

December 2021

Neighborhood Traffic Calming Program

Overview & Purpose:

The City of Auburn is dedicated to improving the quality and livability of Auburn's residential neighborhoods.

City Council adopted a Neighborhood Traffic Calming Program to assist residents and the City in developing solutions to speeding and other traffic safety concerns on residential streets. This program was implemented from 2007 through March 2020, when it was put on hold because of budget reductions due to the COVID-19 pandemic. This updated program will be implemented starting in January 2022.

This program is intended for residential neighborhoods, with implementation on streets classified as "local residential" and "residential collector". It is not intended for commercial/industrial areas or streets classified as "arterials", "non-residential collectors", "rural collectors", or "highways". It is also not intended for alleys.

"Traffic Calming reduces automobile speeds or volumes as a means of improving the quality of life in residential areas, increasing walking safety and making bicycling more comfortable."

(ITE definition, Traffic Engineering Handbook, 2016)

The objectives of the neighborhood traffic calming program are to:

- Reduce speeds in neighborhoods so that most cars regularly drive below or at the posted speed limit.
- Reduce speeds at locations such as intersections and roadway curves, to promote safety for vehicles, pedestrians, and cyclists.
- Discourage cut-through vehicle traffic between arterials, to encourage drivers to use arterials, which are designed for higher traffic volumes, instead of using local streets, which are intended for local access.
- Improve safety for all road users, especially pedestrians and cyclists.
- Educate residents through traffic safety awareness and outreach, which may include events to demonstrate perceived vs. actual speeds.
- Meet Auburn's equity goals with a proactive approach to ensure all neighborhoods are evaluated, regardless of whether complaints were received or not.
- Encourage residents to participate in the process through community outreach.

Tools to meet the program's objectives:

- **Education:**
 - Informational letters, including options for alternative language(s)
 - Neighborhood outreach and meeting(s) to discuss concerns and potential traffic calming approaches, when applicable
 - Temporary awareness signs as a localized safety campaign
 - Placement of the Police Speed Trailer, which indicates the vehicles speed and the posted speed limit
 - Temporary installation of Radar Speed Feedback Signs, which indicate the vehicles speed and posted speed limit (for classified streets only)
 - Social media outreach
 - Magazine articles
- **Enforcement:**
 - Police Emphasis Patrols - Speed study results are shared with the Police Traffic Unit to assist in guiding their enforcement activities
- **Engineering:**
 - Evaluation of best traffic calming treatment options for the neighborhood, to be implemented with available funding
 - Project design and cost estimate, including neighborhood feedback
 - Implementation as an annual capital project
- **Evaluation:**
 - Evaluation of results (community survey and/or data collection) post implementation.

Proactive and Areawide Approach

This program is intended to proactively identify and address traffic calming issues throughout complete neighborhood areas rather than waiting for issues to be reported at a spot location within a neighborhood. The intent is not to address each specific location where a complaint is received, but instead evaluate defined geographic neighborhood areas, one neighborhood area at a time, to ensure that traffic calming treatment measure(s) will not negatively affect neighboring streets. The intent is to ensure that roadways are used as intended, with arterials carrying most of the traffic, and local residential streets used primarily for local residential access, and residential collector streets used to connect local residential streets to arterials.

Individual complaints received will continue to be documented and will help inform the City of potential speeding issues. However, to implement a proactive approach, complaints will not be the only factor considered when determining which neighborhood area to further study and possibly implement traffic calming measures. This may mean longer delays in some complaints being evaluated and addressed. Prioritization of neighborhoods to address will be based on many factors and how much can be accomplished annually, based on staff availability and budget allocations, but the long-term result is expected to be a more successful program.

While a reactive (complaints driven) spot treatment approach may have limited success, a proactive, areawide approach tends to have more success in meeting the goals of a traffic calming program long term, based on nationwide studies and findings.

Localized Neighborhood Speeding Issues

Complaints are sometimes received regarding speeding in neighborhoods where nearly all of the traffic on the streets is residents or guests of the neighborhood itself. Examples of this scenario would be traffic on short cul-de-sac or dead-end roadways and in smaller neighborhoods with only a single connection from the local roadways to a collector or arterial roadway. Sometimes complaints are also received that specific residents within a neighborhood are speeding. These situations do not fall within the program goals to be both proactive and area wide. Program funds for engineering and construction of physical improvements will not be prioritized for these locations. The extents to which the program evaluates and takes action to address specific complaints for localized speeding issues will be based on the availability of program resources that are not already allocated towards non-localized traffic calming efforts. When resources are available, the program will address these situations on a case-by-case basis with the following:

1. Neighborhood education and outreach about traffic safety, including demonstration of perceived speed versus actual speed
2. Placement of temporary educational items such as temporary signs or speed trailer
3. Police outreach – officers can meet with a specific driver and talk about the importance of respecting travel speeds

If the localized neighborhood concerns persist after these efforts, the neighborhood could pursue physical traffic calming measures at its own cost, subject to City approval. In this case, the neighborhood would be responsible for all costs associated with the improvements and would need to hire a licensed engineer to design the improvements and prepare the project plans and a contractor licensed, insured, and bonded per City standards to construct them. The neighborhood or its contractor would be required to secure a construction permit from the City and provide affidavits from at least 51% of the neighborhood property owners that the improvements were desired and acknowledging that the City may remove and not re-construct the improvements at any time without compensation or reimbursement to the neighborhood. This scenario may be applicable if a neighborhood installs traffic calming measures and the City subsequently removes them with a street reconstruction project. The traffic calming measures would be subject to City standards and to City review and approval or denial through the construction permit process.

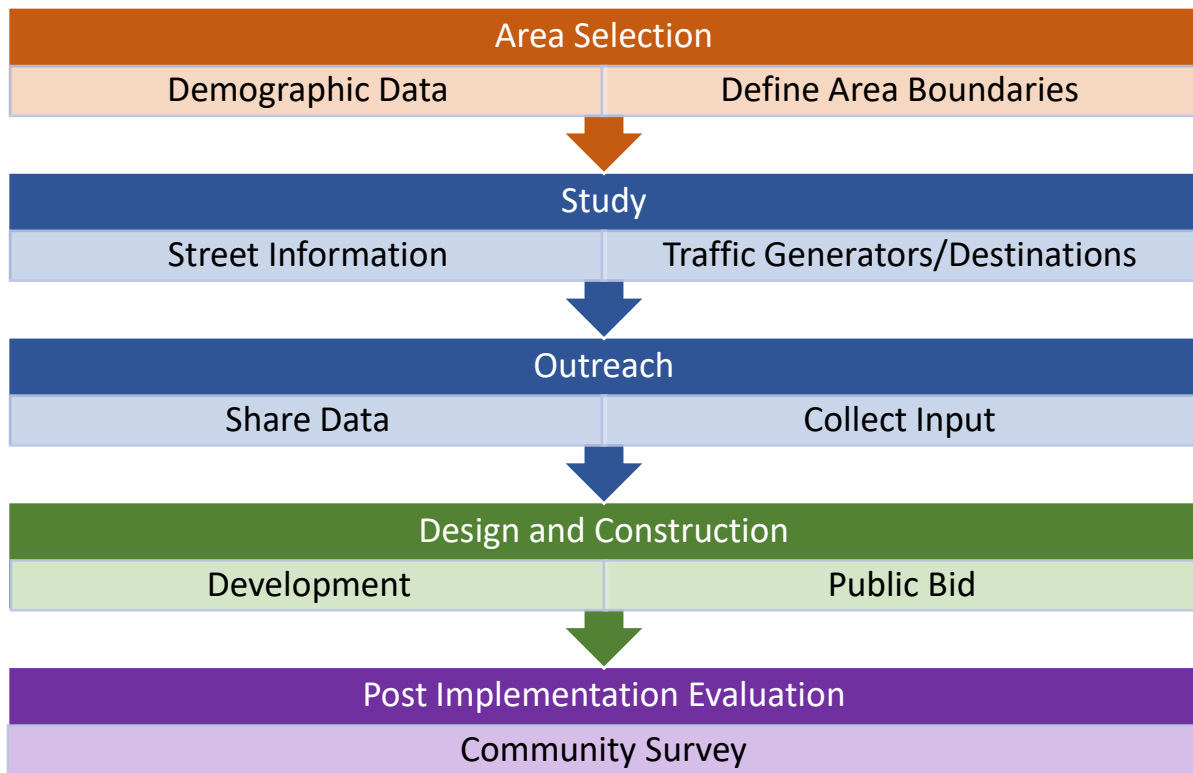
Funding

2022-24 Annual Budget (REET) for this program: \$50,000

2022-24 ARPA funds: \$200,000 per year

ARPA funds can only be used for projects or improvements within Qualified Census Tracts (QCT) as defined by HUD.

Non-Localized Traffic Calming Process



Area selection:

From 2022 to 2024, two (2) types of areas will be considered:

1. Qualified Census Tracts (QCT) using ARPA funds (\$200k/year)
2. Non- QCT (\$50k/year)

Staff will define study area boundaries based on street networks, school boundaries, and other characteristics that define a neighborhood area from a street network perspective. Equity Lens: Staff will review data such as Census demographic data, American Community Survey (ACS) demographic data, and school enrollment data to create a profile for the area with income, demographics, primary languages, and other information that can be helpful with community outreach and prioritization. Staff will also review existing data such as speed study results, complaints, and crashes to identify which areas to study first, as this data will indicate where we have documented issues and help us prioritize these locations.

Study:

Once an area has been defined the following data will be compiled and evaluated:

- Street Information within the Neighborhood:
 - Speed data (based on the 85th percentile)
 - Count data (Average Daily Trip (ADT))
 - Continuous sidewalks (one side, both sides, none?)
 - Lane width
 - On-street parking
 - Other elements such as vegetation, streetlights, street grade, etc.
- Traffic Generators/Destinations Within and Adjacent to the Neighborhood:
 - Public Schools
 - City Parks
 - Community Centers
 - Local retail destination (convenience store)
 - Health services

Outreach:

Once all the data is compiled and staff has completed an “existing conditions” report, staff will engage with the residents to gather input, feedback, concerns, and issues that residents identify in their area.

The first round of engagement will be focused on sharing the results of the data collection effort and collect input from the community to understand their specific concerns.

After this first round of engagement, staff will work internally on compiling a list of projects that could provide improvement, if any deficiencies or needs were identified. The project list will include a range of possible options to address the needs of the area, based on options from the traffic calming toolbox, but not limited to it. This list will be presented to the community via a second round of engagement, where community members can indicate which project(s) they think would be best in their area. Based on community feedback, budget, and feasibility, the City will choose a final project list.

Design and Construction

Once the list of locations and improvements are selected, a project will be established and administered through the City’s Engineering Capital Project team. The design and construction documents will be developed and then go through a public bid process to select a contractor who will build the improvements.

Schedule for 2022 - 2024:

	2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Project 1	Area Selection	Study & Outreach	Design & Outreach		Construction							
Project 2				Area Selection	Study & Outreach	Design & Outreach		Construction				
Project 3							Area Selection	Study & Outreach	Design & Outreach	Construction*		

* ARPA funded improvements must be under contract by 12/31/2024

Post-Implementation Evaluation

Within 1 year after traffic calming improvements are constructed, staff will survey neighborhood residents to evaluate if the residents felt that the project addressed the speeding concerns and if they did not, what concerns may persist. Based on this feedback, the City will determine if additional data should be collected and if modifications or additional traffic calming efforts should be prioritized and pursued.

Equity

To ensure affected populations are invited to learn about and help decide on the final projects, and to meet Title VI requirements, staff will research population data to ensure that outreach and education material is provided in the languages most spoken in the selected area, and research how to best engage with the residents. Material will also be made available in other languages as requested by residents.

Traffic Calming Toolbox

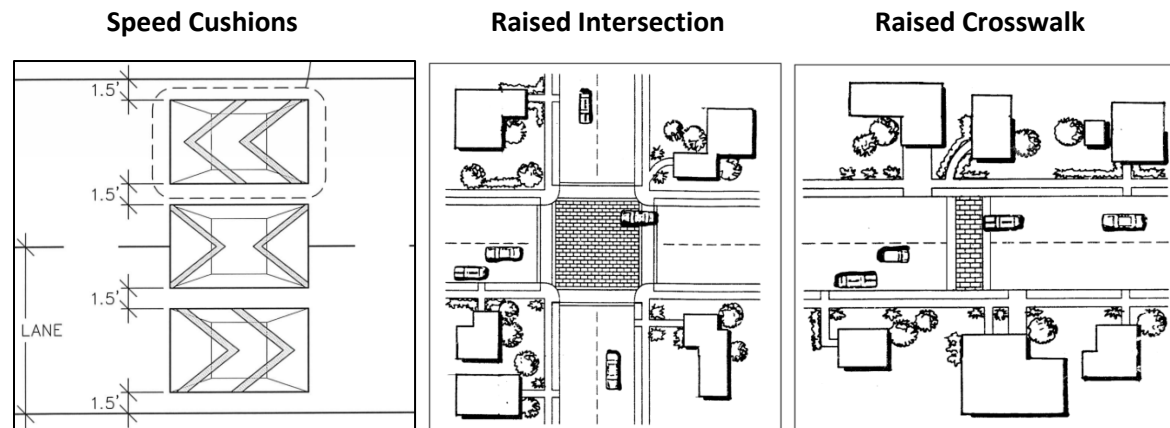
There are several types of traffic calming treatments available, each with a specific intent and impact to be considered before being selected. Some of these tools can be combined with others, based on community needs. The illustrations are concepts for reference only. There are many configurations possible for each tool. Other approaches may be considered. This list is not comprehensive.

Vertical Measures

Speed Cushions are raised installations that do not cross the whole roadway width but are approximately 1 to 2 ft apart and about 6 feet wide and 10 feet long, with a flat top (about 4 feet by 4 feet). They are designed to be most comfortable at a 25 to 30 MPH travel speed, and allow emergency vehicles to straddle them, to not slow them down in an emergency.

Raised Intersections are raised installations built within a whole intersection area, slowing traffic as it approaches the intersection, allowing more time to stop for pedestrians.

Other approaches can include **raised crosswalks**, which are raised crossing areas for pedestrians, and **textured pavement**, which is an installation of bricks, concrete pavers, stamped asphalt, or other material that provide a change in the roadway with a texture that potentially slow vehicles down.



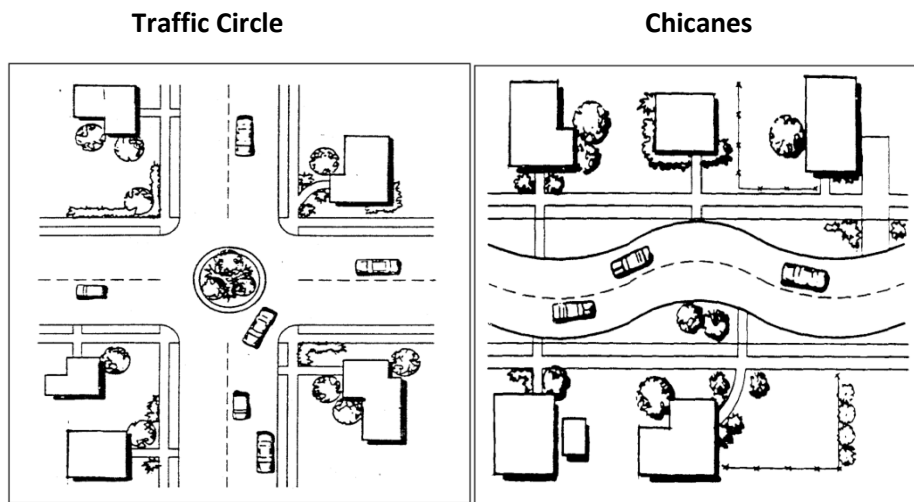
Detail from City of Auburn
Construction Standards 2021

Illustrations from Traffic Calming:
State of the Practice ITE-FHWA, August 1999

Horizontal Measures

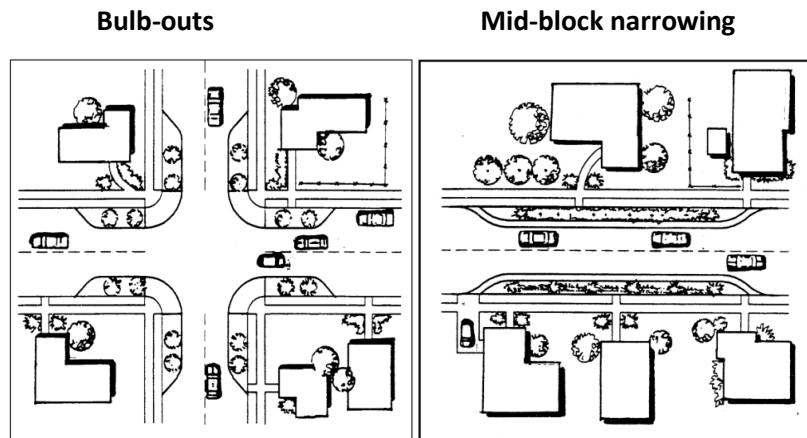
Traffic Circles or traffic calming circles are raised islands located in the center of an intersection, forcing drivers to slow down to drive around it. Depending on the area and design needs, some are built with mountable curb to allow large vehicles such as emergency vehicles, garbage collection trucks, school buses, and large delivery trucks to drive over a portion of it. The center of the traffic circle can be landscaped or not. These are not to be confused with roundabouts which are typically larger in size and installed at larger and higher volume intersections in place of a traffic signal.

Chicanes are curb extensions placed on each side of the street at an interval to form a S-shaped curve. This directs traffic to swerve and slow down to maneuver through the curves. Chicane design can include a protective bikeway, so that cyclists can continue along a straight path, away from motorists, while motorists must follow the curves.



Illustrations from Traffic Calming: State of the Practice ITE-FHWA, August 1999

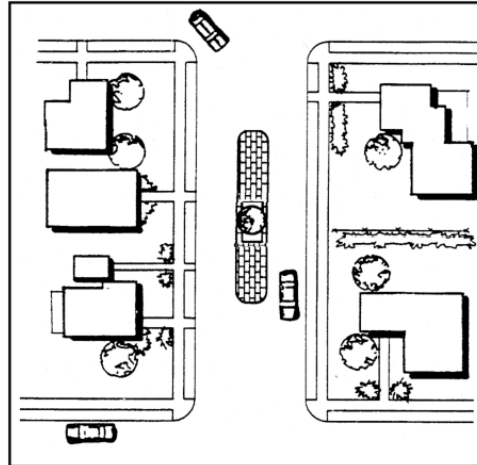
Narrowing means shortening the width of the street, to constrict the space. It can be constructed with crosswalks at intersections (with bulb-outs) or mid-block.



Illustrations from Traffic Calming: State of the Practice ITE-FHWA, August 1999

Medians are raised islands located in the center of the street, which narrows the width of the street at that location. Some medians include a crosswalk and provide a pedestrian refuge area between the two travel lanes.

Median



Data Sources and References:

FHWA Traffic Calming ePrimer:

https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm

ITE / FHWA Traffic Calming: State of the Practice, August 1999:

<https://safety.fhwa.dot.gov/saferjourney1/library/pdf/toolsintro.pdf>

EPA Environmental Justice Mapping Tool:

<https://ejscreen.epa.gov/mapper/>

Washington Office of Superintendent of Public Instruction (OSPI) for demographic data from student enrollment, and special programs.

<https://washingtonstatereportcard.ospi.k12.wa.us/>

United States Census Bureau:

<https://www.census.gov/>

American Community Survey:

<https://www.census.gov/programs-surveys/acs>

Temporary awareness signs as a localized safety campaign example:

Seattle Yard Signs:

<https://www.seattle.gov/visionzero/resources/yard-signs>

Intercity Transit (Olympia) Yard Signs:

<https://www.intercitytransit.com/yard-signs>