**NEIGHBORHOOD TRAFFIC CALMING PROGRAM (NTCP)**
**FRANKLIN, TENNESSEE**

## INTRODUCTION

### Application
This policy applies to local, residential streets. Collector and arterial streets and streets that are located in commercial zoning districts will not be considered for traffic calming.

## PROCESS

Projects that are being considered for the NTCP must follow the procedure that is outlined below. A flowchart summarizing this procedure is provided in Appendix A.

### Step 1: Request Traffic Calming
A homeowner's association or homeowner's group must submit a written request for traffic calming on a specific street segment or segments to the Engineering Department. The request must identify the perceived traffic problem and must include contact information for a representative (the requester) of the association/group. Individual citizens are not eligible to initiate projects for the NTCP.

### Step 2: Conduct Petition
Upon receipt of the written request, Engineering staff will define the petition area. The petition area will typically include the following:

- Properties along the street that is being considered for traffic calming measures
- Properties along streets where access is substantially dependent upon the street that is proposed to be calmed
- Properties along any street that is expected to receive significant increases, as determined by Engineering staff, in traffic volumes or types as a result of the traffic calming installation

Engineering staff will prepare a petition packet that includes the petition form, a copy of the NTCP policy, a map of the study area, the names and addresses of the property owners within the petition area, and an explanation of the NTCP procedures. The petition packet will be given to the requester, who will be responsible for conducting the petition. Prior to conducting the petition, the traffic calming request and petition must be presented at a neighborhood meeting that is publicized by the City of Franklin in a manner that is consistent with Franklin's standard procedures. Engineering staff will attend the meeting to present the traffic calming request, identify the study area, and to explain the NTCP procedures. After the meeting, the requester must obtain supporting signatures, or "yes" votes, that represent 51 percent of the households within the petition area. Missing signatures will be counted as "no" votes. The requester will have 90 days after the date of the neighborhood meeting to submit the petition results to the Engineering Department. If the petition is successful, then the proposed project will proceed to Step 3. If the petition fails, or if the petition is not returned by the petition deadline, then the project is terminated, and the neighborhood will be ineligible to submit another request for traffic calming for a period of one year.

**Step 3: Evaluate Problems and Identify Possible Solutions**
Engineering staff will evaluate the project to determine the need for traffic calming measures. This evaluation will typically include a site visit and the collection of data, such as traffic volumes and traffic speeds. In order for a project to be considered for traffic calming measures, the following criteria must generally be met:

- The Average Daily Traffic (ADT) volume is greater than or equal to 500 vehicles per day.
- The 85$^{th}$ percentile speed is at least 7 mph faster than the posted speed limit.
- The posted speed limit is 35 mph or less.
- The street is a through street.
- The maximum grade on the section of roadway that is being considered for traffic calming measures does not exceed eight percent.
- The combination of horizontal and vertical curves along the roadway is not such that would result in inadequate stopping sight distance for motorists as they encounter the traffic calming devices.
- The street is not a transit route or a primary emergency access route.

If Engineering staff determine that the street segment does not have a traffic volume or a traffic speed problem, then the project will be terminated. The project will be ineligible for the NTCP for a period of two years unless Engineering staff determine that changing conditions have resulted in a traffic volume or speeding problem.

If Engineering staff determine that a street segment has a traffic volume or a traffic speed problem, but the above criteria are not met, then Engineering staff will work with the Franklin Police Department and the neighborhood association/group to address the problem with education and enforcement efforts. However, the street will not be considered for other traffic calming measures at this time. Also, the project will be ineligible for the NTCP for a period of two years unless Engineering staff determine that changing conditions during this time have resulted in a traffic volume or speeding problem.

If Engineering staff determine that a street segment has a traffic volume or a traffic speed problem, and if the above criteria are met, then the project will be included in the NTCP. Engineering staff will identify feasible and appropriate traffic calming solutions to address the identified traffic problem. Examples of traffic calming techniques are provided in Appendix B. Engineering staff will then attend a publicized, neighborhood meeting to present the results of the analyses and the identified solutions. Based on comments received at the meeting, Engineering staff will revise the solutions as appropriate. The project will then proceed to Step 4.

**Step 4: Conduct Education and Enforcement Efforts**
All projects in the NTCP will begin with education and enforcement efforts, which will involve the coordinated efforts of Engineering staff, the Franklin Police Department, and the neighborhood association/group. The neighborhood association/group must actively participate in this process in order for the project to continue in the NTCP. Education and enforcement efforts will be applied for a period of not less than three months and not more than six months. If Engineering staff determine that these efforts have not sufficiently addressed the identified problem, then the project will proceed to Step 5.

If Engineering staff determine that the education and enforcement efforts have addressed the identified problem, then the project will be considered complete. Engineering staff will continue to monitor the project for a period of one year. If the identified problem returns during this time, then the requester will be notified, and the project will proceed to Step 5. If the identified problem does not develop during this one-year period, then the project will be considered complete. If the identified problem returns after this one-year period, or if a new traffic volume or traffic speeding problem develops after this one-year period, the homeowner's association/group must return to Step 1 in order to be considered for the NTCP again.

**Step 5: Develop Construction Documents**
Based on the feasible and appropriate solutions identified by Engineering staff during Step 3, Engineering staff will develop a complete set of construction documents for the proposed traffic calming measures.

**Step 6: Prioritize the Project**
Projects that reach Step 5 will be prioritized by Engineering staff based on a variety of factors, such as traffic speeds, traffic volumes, and implementation costs. Engineering staff will notify the requester of the project's status at this time. This prioritization will be used by Engineering staff to develop construction schedules for the projects.

**Step 7: Install the Proposed Traffic Calming Measures**
Projects will be implemented according to priority and the availability of funding. Projects that have the highest priority will be implemented first. If sufficient funding is not available for the highest priority project, then the highest priority project that can be implemented with the amount of funding that is available will be implemented first. A lower-priority project can be implemented ahead of schedule if the neighborhood association/group elects to pay 100 percent of the implementation costs and as long as doing so does not affect the construction schedules of higher-priority projects. Implementation of a project will not occur until all associated maintenance/landscape/payment agreements have been finalized. Installation of the traffic calming measures will be performed by City crews or by a contractor that is selected by the City.

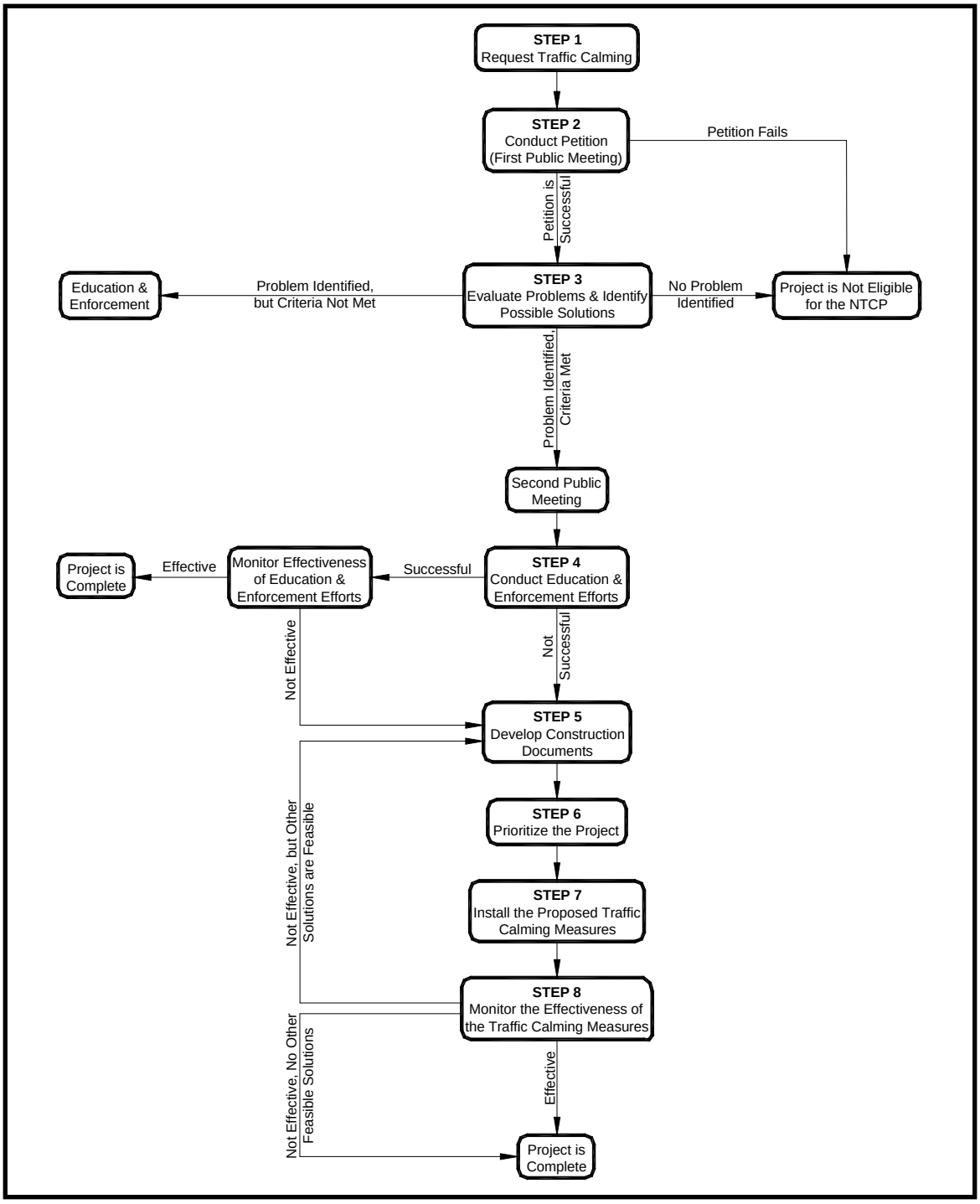
**Step 8: Monitor the Effectiveness of the Traffic Calming Measures**
Approximately three months after the proposed traffic calming devices have been installed, Engineering staff will evaluate the project to determine if the traffic calming devices have sufficiently addressed the traffic problem identified during Step 3. If the traffic problem has been resolved, then the project will be considered complete. If the traffic problem has not been resolved, then Engineering staff will consider other solutions that were identified during Step 3. If an alternate solution is selected by Engineering staff, then the project will return to Step 5. If Engineering staff determine that there are no feasible alternatives, then the project will be terminated and will not be considered for inclusion in the NTCP again unless changing conditions have resulted in a feasible alternative. If this is the case, it will be the responsibility of the neighborhood association/group to submit another written request for traffic calming to the Engineering Department, and the entire NTCP process must be repeated.

## MODIFICATION OR REMOVAL OF A TRAFFIC CALMING DEVICE

### Process

If Engineering staff determine that a traffic calming device should be modified or removed due to public health/safety reasons, then Engineering staff, with assistance from the Street Department, shall modify or remove the device. If the neighborhood association/group wishes to remove or significantly alter a traffic calming device, then the neighborhood must conduct the same petitioning process outlined in Step 2. If the petition supporting the removal/modification is successful, then the neighborhood must pay for the costs that are associated with the removal/modification. A traffic calming device will not be removed until all payment agreements have been finalized. If the removal/modification is initiated by the neighborhood association/group, then the neighborhood will be ineligible to participate in the NTCP for a period of five years.

**APPENDIX A**
**PROCEDURAL FLOW CHART FOR THE**
**DRAFT NEIGHBORHOOD TRAFFIC CALMING PROGRAM (NTCP)**
**FRANKLIN, TENNESSEE**



## APPENDIX B
## TRAFFIC CALMING TECHNIQUES

There are a variety of techniques that can be used to calm traffic on local, residential streets. Techniques that are specifically permitted, as well as techniques that are specifically prohibited, in the City of Franklin are described below. Techniques that are specifically permitted are summarized in Table A1, which also identifies the potential benefits and disadvantages of each.

### TABLE B1
### POTENTIAL IMPACTS OF TRAFFIC CALMING TECHNIQUES THAT MAY BE USED IN THE CITY OF FRANKLIN

| Measure | Potential Benefits | | | Potential Disadvantages | | | Cost |
|---|---|---|---|---|---|---|---|
| | Speed Reduction | Volume Reduction | Conflict Reduction | Limits Local Access | Increases Emergency Response Time | Extent of Maintenance Required | |
| Chicane | ● | ● | ● | ○ | ◐ | ◐ | $$ - $$$ |
| Curb Extension | ◐ | ○ | ○ | ○ | ○ | ◐ | $ - $$ |
| Education | ◐ | ○ | ◐ | ○ | ○ | ○ | $ |
| Enforcement | ◐ | ○ | ◐ | ○ | ○ | ○ | $ - $$ |
| Lower Speed Limit | ◐ | ○ | ○ | ○ | ○ | ○ | $ |
| Raised Median | ◐ | ○ | ◐ | ◐ | ○ | ◐ | $ - $$ |
| Road Diet | ◐ | ○ | ◐ | ○ | ○ | ○ | $ - $$$ |
| Speed Table/Hump | ● | ◐ | ● | ○ | ◐ | ◐ | $ - $$ |
| Traffic Circle | ● | ◐ | ● | ○ | ◐ | ◐ | $$ - $$$ |

● Substantial Benefits/Disadvantages ◐ Minor Benefits/Disadvantages ○ No Benefits/Disadvantages

$ Low Cost $$ Moderate Cost $$$ High Cost

## TECHNIQUES THAT ARE SPECIFICALLY PERMITTED IN THE NTCP

A **chicane** shifts motorists' path of travel by creating a horizontal diversion in the roadway. A chicane is usually formed by a series of curb extensions that are placed on alternating sides of the roadway. These curb extensions reduce the roadway width and force motorists to steer from one side of the roadway to the other in order to travel through the chicane.

*A chicane creates a horizontal deflection in the roadway.*

**Curb extensions** are formed by extending the curb on one or both sides of the roadway into the vehicular travel lanes to reduce the paved roadway width. The reduction in width creates "slow points" in traffic flow. Curb extensions are also commonly referred to as chokers, neckdowns, traffic throats, and pedestrian bulbs.

*Curb extensions reduce the width of the roadway at intersections and create shorter crossing distances for pedestrians. The reduction in lane width encourages motorists to slow down when driving through the intersection.*

*Curb extensions can be installed at mid-block locations to calm traffic in residential neighborhoods.*

**Education** is a key component of all traffic calming projects in the City of Franklin. Before implementing physical traffic calming measures, the City of Franklin Engineering Department will work with participating neighborhoods to educate their residents regarding safe, on-street, vehicular travel. Engineering staff will assist the neighborhood associations/groups in developing educational programs for the residents. However, it will be the responsibility of the neighborhood associations/groups to implement the educational programs.

**Enforcement** efforts will be combined with neighborhood education as a first step in all traffic calming projects in the City of Franklin. The Franklin Police Department will work with Engineering staff to help resolve traffic problems, such as speeding. Enforcement efforts may involve the use of speed trailers and may include tickets for violators.


*Speed trailers may be used as part of the enforcement efforts to control speeding in neighborhoods that request traffic calming.*

Establishing **lower speed limits** may help to reduce speeding and cut-through traffic in residential neighborhoods. Some local, residential roadways have speed limits that are posted at 30 mph or more. It may be desirable to lower the speed limits on these roadways to the City's default speed limit, which is 25 mph for local, residential streets.

A **raised median** is an elevated island that is constructed on the centerline of a two-way street to reduce the width of the adjacent travel lanes. Raised medians can be paved or landscaped. They create "slow points" in the roadway, can serve as pedestrian refuges for pedestrians crossing the street, and can be used in conjunction with other traffic calming measures.

*Raised medians reduce the width of the adjacent travel lanes.*

Reducing the number of travel lanes, or the width of travel lanes, on a roadway can be an effective technique for calming traffic on that street. This process, called a "**road diet**", can help to reduce vehicular speeds, reduce the number of conflict points for right-of-way users, and can help make streets more bicycle and pedestrian-friendly. Road diets can be accomplished by adding parking lanes, adding bike lanes, adding a median, or by reclaiming some of the roadway width, which can create room for sidewalks and street trees.

*The addition of a bike lane and a parking lane on this street helps to create a narrow travel lane for motorists.*

A **speed table/hump** is a wide and flat undulation that is placed on a street, typically across the width of the roadway, to reduce vehicular speeds. They have a height of three to four inches and a length of 12 or 22 feet. Speed humps should be distinguished from speed bumps, which are much shorter (six to 12 inches long) and have been associated with maintenance, safety, and liability concerns.

*The speed table/hump that may be used in the City of Franklin is 22 feet long and three inches*

A **traffic circle** is a raised, circular island that is typically placed in the center of a residential street intersection to allow traffic to flow through the intersection without being controlled by a stop sign or a traffic signal. The design of a traffic circle requires motorists to travel through the intersection in a counter-clockwise direction around the island, which reduces the number of conflict points and reduces vehicular speeds.


*A traffic circle creates a horizontal deflection in the roadway, which causes motorists to slow down as they travel through the intersection.*

## TECHNIQUES THAT ARE SPECIFICALLY PROHIBITED IN THE NTCP

**Rumble strips** are raised buttons, bars, or groves that are closely placed on a roadway at regular intervals. They cause both noise and vibration in vehicles as motorists drive over them. Typically, rumble strips are used to alert motorists of unusual conditions ahead. As motorists get used to the rumble strips, the strips become less effective over time. Rumble strips can result in increased noise levels for nearby residents. Also, rumble strips require a high amount of maintenance. For these reasons, rumble strips may not be used as a traffic calming technique in the City of Franklin.

*Rumble strips may not be used as a traffic calming technique in the City of Franklin.*