



Legislation Text

File #: 18-315, Version: 1

TO: Mayor and Members of City Council
THRU: Kristoff T. Bauer, Deputy City Manager
FROM: Rob Stone, P.E., Director of Public Services
DATE: August 6, 2018

RE:
Discussion on Traffic Calming Strategies

COUNCIL DISTRICT(S):
All

Relationship To Strategic Plan:
Desirable Place to Live, Work and Recreate

Executive Summary:

This is an informational item about traffic calming strategies on City maintained streets in residential areas. The infrastructure strategies typically used by Traffic Services for traffic calming include speed humps, traffic circles and multi-use lane pavement markings. Speed humps are the most common type of request for traffic calming infrastructure and are installed based on guidelines in the City's Residential Traffic Calming Program (RTMP). Traffic Circles can also be used in situations where it may be difficult to find locations to install speed humps or if there is a correctable accident history at an intersection within the area of concern. Multi-use lane pavement markings are installed mainly to delineate the areas of travel for motorists, bicycles, pedestrians and parked cars. Although this is the primary function of multi-use lane pavement marking, they can also provide a traffic calming element by visually narrowing the vehicle travel lane compared to an unmarked roadway. Lastly, enforcement from the police department can be an effective traffic calming strategy on a short term basis or in a targeted area.

Background:

The Traffic Services Division typically utilizes three (3) different infrastructure strategies for traffic calming within residential areas. Those strategies are speed humps, traffic circles, and multi-use lane pavement markings.

Speed Humps

- Intended for residential roadways with a speed limit of 25 mph

- RTMP Guidelines for volume and speed are met
 - 1,000 - 3,000 vehicles per day
 - Speed studies are done to determine if 85% of motorists are travelling at 34 mph or higher
- Community Involvement (Petition Process)
 - 70% of affected area must be in favor of installation
 - 100% adjacent properties must be in favor of installation - location where physical humps are proposed

Traffic Circles

- Intended for residential roadways, speed limits can be higher than 25 mph
- Higher traffic volumes can be accommodated
- Can be installed in areas where it is difficult to locate speed humps or community doesn't complete the petition process
- Wide intersections, which can be conducive to speeding, are good locations
- Circles can be a measure to address an accident issue in addition to traffic calming
- Community Involvement
 - Potential traffic circle locations can be installed in a temporary pattern so the community can evaluate its effectiveness before permanent traffic circle is constructed

Multi-Use Lane Pavement Markings

- Intended for residential roadways, speed limits can be higher than 25 mph
- Roadway needs to be 28 feet or wider to accommodate markings on both sides of the road
- Higher volumes can be accommodated
- Can be installed in areas where it is difficult to locate speed humps or community doesn't complete the petition process
- Defines travel area for vehicles, bikes, pedestrians and parking
- Visually narrows roadway creating a traffic calming effect compared to a wide unmarked roadway
- Community Involvement
 - Petition process is not currently required
 - Markings are incorporated into resurfacing program on streets that are wide enough
 - Markings have been well received by communities

Issues/Analysis:

Staff typically receives requests for speed humps and makes recommendations in accordance with the guidelines adopted in the Residential Traffic Management Program (RTMP). Staff can also recommend other strategies such as traffic circles, multi-use lane pavement markings, or enforcement as alternative strategies to speed humps, or to supplement speed hump installations.

Budget Impact:

The adopted FY 19 operating budget includes \$25,000 for the installation of traffic calming strategies.

The typical costs of these strategies are listed below.

Speed Humps

- \$2,000 - \$3,000 per speed hump
- Width of roadway and material prices affect cost

Traffic Circles

- \$8,000 - \$12,000 per traffic circle
- Width of roadway and material prices affect cost

The adopted FY 19 capital improvement project budget includes \$50,000 for the installation of Multi-Use Lane Pavement Markings. The cost for these are below.

Multi-Use Lane Pavement Markings

- \$1.15 - \$4.00 per foot = \$6,072 - \$21,120/lane mile
- This is a substantial increase from previous contract prices. Previous contract cost was \$0.65 per foot = \$3,432/lane mile. Staff is exploring other purchasing options to decrease the cost. These options include adding additional work to the resurfacing pavement marking quantities or advertising a separate bid exclusively for Multi-Use Lane Pavement Markings and not including with other type pavement marking bids.

Options:

This is an informational item.

Recommended Action:

Staff requests Council provide guidance on any other information needed in regards to traffic calming strategies.

Attachments:

Traffic Calming Strategies Presentation, Speed Hump RTMP