

Norwalk Traffic Calming Program Implementation

The City of Norwalk has implemented traffic calming measures in several neighborhoods throughout the City in recent years. Using lessons learned from these projects, a traffic calming program was developed as part of the City-Wide Traffic Management Plan (TMP) to provide a process for selecting appropriate traffic calming measures and prioritizing project funding. The traffic calming program is a resident-driven process that ensures safety and livability for all road users.

3.1 Traffic Calming

Traffic calming is a relatively new concept, and many people do not know about the wide variety of tools and strategies that are available to their communities. This chapter provides an overview of the City's Neighborhood Traffic Calming Program and can be used as a resource for residents and neighborhood groups seeking to effect change in their communities. It is also intended for use by developers in order to support the establishment of more livable, walkable communities in Norwalk.

Norwalk residents and neighborhood groups may use the Traffic Calming Toolbox discussed in the Guidebook portion of this document to learn about the various traffic calming tools and resources, begin thinking about the roadway classification and characteristics of their neighborhood, and create a plan for garnering support for traffic calming in their neighborhood. Neighborhood groups may submit an application for the Norwalk Neighborhood Traffic Calming Program, provided in the Appendix, to request City funding consideration for a project in their neighborhood.

3.1.1 Neighborhood Strategy

Many communities throughout the United States have taken a reactive approach to traffic calming, installing speed humps and other measures in response to the traffic and speed complaints of a very small number of residents. Without proper planning and appropriate use, some of these traffic calming devices have had unintended consequences which negatively impacted residents, emergency responders, bicyclists



and other road users. Cut-through traffic that is removed from one street may spill over onto the next, impacting other residents. Traffic calming measures mistakenly placed along an emergency response route can slow response times for fire and emergency medical personnel. Bicyclists can be seriously injured if traffic calming devices are not designed properly to accommodate them.

For these reasons, the City of Norwalk is taking a proactive approach to traffic calming, with a structured program which considers technical aspects such as traffic volumes, speeds, and proximity to neighborhood pedestrian generators, as well as public support for the project. This collaborative approach with residents seeks to preserve neighborhood character while solving traffic issues. All new requests for traffic calming must be supported by the neighborhood, not just by residents of a particular street. Applications will be reviewed and prioritized for funding by the City, and the projects which receive funding will be designed by an engineer to ensure the safety and appropriateness of the proposed measures.

3.2 Norwalk Traffic Calming Program Overview

The Norwalk Traffic Calming Program was created to provide a clear structure for addressing traffic concerns in residential neighborhoods. The City of Norwalk will work with residents to design, implement and maintain measures that are effective in calming traffic and enhancing the neighborhood environment.

A Traffic Calming Advisory Committee (TCAC) should be established to advise the Director of Public Works on proposed actions. The committee will be chaired by the City Traffic Engineer and consist of representatives appointed by the respective department heads from the Police Department, the Fire Department, Norwalk Emergency Medical Services, Norwalk Transit District, the Board of Education, the DPW Engineering Division, and the DPW Operations Division.

The Director of Public Works will receive all requests for traffic calming measures on public streets. The traffic calming request is then investigated and studied for suitability by the Department of Public Works (DPW) and a recommendation is made to the Director. All plans which include devices that alter the physical roadway alignment will receive approval from the Common Council before implementation. All plans will receive approval of the Norwalk Traffic Authority.

Traffic calming improvements will be funded annually through the DPW Capital Improvement Program, unless specific funds are provided elsewhere in the city budget, or through grants. Individual projects will be selected for implementation based on the priority scoring system, public support, and available budget. The DPW may determine cut-off dates for the receipt of applications and public opinion surveys to coincide with the development of the City budget.

3.2.1 Due Diligence

Successful traffic calming programs have been created and implemented by many local governments across the United States and overseas. To help avoid liability issues, a municipality must maintain documentation that illustrates their program is appropriate, install traffic calming devices based on objective data, and follow procedures when considering and installing such devices. Therefore, the City of Norwalk has adopted a Program Policy to accomplish the goal of minimizing liability issues.

Through its implementation process, the City of Norwalk will design, implement and maintain the accepted traffic calming measures so that drivers, pedestrians, and bicyclists acting reasonably and exercising ordinary care are able to perceive the intent of the measure and safely negotiate it.

Traffic calming measures should be designed using recognized standards and practices of the Institute of Transportation Engineers, AASHTO, and the Connecticut Department of Transportation. Traffic calming designs shall also conform to the Manual on Uniform Traffic Control Devices and Regulations of the State Traffic Commission.

3.2.2 Existing Developments

The process for implementing traffic calming measures for existing developments consists of a series of steps designed to build community support, identify concerns, collect data, develop solutions and evaluate results. A two-tier process allows for implementation of traffic calming measures in a timely manner when problems can be resolved with fairly routine solutions. When dealing with more complex issues, the process allows for effective management and allocation of resources by prioritizing project areas.

3.2.2.1 Tier 1 Efforts

Tier 1 focuses on changing driver behavior through education efforts and enforcement. These measures consist of easily implemented, low-cost solutions such as neighborhood traffic safety campaigns, speed display units, targeted police enforcement, and pavement marking changes. Once implemented, these efforts are evaluated for up to one year to determine their effect on traffic. Most neighborhoods find these efforts effective in addressing the traffic concerns identified by the community.

- ◆ **Step 1** – Submit a Traffic Calming Request Form to the Director of Public Works detailing your traffic concerns, along with a petition of support.
- ◆ **Step 2** – If the area qualifies for traffic calming, the DPW determines the scope of the study area, conducts a field review of the site, and collects data.
- ◆ **Step 3** – The DPW evaluates the request and scores the application according to both threshold and priority scoring criteria.



- ◆ **Step 4** – DPW sends out information about the findings and recommendations.
- ◆ **Step 5** – DPW works with the neighborhood to develop and implement Tier 1 recommendations.
- ◆ **Step 6** – Over the next 6 to 8 months, follow-up data is collected and the TCAC reviews the effectiveness of the Tier 1 recommendations.
- ◆ **Step 7** – If the Tier 1 measures are unsuccessful, the TCAC can initiate the Tier 2 process in which physical devices are considered.

3.2.2.2 Tier 2 Efforts

If Tier 1 efforts are not effective, Tier 2 strategies may be considered. Tier 2 measures consist of physical treatments such as speed humps, median islands, traffic circles and curb extensions.

- ◆ **Step 1** – DPW meets with neighborhood residents (via a neighborhood association if active).
- ◆ **Step 2** – Residents are asked if they would be interested in serving on a Traffic Committee to develop a Traffic Calming Plan.
- ◆ **Step 3** – The recommended plan is approved by the DPW and presented to the neighborhood.
- ◆ **Step 4** – DPW surveys the neighborhood to determine the level of support for the recommended traffic calming plan. If 2/3 of the households surveyed support the proposed plan, then the request is recommended for approval by the Traffic Authority.
- ◆ **Step 5** – Once approved by the Traffic Authority, a final design is developed by DPW.
- ◆ **Step 6** – Approved projects are prioritized for inclusion in the Capital Improvement Program according to the priority scoring criteria developed under Tier 1 and available funding.
- ◆ **Step 7** – The DPW constructs the traffic calming device.
- ◆ **Step 8** – The traffic calming device is evaluated 6 months after installation and modified if necessary.

3.2.3 New Developments

Applicants for new subdivisions or other residential developments are encouraged to integrate traffic calming strategies into the site plan. Slow points should be constructed at regular intervals of 600 to 1,000 feet and, where possible, street parking and landscaping should be used to reduce the visual impact of roadways.

For new commercial developments, buildings should be placed on or close to the roadway so as to create a pedestrian-scale environment and a sense of visual enclosure that encourages lower speeds and increased driver awareness. Street furnishings such as street lights, signs, and fencing should be of a pedestrian scale and placed close to the roadway, but should remain out of the travelled way as to avoid potential contact with passing and turning vehicles. Street lamp heights of approximately 12 to 15 feet signal to drivers that they are in a pedestrian environment.

Benches, trash receptacles, bus shelters and other pedestrian amenities can be placed adjacent to the roadway to enhance the pedestrian environment. Care should be taken that space is allowed for opening car doors and for ADA compliance. Parking should be provided on-street or at the rear of buildings with several access points for vehicles and mid-block pedestrian walkways to parking areas. Members of the City Traffic Engineering staff are available to consult on the preferred methods of achieving the goals of this program.

3.2.4 Removal of Traffic Calming Devices

Traffic calming devices may be removed if the DPW determines they are ineffective or unsafe, or if they have created a negative impact that cannot be corrected. Removal of traffic calming devices may be requested by the neighborhood if they present a petition to the Director of Public Works with the signatures of 67% of the property owners. The final decision to remove the Traffic Calming Devices will be by the Traffic Authority. Streets from which devices are removed shall not be considered for further calming measures for a period of five years after the device is removed, unless initiated by the DPW to address specific safety concerns.

3.3 Tier 1 Process

3.3.1 Project Initiation

Implementing effective traffic calming measures in a neighborhood requires collaboration between community and governmental entities including Public Works, the Traffic Authority, and the Police and Fire Departments. Residents are encouraged to work through existing neighborhood associations as this allows for better communication and exchange of information.

Residents are asked to first visit the Norwalk DPW Website and utilize an on-line “Traffic Calming Toolbox” so that they can better understand the process associated with requesting traffic calming in their neighborhood and to determine if traffic calming is appropriate.

The traffic calming process begins once the Director of Public Works receives a request from a neighborhood group to initiate a study. The form must include a description of the existing problem and the names and signatures representing at least 50% of



households on the street requesting traffic calming, who are in support of installing traffic calming measures. Persons or groups interested in traffic calming along pedestrian or other routes that may extend beyond their street of residence, should contact DPW for a determination of the required petition area.

A blank Neighborhood Request Form is provided in Appendix A. The form may also be obtained from the DPW page of the City's website at <http://www.norwalkct.org/index.aspx?nid=19>.

3.3.2 Threshold Criteria

All applications will be reviewed by the Traffic Calming Advisory Committee (TCAC). To be eligible for the development of a physical Traffic Calming Plan, the road or street segment must meet the following threshold criteria:

- ◆ Street must be accessible to the public, maintained and classified as a Local Road by the City of Norwalk. A limited number of devices are eligible for use on roads classified by the City as collectors or arterials. Speed humps or other devices designed to cause an abrupt change in direction will not be allowed on collector or arterial roadways. Privately owned roadways are not eligible. State roadways may be eligible depending on its classification and volumes. Any traffic calming on state roads would be done in cooperation with ConnDOT via the TCAC.
- ◆ Streets must not have more than two travel lanes.
- ◆ Streets must have a posted speed limit of 35 mph or less.
- ◆ Streets must be primarily residential and not serve as the primary access to commercial or industrial areas.
- ◆ Speed humps or raised crosswalks will not be installed on primary emergency response routes.
- ◆ Traffic volumes must exceed 1,000 vehicles per day or 100 vehicles during the peak hour.
- ◆ A Traffic Speed Study must show that speeding is a problem based on the standard of an 85th percentile speed of at least 6 mph over the posted speed limit.

Roads or Street segments that do not meet these qualifications cannot be considered for the development of a Tier 2 physical traffic calming plan. The DPW and the Police Department will assist with Tier 1 educational and enforcement methods of reducing speed to the best of their ability.

3.3.3 Data Collection

Once DPW staff understands the scope of the problem in terms of geography and road use, the next step is to determine the boundaries of the study area and collect data

which will be compared to the threshold criteria. Depending on the areas of concern to be analyzed, some or all of the following data will be collected:

- ◆ Traffic Volume Counts (Peak and 24-hour)
- ◆ ATR Speed Studies (85th percentile)
- ◆ Origin/Destination Studies
- ◆ Resident Opinion Surveys
- ◆ Field observations
- ◆ Reported accidents within the last 3 years
- ◆ Other, to be identified as needed

DPW Staff will review the results of the data collected and compare with the established criteria for identifying traffic problems. They will also add the data to the traffic calming database for reference and program review.

3.3.4 Prioritization and Resource Allocation

Limited funding is available for traffic calming and should be allocated to those areas with the greatest need and where the use of traffic calming can have the greatest effect. Applications will be prioritized based on a series of criteria including speed, volume, accident history, proximity to schools, etc. as described in the Exhibit 3-1 below. Neighborhood traffic calming projects that are not selected for funding in the upcoming fiscal year remain eligible for funding in future years.



Exhibit 3-1 Priority Scoring Guidelines

Criteria	Definition	Value	Points
Average Daily Traffic Volume (ADT)	Traffic volumes are measured for an average 24 hour period on a single street in the traffic calming area.	<1000	0
		1000-1500	1
		1500-2000	2
		2000-3000	3
		3000-4000	4
		>4000	5
Peak Hour Traffic Volumes	Traffic volumes are measured during the peak hour for both directions on a single street in the traffic calming area.	<200	1
		200-250	2
		250-300	3
		300-400	4
		>400	5
		Percentage of Cut-through Traffic	Percentage of traffic without an origin or destination within the study area versus the total peak hour traffic entering/exiting the area.
20%-40%	2		
40%-60%	3		
60%-80%	4		
>80%	5		
85 th Percentile Speed	Measured speed at which 15% of vehicles exceed. Scoring based on mph over the posted speed limit.		
		8-9	2
		10-12	3
		13-15	4
		>15	5
		Accidents	Number of reported accidents, correctable by traffic calming on the project street in the last three years.
6-9	2		
10-12	3		
13-15	4		
>15	5		
Pedestrian Generators	Public and private facilities on or near the project street, such as schools, parks, community houses, senior housing, etc., which generate a substantial amount of pedestrian traffic.		
		3/4 - 1 mile	2
		1/2 - 3/4 mile	3
		1/4 - 1/2 mile	4
		< 1/4 mile	5
		Public Support	For DPW neighborhood surveys one additional point is given for every 5% of households supporting the proposed plan over 70%
80%-84%	2		
85%-89%	3		
90%-95%	4		
>95%	5		

3.3.5 Public Involvement

Being a neighborhood based program, any proposed calming measure within an affected area requires a significant level of community input and support. Residents may have

strong opinions and emotions about any actions that affect the appearance and condition of streets in their neighborhood.

Once an application is accepted and the data collection is complete, the DPW staff will present its findings and solicit input on Tier 1 calming measures. For complex projects, a neighborhood advisory committee will be formed to work with DPW on the development the traffic calming plan.

3.4 Tier 2 Process

3.4.1 Public Approval Process

Before an application for a Tier 2 traffic calming device can be submitted to the Traffic Authority for approval, the DPW will conduct public outreach to gauge support for the proposed action. Surveys will be mailed to every household within the designated study area. If at least two thirds of all households within the designated area complete and return the original survey form indicating support of the proposed plan, then the plan will be presented to the Common Council for approval.

If at least two thirds of the households do not return affirmative surveys, the request may not proceed. For the purposes of this program, a household is defined as any owned or rented living unit with its own street address, regardless of how many people live in each unit. Each survey will represent one household.

The designated area will be determined by the Director of Public Works or designee to include residences on the proposed street, as well as residences on all streets that have major access to the street where the traffic calming device is installed. The DPW will work with the neighborhood, as well as police, fire and rescue services to select appropriate traffic calming measures for each location, and implementation will be based on priority ranking and available funding.

3.4.2 Design of Physical Devices

Traffic calming measures should be designed using recognized standards and practices of the Institute of Transportation Engineers, AASHTO, and the Connecticut Department of Transportation. Traffic calming designs shall conform to the Manual on Uniform Traffic Control Devices and Regulations of the State Traffic Commission. In addition, the devices should meet the City of Norwalk's specifications and details.

3.4.3 Temporary Installations

Temporary installations allow residents, bicyclists, emergency personnel and other street users to "try before they buy" and determine if a given traffic calming measure is



effective before the City pays for construction of a permanent device. These temporary installations may include portable speed humps and striping, cones and/or delineators to mark out the location of bump-outs, islands, chicanes and traffic circles. When appropriate, the City of Norwalk may set up temporary installations of Tier 2 traffic calming devices, subject to an assessment of impacts and support of the residents, for a period of up to six months before approving a permanent installation.

These installations may be used to evaluate the effectiveness of a proposed physical alteration to the roadway or to ensure the ability of Fire Department equipment or other vehicles to safely negotiate the altered roadway. Most importantly, this trial period allows residents time to adjust to the device and decide whether it is something they would like to be a permanent part of their neighborhood. In some cases, residents who



support a traffic calming project may raise objections to the noise generated by vehicles driving over a speed hump in front of their house day and night. Other times those who initially oppose a project come to support it after they are allowed to drive through the traffic calming device themselves. It should be noted that while temporary devices help determine the resulting travel speed and traffic volume changes, they are not often aesthetically pleasing.

3.4.4 Effectiveness Review

Six months after construction is complete (depending on weather conditions), the DPW will evaluate the effects of the project with a follow-up Traffic Study and an evaluation of any complaints, or compliments received. If any unacceptable or non-mitigatable impacts are identified, corrective measures will be reviewed by the DPW and the Traffic Calming Advisory Committee (TCAC) and recommended to the Common Council.