th Street Roundabouts are unsafe and is unsure about how to use them			D	D	D	Complete
2/1/2016	<u>11</u>			Cornelia Drive	Request for information on Cornelia Drive			D	D	D	Complete
2/2/2016	<u>12</u>			Tracy and Countryside Road	Northbound Tracy, after the curves (south of Countryside School). Kids are crossing road to school, but drivers are traveling fast and don't have proper sightlines. Creates danger crossing street.			A (04/06/16)	A (04/21/16)	A (05/17/16)	Complete
2/5/2016	<u>13</u>			Cornelia Drive and Dunberry	The Cornelia Drive Sidewalk should include a crosswalk across Cornelia at Dunberry. This count should be taken AFTER the project is complete, during early school year, to ensure that the chance of a crossing being warranted is maximized						Pending
2/10/2016	14			54th and France	Light timing is inadequate for 54th Street			D	D	D	Complete

Example tracking form

This example tracking process provides guidance to agencies on how to record requests to ensure each request was properly being addressed and within a timely matter. The process follows the following steps:

- Receive request
- Enter into database
- Determine data to be collected and reported
- Traffic safety committee meets monthly to review the requests and subsequent reports (typically 5-10 reports)
- The safety committee approves or denies requests or requests additional information

- Revise report(s) to include decision or further information
- City Transportation commission reviews and approves or denies
- City Council approves or denies request (Council rarely goes against transportation staff recommendation)



An option besides a spreadsheet is to use a software designed to track citizen request, such as Cityworks.

Ensuring a proper tracking process is key for consistency when responding to requests. This also allows for tracking of multiple requests in the same location, which may help identify issues that should be given priority. These two similar examples have been proven to be effective in their respective agencies, and allow for easy use by multiple staff when necessary. Identifying a point person to log and track all requests provides consistency and reduces the chance of requests being missed.

It is important to archive traffic safety requests/evaluations permanently for future reference (e.g. receiving the same requests in the future, a step in evaluating is to search these records for past evaluations, reference for claim liability issues, etc.) and the tracking system can be used to assist in finding the archives.

The example tracking form is available for download and use on the LRRB website for the project http://mndot.gov/research/reports/2017/2017RIC05trackingsheet.xlsx

CASE STUDIES

The following pages include a few cases studies of situations an agency encountered with a citizen request and how they responded.



Mark Nolan, AICP

Transportation Planner
City of Edina

Subject: Tracking Process for Sign Requests

Why was this created?

In 2002 City staff was directed by City Council to create a staff committee to address citizen traffic safety requests. The committee determined that a spreadsheet tracking tool would be helpful and useful in determining where the requests come from, what they are, and how they respond. To best normalize the process, one person records all requests and reports these to the committee in monthly meetings. The City is in the process of implementing additional software to track requests in the future.

Key Information/Practices:

In 2016 there were over 180 requests.

Consistency is key. Ensuring one person is entering information each time is a general rule of thumb. This way each request is recorded similarly and the fields within the spreadsheet are all entered in the same fashion.

Technology is changing, which has affected how requests are received. The City now receives requests online, on the telephone, in writing, and via smartphone apps. Regardless, all of these requests are directed to the appropriate person and entered manually into the spreadsheet tracking tool.

Prior to formally bringing requests to the committee, the requests are reviewed by the person entering the data to determine if it is repeat request or something not typically addressed by the traffic safety committee.

Process:

The request process follows a flow chart of steps.

Receive request \rightarrow Enter into database \rightarrow Determine data to be collected and reported \rightarrow traffic safety committee meets monthly to review the requests and subsequent reports (typically 5-10 reports) \rightarrow The safety committee approves or denies requests or requests additional information \rightarrow Revise report to include decision or further information \rightarrow City Transportation Commission reviews and recommends approval (with or without changes) \rightarrow City Council approves or denies requests (Council rarely goes against transportation committee staff recommendation).

Throughout the process, the requesting citizen is kept informed of the steps being taken and findings.



Mark Ray, PE

Director of Public Works

City of Crystal

Subject: Unique Sign Request

What was the citizens request/ Did they request a sign type initially? The citizen requested that a handicap warning sign be installed on a street near her house.

Was the sign request appropriate for the issue? She was in a wheelchair and frequently went out in the neighborhood. She felt that the sign would increase drivers yielding to her when she was trying to cross the street.

What steps did you take? I met with her in person to talk about her concerns. I asked her where she traveled to, when she would go out, and got more info on her specific concerns of traveling in the area.

If you did not approve, what did you offer instead? The sign was not installed. I gave her some reflective tape that she could put on her wheelchair to be more visible from all directions. I also encouraged her to get a flag for her wheelchair.

Did that alternative option achieve the goal and was the citizen happy with the solution? Because she traveled throughout the neighborhood, a warning sign in one location would have very limited effectiveness from a geographic perspective. Furthermore, the impact of a wheelchair warning sign is questionable. By providing a method to make her wheelchair more visible wherever she was this would go to her desire to try and increase driver awareness.

Were there any adverse effects from this alternative solution? In theory if the City continued to take the approach of giving out reflective table, we have the potential to give out a lot of tape. That said, actually making wheelchairs more visible from all directions when they are out and about may actually be safer and is clearly more effective than a sign in just one locations. Also, the amount of tape we gave out is cheaper than purchasing a sign, not even including the labor or long term maintenance considerations.

Has this alternative option continued to be recommended? I am open to continuing to provide reflective tape to wheelchair users in the City.

How did you develop this alternative option? Communicating with the resident to actually focus on what the problem is and working to address the problem. In evaluating potential solutions, trying to be a bit creative and not just look to the sign manual as the only potential solution.

Other information: At the local level need to really embrace the reality that signs have limited effectiveness and the research supports this. That said, a lot of us got into the profession because of our passion for public service, so we want to help people when we can. When we get concerns, we need to open a dialogue with the resident, find the root concern, and try to work with them to find an option that may actually make a difference. And when no such option exists, we need to resist the urge to do something just to have something for show.

Subject: Stop Sign Request



Was the sign request appropriate for the issue? No, stop signs are installed to establish right-of-way at an intersection. Stop signs do not influence speeding except in the immediate vicinity of the intersection.

What steps did you take? We performed a warrant analysis. Collected traffic data on the legs of the intersection far enough away to get accurate speeds. Review sight lines and crash history, in case there were other factors influencing the assignment of right-of-way at the intersection. The majority of our stop sign requests do not meet the threshold set out by the MMUTCD. In response to the request, we provide the requester with a summary of the information gathered and how it compares to the thresholds for the requested traffic control. We also provide information explaining that stops signs are not installed to manage speeds, rather for assignment of right-of-way.

If you did not approve, what did you offer instead? It depends on what the data shows for speed. In all cases, we offer placing a speed board out on the street to educate drivers on the speed limit in comparison to how fast they are going. In cases where the majority of traffic is traveling at or below the speed limit (85th percentile speed), we have also met with property owners in the field with a hand held radar to assist with the perception of speed. Finally, if the data shows that there are vehicles routinely exceeding the speed limit, we offer targeted police enforcement and have installed speed limit signs on the street.

Did that alternative option achieve the goal and was the citizen happy with the solution? It depends. Most residents are satisfied that we took their request seriously. In the case of a speeding concern, offering a speed board, targeted enforcement, and signs does give the citizen satisfaction that we are doing something.

Were there any adverse effects from this alternative solution? No

Has this alternative option continued to be recommended? Yes

How did you develop this alternative option? The alternatives were developed to be responsive and give the citizen a tangible outcome from their request.

Other information: In cases where a stop sign does not meet the warrant thresholds, the City's Traffic Policy allows for citizen petition. If 70% of the property owners within 600 feet of the intersection support the installation of a stop sign, we bring the request to the City Council for consideration. The majority of our requests do not pursue this option.



Debra Heiser

Engineering Director

St. Louis Park

EXAMPLE RESPONSE TEMPLATE LETTERS/EMAILS

The following are example letters and emails that can be used as a guide or template, when communicating with citizens.

All-Way Stop Control Crosswalk Form Letter

Dear Mr./Ms. XXXX,

Thank you again for reaching out to us. You have requested that the City add a new marked crosswalk across "Study Roadway/Intersection".

This intersection is currently all way stop controlled. A controlled location is a crosswalk at an intersection with all way stop control on the approaches to the crossing.

For clarification, every intersection is a crosswalk. Adding marked crosswalks alone will not make crossings safer, nor will they necessarily result in more vehicles stopping for pedestrians. Crosswalk markings are installed to provide guidance for pedestrians who are crossing roadways by defining and delineating paths on intersection approaches or across the street. To maximize effectiveness, marked crosswalks should be installed carefully and selectively.

In general we do not paint the crosswalks at all way stop intersections. Crosswalk markings are installed to provide guidance for pedestrians who are crossing roadways by defining and delineating paths on approaches to intersections where traffic stops. At locations controlled by STOP signs, crosswalk markings should be installed where engineering judgment indicates they are needed to direct pedestrians to the proper crossing path(s). Since each of these intersections are square, there is little confusion on the path for pedestrians to cross, as a result, we would not recommend painting crosswalks at this intersection.

Since the above criteria were not met, the Traffic Committee does not recommend a marked crosswalk at this location.

If you have any questions, please let me know.

Special Interest Sign/Speeding Form Letter

Dear Mr./Ms. XXXX

The City's Traffic Committee met this week and discussed your concerns about speeding along the "Study Location". From your request:

- Request to install "children at play" sign or some other sign to remind motorists of the consequences
 of speeding
- Concern about speeding.

Data was collected on your street, and revealed the following:

- Speed Limit: 30 MPH
- 85th Percentile speed: 29 MPH
 - (85th Percentile speed is the speed which no more than 15% of traffic is exceeding)

What this indicates is that the majority of drivers on the road are complying with the speed limit for this road.

In areas where there is a concern about speed, we will deploy our speed trailer. The trailer assists by displaying a driver's speed as well as the posted speed limit. These are rotated throughout the city during the non-winter months to assist with driver education. Your block has been added to the list of locations throughout the city.

In addition, our police department will monitor the neighborhood and provide additional enforcement as needed.

If you have any additional comments or questions, please let me know.

Special Interest Signs Additional Info

The City's Traffic Control Policy and the MN Manual of Uniform Traffic Control Devices (MN MMUTCD) guide the installation of signs. Before we recommend installing a sign, we perform a study to determine what makes this street different from all the other streets in the city.

A "Children at play" sign is considered an advisory or warning sign. Warning signs are installed to alert road users of the potential for unexpected activity. As indicated with our speed study, the majority of drivers are complying with the speed limit and there is not unusual vehicle behavior on the street. When driving in a neighborhood, a driver should always expect children and pedestrians to be present in and around the roadway. These signs are un-enforceable and do not communicate to the driver what action they are expected to do.

The use of signs is addressed in section 2C.2 of the Minnesota Manual on Uniform Traffic Control Devices which states: "The use of warning signs should be kept to a minimum as the unnecessary use of warning signs tends to breed disrespect for all signs."

As a result we do not install these types of signs in '	"City/County"
---	---------------

Past experience has demonstrated that placing signs in locations where they do not meet certain conditions can potentially cause a road to be less safe. We therefore take such requests seriously and complete a thorough review of the roadway using established industry standards to develop our recommendations.

The City's Traffic Control Policy and the MN Manual of Uniform Traffic Control Devices (MN MMUTCD) guide the installation of signs. Before we recommend installing a sign, we perform a study to determine what makes this street different from all the other streets in the city. As indicated with our speed study, the majority of drivers are complying with the speed limit and there is not unusual vehicle behavior on "Study Location". In addition the traffic volume on the street, XX cars, is on the low end for a neighborhood street.

Warning signs are installed to alert road users of the potential for unexpected activity. When driving in a neighborhood, a driver should always expect children and pedestrians to be present in and around the roadway. These signs are un-enforceable and do not communicate to the driver what action they are expected to do. The use of signs is addressed in section 2C.2 of the Minnesota Manual on Uniform Traffic Control Devices which states: "The use of warning signs should be kept to a minimum as the unnecessary use of warning signs tends to breed disrespect for all signs. I am available at "Phone Number or Email" if you would like to discuss this further.

Uncontrolled/Side-Street Stop Controlled Crosswalk Form Letter

Dear XXXX,

Thank you again for reaching out to us. You have requested that the City add a new marked crosswalk across "Requested Intersection".

This intersection is currently uncontrolled. An uncontrolled location is a crosswalk at an intersection without a stop control on the approach to the crossing (meaning there is no STOP sign for mainline traffic on XXXX Road).

For clarification, every intersection is a crosswalk. Adding marked crosswalks alone will not make crossings safer, nor will they necessarily result in more vehicles stopping for pedestrians. Crosswalk markings are installed to provide guidance for pedestrians who are crossing roadways by defining and delineating paths on intersection approaches or across the street. To maximize effectiveness, marked crosswalks should be installed carefully and selectively.

The City uses specific guidance when evaluating requests to install new marked crosswalks at uncontrolled locations. Marked crosswalks will be considered when the following criteria are met:

If you have any questions, please let me know.



LRRB Report 2017RIC05

December 2017



This report represents the results of research conducted by the authors and does not necessarily represent the views or policies of the Minnesota Department of Transportation or SRF Consulting Group, Inc. This report does not contain a standard or specified technique.

The authors, the Minnesota Department of Transportation, and SRF Consulting Group, Inc. do not endorse products or manufacturers.

Any trade or manufacturers' names that may appear herein do so solely because they are considered essential to this report.