# City of Ann Arbor Traffic Calming Program Frequently Asked Questions

Questions frequently asked throughout the City of Ann Arbor Traffic Calming Program are outlined below.

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#### Traffic Calming Device Overview

# What is the difference between traffic calming devices that you drive over and devices that you drive around?

Things you drive over are those which extend vertically from the road surface to slow traffic, for example speed humps. Things you drive around slow traffic by extending horizontally, such as curb bump outs, and create the perception of friction for traffic passing through the area.

Typically devices that you drive over (such as speed humps) are more effective at slowing speed than devices that you drive around (such as bump outs and traffic circles). Devices that you drive over are typically effective at dropping the 85th percentile speeds to around 23-25mph. In general, devices that you drive around are not as effective, but have been shown to reduce the 85th percentile speed by a couple of miles per hour. A combination of both device types is often the best engineering solution for a community's concerns.

### What is the preferred spacing between devices to maximize effectiveness?

The preferred spacing for maximum effectiveness is 350-400 feet between each device, though the Institute of Transportation Engineers (ITE) spacing guidelines recommends that 250-650 feet is acceptable. To determine device locations City staff assesses the project area taking into consideration fire hydrants, street light locations, proximity to intersections, etc. When drivers can see that they are approaching another device ahead they are more likely to limit acceleration between devices.

#### What are the size dimensions of speed hump, speed table, and raised crosswalks?

Speed Humps are 12 feet wide, 3 inches high, have a parabolic shape, and extend the full width of the street.

Speed Tables are typically 22 feet wide – including a 10 foot wide center platform and slopes tapering down on each side, 3 inches high, and extend the full width of the street. The center platform width is variable and can be customized to the location.

Raised Crosswalks are 18 feet wide – including a 6 foot wide center platform marked with crosswalk striping and slopes tapering down on each side, 3 inches high and extend the full width of the street. All crosswalks are constructed in compliance with Americans with Disabilities Act (ADA) requirements and include a level landing for this purpose.

Traffic calming device dimensions are based on the Institute of transportation Engineers (ITE) guidance. These devices are designed in a way that it should be comfortable for vehicles traveling at 25mph, and that those driving at speeds that exceed 25mph will feel discomfort. Some vehicles will need to travel even slower than 25 mph to pass over devices such as speed humps, speed tables and raised crosswalks with comfort. A yellow post, placed behind the curb line, is used to mark the location of each device, and painted chevrons on each device are used to increase visibility to oncoming motorists.

#### Where can I find examples where other traffic calming devices have been installed?

Refer to the traffic calming map on the City of Ann Arbor's website for a full list of traffic calming projects: a2gov.org/trafficcalming

#### Can I park on speed humps?

Parking on top of speed humps and speed tables is allowed. Parking on top of a crosswalk (level or raised) is not allowable according to Michigan Compiled Law (MCL) 257.674 (I).

#### Has there been any removal of traffic calming devices once placed in the City?

Since the establishment of the current Traffic Calming Program the City has not received any requests for traffic calming device removal. Due to the project area engagement and support criteria that must be met for installation, it seems neighbors are generally satisfied once an installation is completed.

### **Traffic Calming Device Impacts**

# What is the risk reduction and effectiveness of traffic calming devices? Which device will be most effective at slowing speed?

Previous study results regarding effectiveness have been compiled by the Federal Highway Administration as the <u>Traffic Calming ePrimer</u> (https://safety.fhwa.dot.gov/speedmgt/traffic\_calm.cfm).

This document shows wide ranges of speed results for each device. As site conditions vary, it is not feasible to predict the effectiveness of devices at a particular site. A general trend observed in the Federal summary is that speed humps may be more effective than raised crosswalks, and raised crosswalks may be more effective than speed tables in controlling travel speeds. In terms of reducing cut through traffic, a series of devices that you drive over is typically associated with a 20% reduction, while curb bump outs have little effect on traffic volumes.

A summary of some data from the FHWA report is provided below. Visit Module 3 on the above website for more information about each device.

Device	Number of Field	Number of Devices	85 <sup>th</sup> percentile speed
	Studies	Studied	reduction (mph)
Speed Hump	7	199	6-13
Speed Table	6	98	4-11
Raised Intersection	2	5	1-5
Curb Bump Out	2	5	1-3.5
Choker	2	12	1-4

#### Will devices impact property value?

The available research shows there may be either no effect or a marginal increase in property values resulting from the installation of traffic calming devices, see below:

- http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23862
- http://www.vtpi.org/calming.pdf

#### Will devices impact emergency response time?

Staff from the City of Ann Arbor Fire and Police departments are involved in this process. The plans for the proposed traffic calming devices are shared with Police and Fire representatives for comment, and they are invited to attend the meetings. Typically, police and fire representatives report that emergency response time is increased by a few seconds (approximately 2-10 seconds) as police and fire have to slow down at device locations. Impacts to response time must be weighed against overall safety improvements from traffic calming.

#### Will devices impact snow plowing?

The street would continue to receive winter maintenance at the current rate. City of Ann Arbor street maintenance staff handle snow plowing in areas throughout the city where traffic calming devices such as speed humps and curb bump-outs have been installed. The location of devices that you drive over are clearly marked by reflective posts so that snow plows are aware.

#### Will devices impact stormwater drainage?

We do not expect any change in drainage pattern due to traffic calming device installation.

#### Will devices impact school buses?

We do not typically hear complaints regarding impacts to school buses, but they do have to slow down the same as other traffic when passing over speed humps.

#### Will devices impact bicyclists?

Speed humps should not deter cyclists, as long as they are traveling under 25mph.

#### Where can I find more information about Traffic Calming Devices?

<u>Institute of Transportation Engineers (ITE) – Traffic Calming Measures Technical Resources</u> (<a href="https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/">https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/</a>)

#### **Traffic Calming Options**

#### Can devices be installed to deter traffic from cutting through the project area/neighborhood?

The program currently utilizes a series of devices in combination to discourage cut through traffic.

# Can additional signs be placed along the street instead of traffic calming devices? What is the effectiveness of traffic calming device installation as compared to signage?

Speed limit signs are not generally posted on local streets. Speed limit signs have been found to rarely affect the 85th percentile speeds and are not considered an effective speed control device. It is expected that the general public knows that residential areas have a speed limit of 25 mph. Best practice is that when you turn off of a higher speed roadway onto lower speed roadway that a sign is posted to raise awareness of the change in speed limit, but not posted throughout the neighborhood.

Traffic professionals and the Michigan Manual of Uniform Traffic Control Devices (MMUTCD) have found that installing stop signs on all approaches to an intersection does not result in fewer collisions or slower traffic. By law, the purpose of a stop sign is to assign right of way, not to slow vehicles, and in fact, the MMUTCD prohibits the use of stop signs as a traffic calming device. If you believe a stop sign is needed at an intersection, contact <a href="mailto:Engineering@a2gov.org">Engineering@a2gov.org</a> or 734.794.6410.

#### Could police presence for speed enforcement be pursued instead of traffic calming devices?

The best traffic control is an effectively designed street. Enforcement is not as effective. Police presence is a challenge because the Ann Arbor Police Department (AAPD) can't routinely be available on the street all of the time. Past experience has shown that there may be a reduction in speed while the officer is present, but when the officer cannot be there speeds return to previous conditions. Requests for targeted speed enforcement can be submitted via the AAPD traffic complaint questionnaire.

#### Could a flashing sign for speed be installed?

Temporary signs that flash the speed of passing traffic can be used, upon request. When the flashing sign is used routinely it becomes part of the scenery and is not as effective. Requests for a flashing speed radar sign can be submitted via the AAPD traffic complaint questionnaire.

#### Could the street be closed to through traffic, or turned into a cul-de-sac?

Street closures, including physical cul-de-sacs and movable barricades or barriers, are not part of the Traffic Calming program. Street closures are significant changes to the transportation network and create major impacts on neighborhood connectivity; provision of basic City services such as solid waste collection, street sweeping and snow removal; and parallel routes. The Traffic calming program has been created to change driver behavior on a corridor with devices that fit in the existing street footprint. Installing a cul-de-sac would require area-wide study and transportation planning, engagement with multiple areas of City service, and engagement with the larger community. Additionally, cul-de-sac streets are subject to the following regulation:

International Fire Code (IFC) 2009 Appendix D103.4 (also adopted by reference through City of Ann Arbor Code of Ordinance, Title IX, Chapter 111, Section 9:101): turnaround requirements for dead-end fire apparatus access roads in excess of 150 feet shall provide one of the following turnaround options: 96-foot-diameter cul-de-sac, 120-foot hammerhead or 60-foot "Y" turnaround.

 City Standard Specifications (<u>a2gov.org/StandardSpecifications</u>) limit cul-de-sac length to 600 feet; reference Division II: Design Standards, section 7H. 'Cul-de-sacs'

#### **Traffic Calming Program Process**

## Why are you here, in our neighborhood, making us go through the Traffic Calming Program?

The City responds to resident initiated petitions for the Traffic Calming Program. To be considered for traffic calming, the City must receive a petition with the signatures from a representative (renter or owner) of at least 50% of all addresses within the area of interest. If a qualified petition area meets the program qualification criteria, the Traffic Calming process will move forward, including public engagement.

#### How is the project area determined?

The Traffic Calming program defines project area as all addresses adjacent to the area of interest (as defined by the petitioner) and addresses 100 feet from where the project street intersects a local cross street.

- The property owner and current resident are included.
- Where one parcel includes multiple units, each unit is included.
- Cul-de-sac properties on streets intersecting the project area notified for information, but not provided a questionnaire or final polling opportunity.
- Other corridor users are welcome at public meetings but are not sent materials.

### How are speed study results considered in project eligibility determination?

Speed data is typically collected at multiple points throughout the project area. The Traffic Calming Program operates such that a speeding problem at any point along the identified project area is sufficient to qualify the entire project area.

#### Who is invited to participate in final polling?

The final polling opportunity is provided to all addresses within the project area. See project area definition above.

#### How is the neighborhood decision about traffic calming made?

Each address within the project mailing area (residents and property owners) receives a final plan and polling opportunity to determine community support. Respondents indicate support or opposition for the plan by marking 'yes' or 'no.' Greater than 50% of returned final polls must indicate support ('yes') for the final plan to move forward for City Council approval to construct.