

# **A Traffic Calming Toolbox – A Technical Resource Developed for the South Western Region of Connecticut**

By

**James W. Ford, P.E., Tanya Court and Susan Prosi**

## **Executive Summary**

This paper describes the development of a technical resource used by eight communities in Southwestern Connecticut as a guide for the development of traffic calming programs. The consultant team for this assignment consisted of Earth Tech, Inc., of Glastonbury, CT; Partners in Traffic Calming of Portland, OR, and Fitzgerald and Halliday of Hartford, CT. The contracting authority was the South Western Regional Planning Agency (SWRPA). Their collective efforts resulted in a detailed report outlining experiences in traffic calming program development and recommending a process for consideration by municipal agencies seeking to start such a program.

This project developed from increasing demands by residents of Towns in the region for the implementation of traffic calming measures to address perceived, and in many instances all too real, vehicular traffic intrusion into neighborhoods and residential streets. The South Western Regional Planning Agency (SWRPA) serves eight towns along what is called the “Gold Coast” of Connecticut. These towns (Figure 1) are residential communities supporting the Metropolitan New York area and, on an increasing basis, are a desirable target area for companies seeking to relocate from New York City. This development pattern has resulted in increasing commutation traffic and congestion on arterials and collectors. Excessive speeds and additional cut through traffic in neighborhoods has been the trend. Over the years, the demand for action from residents has been met with varying responses on the local level, and SWRPA has received many inquiries from its communities for assistance and information.

The Traffic Calming Program developed by SWRPA was designed with four goals in mind:

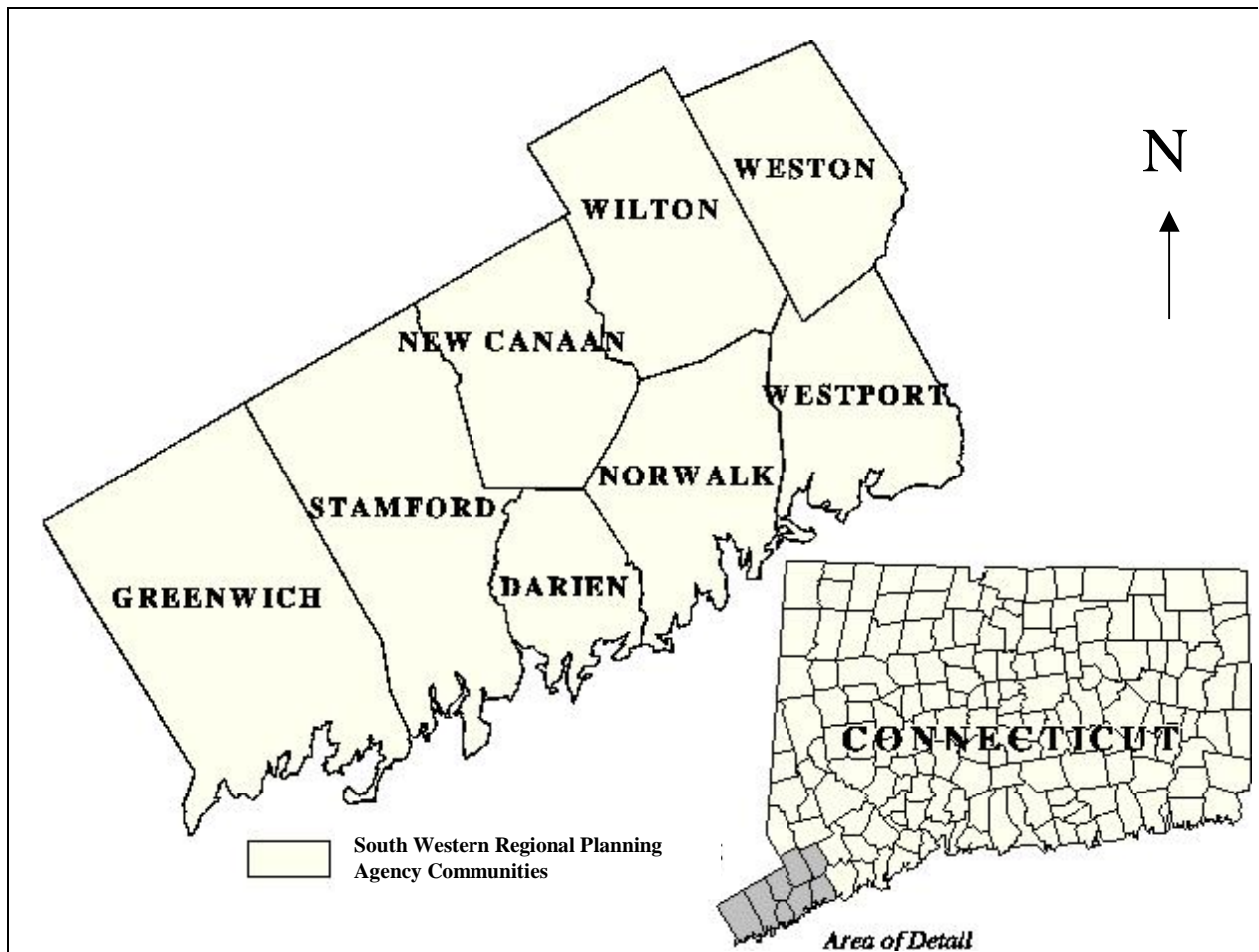
- Research the state of the art in traffic calming
- Conduct a public outreach and education program in the region to determine issues and traffic calming needs.
- Hold community and regional meetings on traffic calming
- Compile a “tool box” to serve as a reference guide for regional communities.

This paper describes the process of the study and presents the results of the team’s efforts. The final product of the project was a “Traffic Calming Toolbox Report” which compiled (in one place) resources on the do’s and don’ts of traffic calming. This report has been widely distributed to member communities and has guided the development of programs and use of Traffic calming devices.

## Introduction

Traffic calming was new to the South Western Planning Region in 1997. Several communities had begun the process of looking at traffic calming measures to address growing traffic problems from increasing regional development and the economic resurgence being felt by the region.

The South Western Regional Planning Agency (SWRPA) serves eight communities in the southwestern region of Connecticut. This geographic section of Connecticut serves as a residential area for Metropolitan New York City with a large segment of the population commuting to New York City daily by rail or other means. In addition, the major employment centers (Stamford and Norwalk) have seen significant growth leading to traffic congestion during the commuter peak travel periods. As a result, increasing reports of intrusion into neighborhoods were occurring and the general public sought remedies from their town officials.



**Figure 1. South Western Regional Planning Agency Area**

The question of how to go about “calming” traffic, and the benefits to be gained, inspired as many opinions as communities involved. Some towns attempted to implement programs with widely varying degrees of success.

Recognizing the need for a more comprehensive approach, SWRPA developed the program that framed this assignment. This was not to be a standard Traffic Engineering services project, which in the past were mostly targeted at specific problem locations. This was to be a regional program looking at traffic calming in the SWRPA area and documenting efforts.

Looking at what was going on in the region was just the beginning. All recognized that this was a new concept to SWRPA and an expanded information base was needed to allow evaluation of how to approach traffic calming. The concept of a multi-faceted approach was developed with the following four goals:

Program goals required that SWRPA seek consultant assistance to supplement agency staff. An initial step by SWRPA staff was to identify a representative from each member community to serve on a Project Advisory Committee (PAC). The PAC was charged to interface with agency staff and the consultant team. Following a solicitation and interview process, Earth Tech, in association with Partners in Traffic Calming, and Fitzgerald and Halliday was selected to perform the assignment. The project was funded through a regional transportation planning program using regional, state, and federal funds.

## The Scope

Four separate and distinct tasks framed the assignment.

- **Task 1 - State of the art research and outreach for national best practices**
- **Task 2 - Public Involvement and Workshop programs**
  - **Staff Interviews**
  - **Workshops**
  - **Design Charrettes**
- **Task 3 - Analysis**
  - **Case Studies**
- **Task 4 - Recommendations and Toolbox Development**

Each task is described below with examples of the study products and recommendations presented.

### *Task 1: State of the art research and outreach for national best practices.*

The Earth Tech Team conducted a national literature search and contacted agencies that were conducting traffic calming programs. Each agency was asked to forward to Earth Tech copies of regulations and program guidelines that it used in its jurisdiction. Contact agencies were identified through various sources including ITE publications and the INTERNET.

Responses were received and reviewed to determine relevant issues and trends in the traffic calming experiences of responding agencies. General observations that resulted from this effort were as follows:

- Traffic calming efforts are more established on the West Coast and have centered on the installation of humps and similar devices.
- In general, the process of establishing a traffic calming program has been driven by resident concerns. Most communities that have attempted programs felt that they (the staff) were not well prepared to do so.
- Most communities with traffic calming programs stressed the need to establish ground rules at the outset of the program. Problem programs did not do so.
- Public input was seen as critical to programs. Most communities responding cautioned that not all residents felt the same toward traffic calming and consensus was critical. Residents view the street as an extension of their property. While there was agreement on this point, the way consensus was achieved varied.
- Limiting the number of “Devices” to be used in a community was seen as desirable.

- Little evidence of increased risk was identified by responding agencies.
- Diversion projects are the most difficult to implement. Therefore, community's first project should not be a diversion project.
- The use of temporary devices was encouraged to allow a "Try it to see if you like it" approach.
- A universal issue was concern for emergency response agencies and the perceived conflict with Traffic Calmers. It was stressed by most that this was the most contentious issue, and one which needed to be addressed at the start of a program. In general, it was recommended that communities establish standards for such devices and follow them closely for a successful program.

***Task 2: Public Involvement and Workshop programs.***

Concurrently with the development of a database of national experience, the task of local program identification and public outreach commenced. The goal of this task was to determine the status of traffic calming in the South Western Region and to increase sensitivity and awareness of traffic calming concepts. Three methods were used in this effort, with each designed to compile information and assist in educating the region on the traffic calming issue.

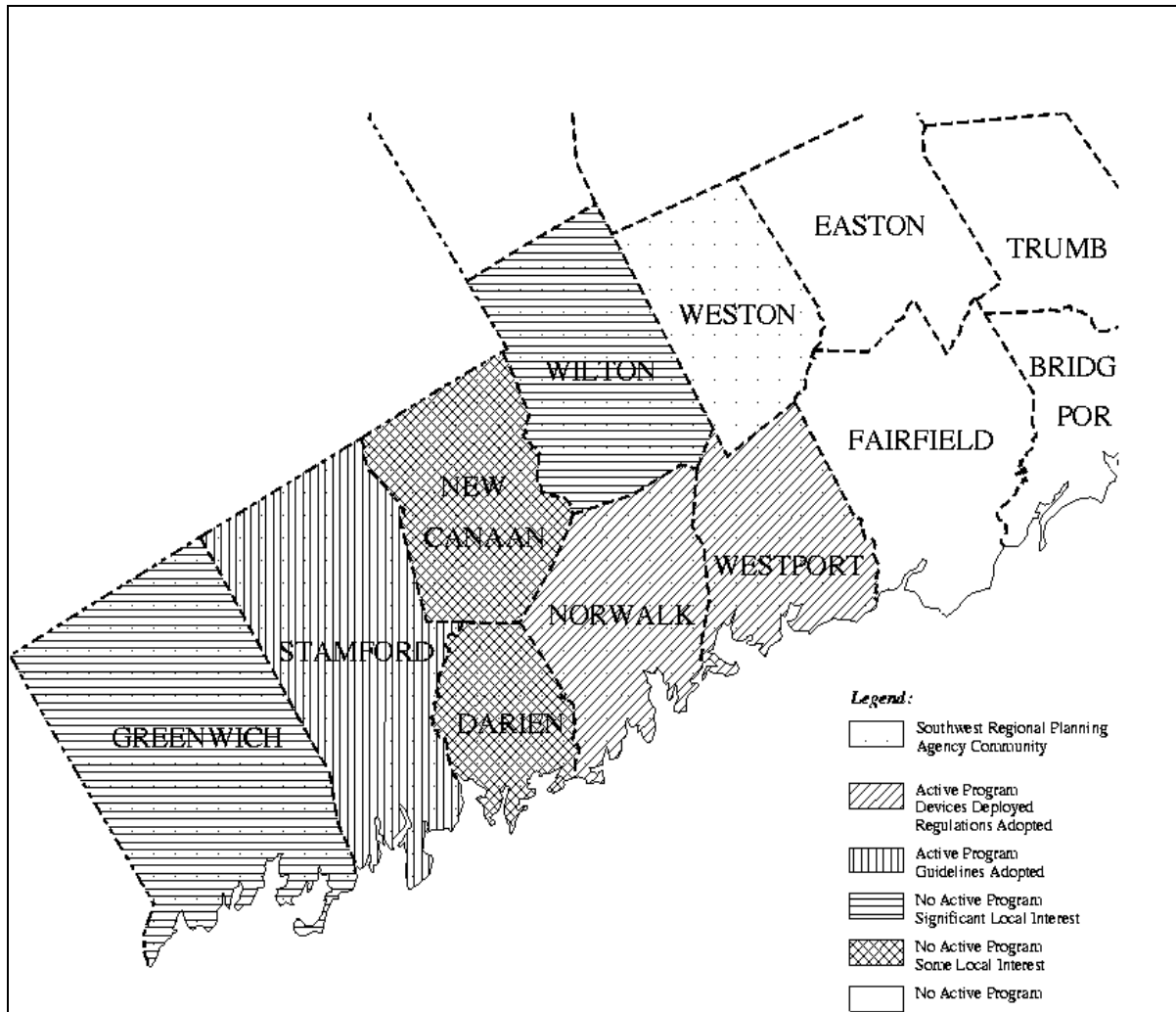
The process was began with two Workshops designed to address separate aspects of the traffic calming awareness.

Workshop 1 was an evening session for interested citizens. The content of this Workshop was general in nature providing information on the status of traffic calming, and the devices used in other parts of the nation. Partners in traffic calming of Portland, OR devised and conducted this workshop.

Workshop 2 was an all day session for public officials taking the form of a seminar and providing significantly more technical information on the traffic calming program process and planning/engineering of traffic calming Devices. Attendance was limited to elected officials, public works staff members, planners, police officers charged with traffic control, emergency response personnel, agency and project staff. The goal of this workshop was primarily educational in nature and the workbook provided to each participant included design guidelines and information on programs in other regions. Much of the discussion at this workshop surrounded problems encountered and solutions used in other areas. Participants at the meeting were primarily those charged with program development in SWRPA communities.

The second component of this task was the in-depth staff interview process. This effort involved the development of a standardized questionnaire and conduct of face-to-face interviews with designated officials in each SWRPA community. Following the completion of the staff interview process, the results were summarized and the level of traffic calming interest and knowledge determined for each community. Figure 2 summarizes the results of this interview process. The questionnaire used is included in the appendix. As might be expected, the level of interest in the program and the degree to which communities had interest in traffic calming varied widely. Many of the issues that had been stressed in the national outreach were echoed in

the local surveys. The SWRPA region was experiencing the usual traffic calming growing pains.



**Figure 2. Status of traffic calming in the South Western Region - Interview Results**

The final component of this task was the conduct of “Design Charrettes” in communities that expressed interest in such meetings. The goal of this series of meetings was to fine tune the workshop efforts for the staffs in each community and to allow them to discuss, in more detail, their specific issues. Such meetings were held in Greenwich, Westport, Wilton and Norwalk. To make the most of these mini-workshops each was tailored to the specific needs of the community. Thus the content varied based on expressed interests of those attending. One community wished to discuss a specific area. Another community wanted to discuss how to set up a process within its agency structure. Yet a third wanted to look at what devices might be used and how to put them in place. The main effort of this task was to support community needs and help the process develop.

### ***Task 3: Analysis***

Following the public involvement program efforts, case studies were selected by three member communities. These studies were designed to look at specific areas and prepare a traffic calming program for that area. Each candidate area was reviewed by consultant staff and specific recommendations made on the basis of identified needs expressed by the community.

The three case studies selected presented the key component issues that drive most traffic calming efforts.

- Roseville Road in Westport was a collector which carried some 8000 trips per day. It had speeding problems and concern for safety. Due to volumes and the nature of this road recommendations centered on speed reduction measures not using Humps.
- Wilton Center in Wilton involved pedestrian safety and encouragement, speed reduction and traffic calming on an emergency response route. Here recommendations were more varied and involved roundabouts, slowpoints, curb extensions, and parking management.
- Loveland Road - Pepper Ridge Road in Stamford involved significant cut through traffic and recommendations involved diversion means and speed reduction.

While these efforts were based on limited study of the areas, the context was aimed offering initial suggestions to the community staff.

### ***Task 4: Recommendations***

The final step was to combine information gathered from national experiences and apply that data to create a report offering continuing guidance to SWRPA communities. This process evolved into a traffic calming Tool Box that addresses the issues and the devices available to traffic calming managers.

The report which was prepared in binder format to allow ongoing updating by communities. Reference is made to Figure 3 for its structure.

**Traffic Calming Tool Box  
Table of Contents**

Section	Title
ES	Executive Summary
I	Introduction
II	Developing a Traffic Calming Program
III	Blueprint for a Traffic Calming Project
IV.	Traffic Calming Tools
V.	Risk Management and Liability Concerns
VI.	Sample Ordinance
VII.	Technical References
VIII.	Who's Doing It Now?

**Appendix**

1. Traffic Calming Regulations from around the nation.
2. Selected Traffic Calming Reference Materials and Reports.
3. Traffic Calming Study Requirements and References

**Figure 3. Traffic Calming Toolbox Structure.**

As can be seen from the above Table of Contents, the toolbox covers issues that a community is most likely to encounter in developing a traffic calming program. Recommendations are made on “how” to set up a program and conduct a traffic calming project. Detailed information is also provided on the devices used in programs throughout the country, along with the grouping of devices into “Use Categories”.



<b>Calming Device</b>	<b>Section</b>
<b>Speed Reduction</b> <ul style="list-style-type: none"> <li>· Enforcement</li> <li>· Public Awareness</li> <li>· Speed Humps</li> <li>· Traffic Circles</li> <li>· Roundabouts</li> <li>· Chicanes</li> <li>· Entrance Treatments</li> <li>· Pavement Treatments</li> </ul>	<b>A</b>
<b>Reduce Traffic Volume</b> <ul style="list-style-type: none"> <li>· Diagonal Diverters</li> <li>· Semi-Diverters</li> <li>· Median Barriers</li> <li>· Cul-de-sacs</li> <li>· Vehicle Exclusion Lanes</li> <li>· Choke Points</li> </ul>	<b>B</b>
<b>Pedestrian Safety</b> <ul style="list-style-type: none"> <li>· Pedestrian Refuges/Slow Points</li> <li>· Curb Extensions</li> <li>· Raised Crosswalks</li> </ul>	<b>C</b>
<b>Summary</b>	<b>D</b>

**Figure 4. Traffic Calming Devices presented in the Traffic Calming Toolbox**

***Lessons learned:***

In general, the development of a traffic calming program was found to have some similar tendencies and issues. Most traffic calming programs are generated by residents concerns over traffic impacts in their neighborhoods. Unfortunately, most staff professionals resist these demands at the outset and are ultimately overcome by public concern. Traffic calming efforts undertaken in new communities too often install devices such as humps, chicanes etc, on a knee jerk reaction basis. Little planning is done, and the programs start in a reactive mode to public pressure on local legislative bodies. The results of this scenario are routinely the same - unsatisfactory. The most successful programs are those that are carefully planned, professionally designed to standards, communicated with residents, and are continually evaluated to measure planned and realized performance of the traffic calming devices.

During the study, several stories were shared which illustrate the results of poor planning.

- In one community, the devices were installed without markings or signs and resulted in an accident and litigation.
- In another town devices were installed at the request of 20 residents. Unfortunately, the other 30 or so families on the street were not contacted and objected to the program after the devices were in place. The program had to be removed.
- Another community tried to start a program but was concerned for possible risks. They were not able to award a contract for construction due to contract provisions forced by Local Risk Managers. Town attorneys need to be brought into the planning process early on.

Most successful communities follow a process developed to assure communications, consensus, and rational allocation of resources. Figures 5 and 6 show the process recommended for a local traffic calming program.

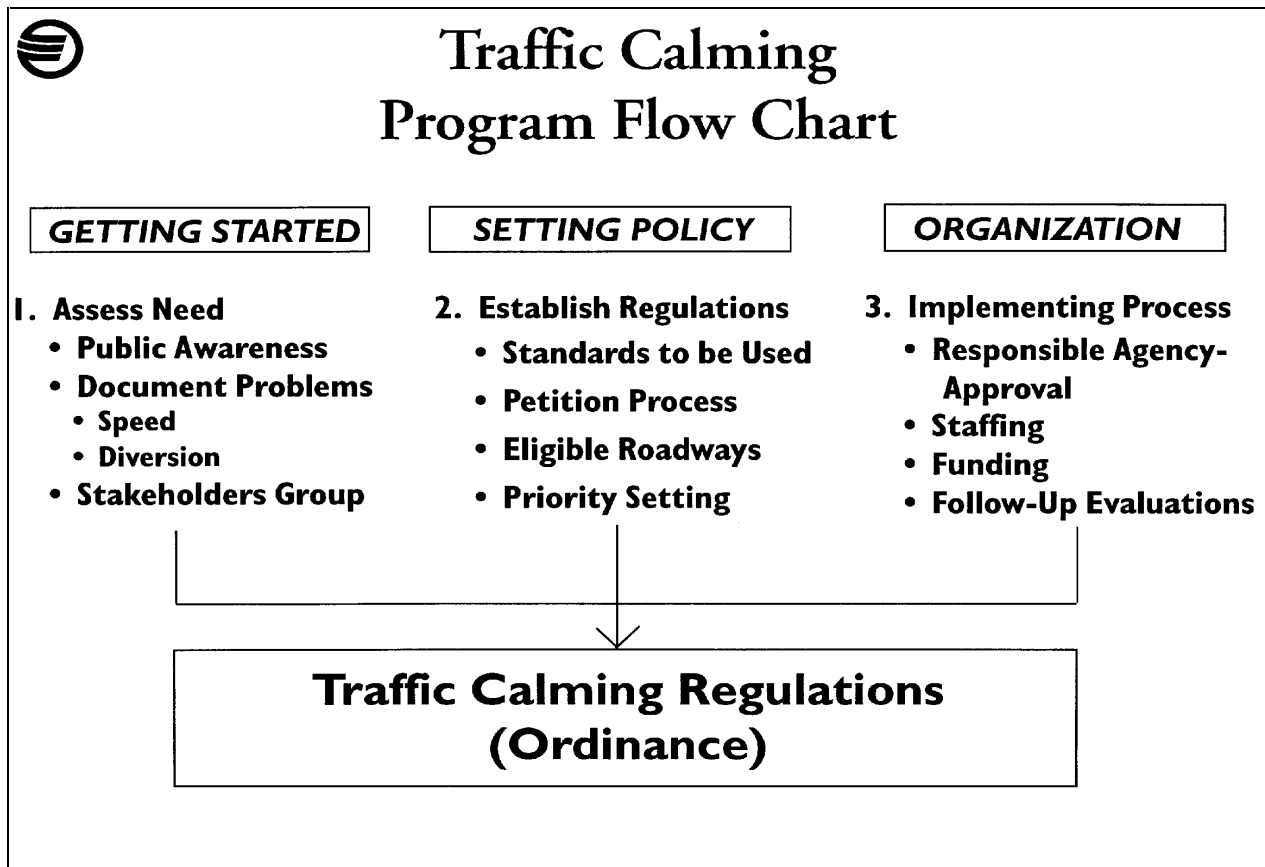


Figure 5 Traffic calming Program Setup Procedures

## ***The Traffic Calming program should be set up first***

- **ASSESS NEED**

Why is traffic calming needed? Will it benefit the community? Is the consensus and commitment in place so the resources will be available?

The traffic calming Toolbox recommends an initial study by the community to identify those conditions that might benefit from traffic calming. This program must include public outreach and awareness education, documentation of problems and needs, and the development of a stakeholders group to endorse programming.

- **SETTING POLICY**

How will the community start a program in a neighborhood? What devices will be used? Where? How will they be designed and built? Who pays and how much? How does the priority get set for each project?

All these questions need to be established up front so the program will function smoothly. Roadway classification was found to be critical. Studies on most traffic calming devices have recommended that such devices are not appropriate on arterials and should be of limited use on collectors. The community must agree on how to classify local streets. This may require professional input.

Successful programs have been framed by traffic calming REGULATIONS that are adopted by the community. Appendix A includes the traffic calming Draft Ordinance developed for this study. While written based on Connecticut law and terminology, this example shows the “basics” essential to be codified for a local program. It should be noted that the Sample Ordinance provides for the legislative establishment of need, types of devices to be used, (or not used), classification of roads, consensus on emergency response routes, and allocation of responsibility for administration of the program.

Also mandated are follow-up evaluations which should be an integral part of any community program. Communities responding to our inquiries cited numerous instances of program revisions. If devices are not working they should be changed or removed. Despite the best laid plans some things may not work as conceived.

### ***Administering a Traffic Calming Program***

Once a community has gone through the process of setting up an ordinance and regulations to guide the process of traffic calming they need to move quickly forward. Based on the review of successful program there are four fundamental phases to a traffic calming Process:

1. **Initiation** - (The process by which a Traffic Calming Project is born.) It generally begins with a citizen complaint or concern. This triggers actions, which are in the regulations, and ends with neighborhood consensus that a traffic calming program is needed. Included in this phase should be at least one public meeting for local concerns. The key to the initiation phase is that the neighborhood to be affected is notified before significant design and evaluation is undertaken to assure that there is majority interest for the program. A petition process is suggested with at least 60 (and perhaps 75%) as the essential endorsement level to allow the program to proceed.
2. **Evaluation and Engineering** - (The analysis and determination of needs and options.) Once the neighborhood agrees that a problem exists the degree to which traffic calming can alleviate the problem is analyzed. This entails collecting data for the site, analyzing this information and determining need. Included in this activity timeline should be the setting of priority on the basis of the analysis results, preparation of a traffic calming design, notice of this design and public meeting(s) and, finally achieving consensus that the design will address the problem.
3. **Approval** - (The obtaining of regulatory and administrative review.) As stated earlier programs should undergo formal approval prior to implementation. In Connecticut this body should be the Legal Traffic Authority (LTA). The charge to the LTA will be to review the proposed actions. This review should involve determination by the LTA that STANDARDS have been followed and that the program has a reasonable potential of being effective. Following approval by the LTA, the project is scheduled for construction.
4. **Implementation** - (Putting devices in place.) This phase of the program involves the steps necessary to construct the project. Funding is set and the construction scheduled in accordance with priorities. Construction is monitored to assure that STANDARDS are met. Implementation does not end with the completion of the construction of the program. It includes a process of post-evaluation for effectiveness. This post construction evaluation is essential to determine, if or unwanted events are occurring. This is important immediately following construction. Are more signs necessary? Is anything strange happening?



# Traffic Calming Recommended Process and Time Line

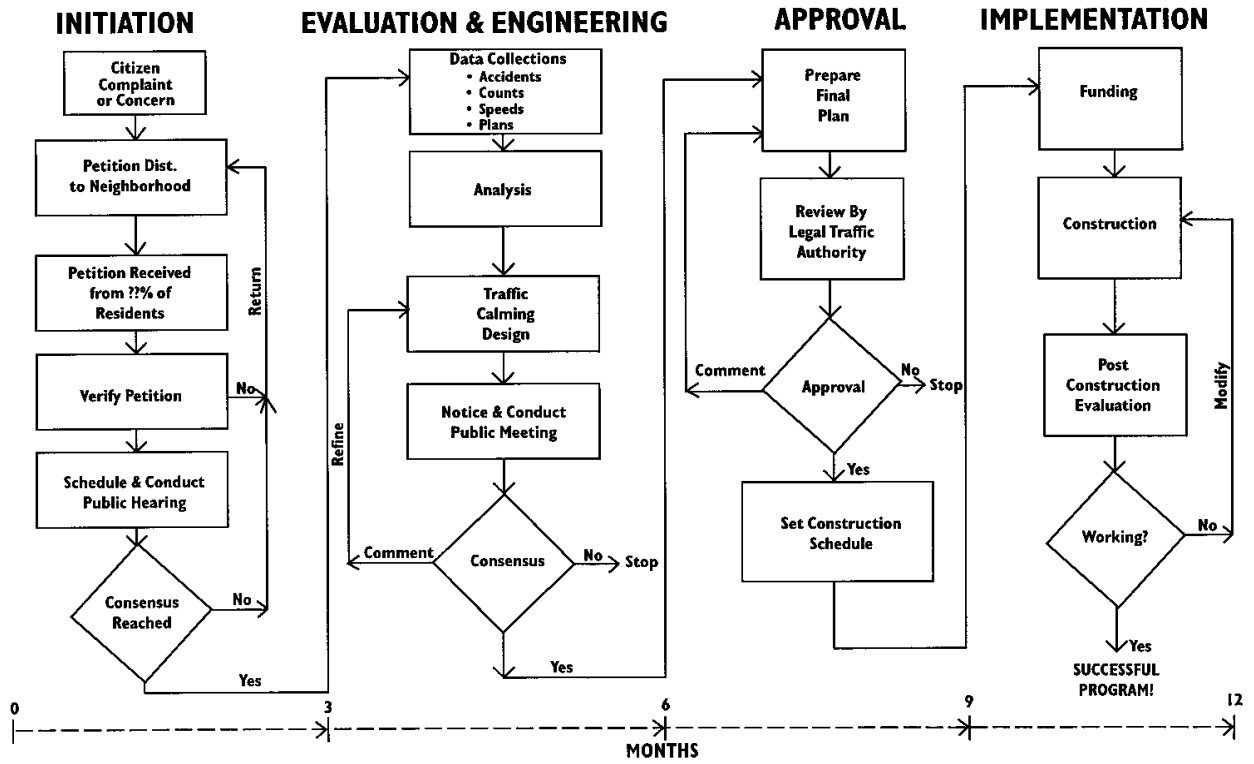


Figure 6. Traffic Calming Project Flow Chart.

Twelve months seems like a long time but, considering the process and the demands of a traffic calming to be done right, its not long at all. Essential to this program is that the attention to detail is stressed and that adjustments are possible throughout the process. The end result will be A SUCCESSFUL PROGRAM!

## ***Traffic Calming Tools***

Earlier in this report, the tools presented in the “Toolbox” were outlined. The Toolbox adopted a standard format based on that used in the Portland, OR website. It presents the device, its pros and cons, and standards for the application. While this paper does not provide sufficient space to reproduce the “Tools” section, the following example is presented to show the format used (Figure 7). Table 1 presents a summary of the devices with a comparative analysis.

## SEMI-DIVERTERS

### DESCRIPTION:

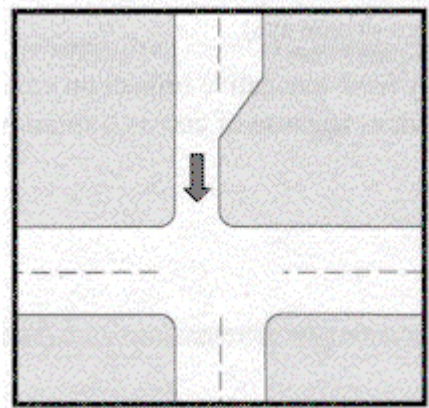
Semi-diverters are curb extensions or islands that block one lane of the street.

### PURPOSE:

Semi-diverters prevent drivers from entering or exiting certain legs of an intersection. Strategically located, semi-diverters can effectively reduce traffic volumes on a street.

### EFFECTIVENESS:

Semi-diverters are very effective in reducing volumes.



### COST:

Semi-diverters cost approximately \$5,000 - \$20,000.

### PARKING IMPACTS:

Semi-diverters may affect curbside parking opportunities opposite the device to permit emergency vehicle access.

### TRANSIT SERVICE IMPACTS:

Semi-diverters are typically only considered on non-transit streets.

### EMERGENCY SERVICES IMPACTS:

Semi-diverters allow a higher degree of emergency vehicle access than cul-de-sacs or diagonal diverters. Semi-diverters can be designed to allow emergency vehicle access, but careful consideration needs to be given to their use on primary fire response routes.

### NOISE IMPACTS:

None.

### OTHER CONSIDERATIONS:

Semi-diverters apply to all drivers, including local residents. Very special care must be taken to consider the availability, capacity, and appropriateness of the alternative route drivers might use if a semi-diverter is constructed.

Figure 7. Typical Traffic Calming Toolbox “Tool” page.

**Table 1**  
**Comparative Traffic Calming Device Matrix**

<b>Calming Device</b>	<b>Purpose</b>	<b>Effectiveness</b>	<b>Cost</b>	<b>Impacts Parking</b>	<b>Impacts Transit/ Emergency</b>	<b>Noise Impacts</b>
Enforcement	Reduce Speed	Short Term	\$100/hour	None	None	None
Public Awareness	All Aspects	Minimal	Varies	None	None	None
Speed Humps	Reduce Speed	Very	\$2,000	None	Some	Minimal
Traffic Circles	Reduce Speed/Accident	Very	\$5 – 15,000	High	Some	Minimal
Roundabouts	Speed/ Accident	Very	\$30,000 - \$100,000	High	Minor	Minimal
Chicanes	Reduce Speed	Somewhat	\$5 – 10,000	Medium	None	None
Entrance Treatments	Reduce Speed	Minimal	\$5 – 20,000	None	None	Some
Diagonal Diverters	Reduce Volume	Very	\$15 - 35,000	None	High	None
Semi-Diverters	Reduce Volume	Very	\$5 – 20,000	Low	Some	None
Median Barriers	Reduce Volume	Very	\$10 - 20,000	Low	Some	None
Cul-De-Sacs	Reduce Volume	Very	\$20,000	Medium	High	None
Exclusion Lanes	Change Pattern	Somewhat	\$2 – 10,000	Low	Some	None
Choke Points	Reduce Volume	Somewhat	\$7 – 10,000	Medium	Some	None
Refuges/Slow Points	Safety/Reduce Speed	Somewhat	\$8 – 15,000	Medium	None	None
Curb Extensions	Safety/Reduce Speed	Somewhat	\$7 – 10,000	Medium	None	None
Raised Crosswalks	Safety/Reduce Speed	Very	\$2 - 5,000	None	Some	Minimal

While this list is not all-inclusive, it is a cross section of traffic calming devices/applications in use today. Different locales will have different preferences on the types of devices they wish to use. The goals and desired results will likely dictate applications considered. Speed reduction has been found to be the easiest measure to implement. Where the goal is to divert traffic from an area, caution and care are suggested in program development. The results of “diversion” projects are less precisely forecast. Often such programs affect areas outside the immediate project location and, as such, should involve wider public participation and consensus.



One recommendation for traffic calming Tool implementation and selection is to go the field with trial installations. Many of the devices can be installed temporarily and evaluated. In fact, portable “humps”, are currently under development, and in use in some jurisdictions. Field evaluation periods of up to six months are common.

### ***Risk Management and Liability Concerns***

Early in the development of the SWRPA program the consultants were tasked with an evaluation and literature search in the area of Liability and Risk Management concerning traffic calming Devices. Community Traffic Calmers starting a program often are faced with questions from Risk Managers, Town Attorneys and Legislators who are concerned with associated liabilities of such programs.

The results of the literature search and communications during this study did not reveal a pattern indicating that traffic calming Programs lead to liability for communities. If done correctly, the contrary seems true.

Recommendations for sound traffic calming programs are similar to most transportation programs and are summarized below.

#### **1. The application of proper design standards is essential!**

- Use devices that have been tested and used successfully in other communities.
- Avoid untried devices
- Design each program individually with consideration to all traffic engineering criteria - speed, sight distance, volume, grades, and other roadway conditions
- Seek the advice of a licensed professional in the design if they are not available on staff. Professional design may be needed, as well as the application of prudent and proper standards.

#### **2. Develop a STANDARDIZED manner of evaluating a project.**

- Establish a process for orderly development of projects.
- Establish the need for the improvement and demonstrate that the installation was not a whim.
- Demonstrate an organized and correct method of responding to a noted deficiency.

### **3. Adequately advise of construction as in any roadway improvement project.**

- Proper maintenance and protection of traffic is essential during construction.
- Most programs need a “phase in” period when extra signs and notices are in place to advise drivers of the changed conditions. Remember drivers are creatures of habit and may not readily become aware of change.

### **4. Supervise the installation of devices and accompanying warning signs.**

- Construction sequence is important. It is better to err on the side of caution.

### **5. Monitor the results of the program. Be open to changing or modifying a program.**

- Program review is critical.

The summary result of our review of the status of Traffic Calming and Risk Management led to the conclusion that such problems have not materialized in **Tort Law**.

Another area of claim used in challenging traffic calming programs is the assertion that the municipality does not have “**Authority to Implement**” under local or state laws. In this set of actions, the plaintiff asserts that appropriate law does not govern the installation of traffic calming devices is not authorized by appropriate law governing such cases. The current landmark case in this area is in the State of Florida, where the City of Sarasota lost a decision in state court which recognized that Traffic Calming Tools are not included in the Florida Manual of Traffic Control Devices and thus, Sarasota had no statutory authority to install. This case is being appealed and the State is now considering amending the manual. Care should be given to distinguish the actual physical construction of Traffic Calming Actions from being considered Traffic Control Devices. Signs and pavement markings which are used with traffic calming actions, are devices and should comply with appropriate standards for such uses. Should a sign or warning device be developed for use especially in the community, it may be appropriate to have such approved by the Legal Traffic Authority and State Traffic Commission. Adoption of enabling legislation by the local legislative body is also recommended. (See sample ordinance included in Appendix A).

The last area in which a community may experience a challenge to traffic calming efforts is in the area of alleged **Taking** of property rights. In this case the plaintiff will assert that the action has damaged his property rights. Most cases have been unsuccessful provided there is careful thought and public outreach. Most states have held that access is not an absolute right and it is within the police power of a municipality to regulate reasonable use of the road network for public safety and protection of its residents. The enabling legislation should embrace the purposes in its preamble. In any case, this type of action will not stop traffic calming. These

cases always allege a Taking of property rights and the remedy available in such cases is financial compensation.

### ***Summary - Risk Management and Liability***

Traffic Calming is an emerging field and the case law is still developing. There is not, at this time, a significant level of decisions that represent a deterrent to the undertaking of traffic calming so long as it is approached comprehensively and with established process.

### ***Conclusion***

This paper has presented the development of a project which was undertaken in the South Western Regional Planning Region. Traffic Calming was a “hot button” issue and the communities looked to the SWRPA staff for guidance and assistance. The process developed by SWRPA and The EARTH TECH team of engineers and planners culminated with the publication of a Traffic Calming Toolbox. This report is a comprehensive resource report, which is now being used in the Region, to assist communities in developing traffic calming programs and devices.

### ***Need Further Information?***

The authors would be pleased to respond to inquiries concerning the Toolbox or the program tasks used to develop the regional program. Copies of the report can be obtained by contacting SWRPA.

### ***Author biographies***

James W. Ford, PE. (Fellow) is Vice President of Infrastructure Services and National Group Leader for Traffic Engineering with Earth Tech. He is located in the Glastonbury Connecticut office and manages projects throughout the northeast region encompassing New England, New York and New Jersey. As the project manager for the SWRPA Traffic Calming Effort, he was responsible for the overall project conduct and development. His career has spanned some 31 years in traffic engineering. In addition to his consulting experience he has served as Director of Traffic and Parking for the City of Stamford, CT, and with the Traffic Division of the Connecticut Department of Transportation.

Tanya Court is Deputy Director of the South Western Regional Planning Agency, located in Norwalk, CT. She is responsible for the day-to-day operations of the agency, and has over twenty years of regional planning experience. Her interests include facilitating teams and committees towards consensus to realize and support organization objects. She pioneered innovative approaches to incident management through creation of a multidisciplinary incident management team which has received statewide recognition and acclaim.

Susan Prosi is Senior Transportation Planner with the South Western Regional Planning Agency. Ms. Prosi was the Project Manager for the Traffic Calming effort, and oversees the regional transportation planning program. She has 25 years of experience in transportation planning and engineering in the public and private sectors.

## **Appendix A**

### **Sample Traffic Calming Ordinance**

#### **Purpose and Intent**

Whereas the (legislative body) of the (City/Town) of \_\_\_\_\_ has determined that increasing congestion and traffic volume on City/Town roads is present and,  
Whereas it is the policy of the (Legislative Body) to improve the quality of life in the community and,  
Whereas, the reduction of traffic in residential neighborhoods will improve safety and,  
Whereas, Traffic Calming is a recognized traffic engineering tool and,  
Whereas Design Standards have been developed for implementation of traffic calming measures and,  
Whereas the (Legislative Body) of \_\_\_\_\_ is empowered to regulate the flow of traffic pursuant to section 14 of the General Statutes.  
Now therefore be it ordained by the (Legislative Body) that a Traffic Calming Program shall be implemented in accordance with this ordinance and applicable laws and statutes.

#### **Implementing Authority**

The \_\_\_\_\_ Department of CITY/TOWN is hereby authorized to undertake the organization and operation of a Traffic Calming Program in accordance with this ordinance.

#### **Traffic Calming Measures**

In developing traffic calming programs for community streets the implementing authority may utilize measures to reduce speed, enhance pedestrian safety and reduce traffic diversion in residential neighborhoods.

Traffic Calming programs may include devices known as \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ are among resources used by traffic engineers in such programs. The use of \_\_\_\_\_ and \_\_\_\_\_ are deemed not compatible with the needs of the City/Town of \_\_\_\_\_ and are prohibited from such programs.

#### **Program Technical Requirements**

Traffic Calming measures shall be in all cases designed to comply with 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.

All traffic calming measures shall be designed under the supervision of the \_\_\_\_\_ or other individual who shall be a Professional Engineer Licensed in the State of Connecticut.

Every plan shall bear the seal of such engineer which shall be applied consistent with the practices of the State Board of Professional Engineers and Land Surveyors. Plans not so prepared and sealed shall not be implemented under this ordinance.

### **Applicable Community Roads**

It is the policy and intent of the (legislative body) that traffic calming measures not inappropriately delay emergency response to fires, medical, or other emergencies. It is further the policy of the (legislative body) that traffic calming measures which place obstructions in roads (Humps, Tables, etc.) be restricted to collector and local roads. Prior to installing any traffic calming project the Implementing Authority shall cooperatively develop a classification of roads in the community which shall identify the following categories of roads:

- Arterial Roads carrying major traffic movements between sections of the community.
- Collector Roads carrying traffic movements between neighborhoods and sections of the community connecting to Arterial Roads.
- Local Roads carrying traffic in neighborhoods
- Emergency Response Roads carrying essential emergency traffic and subject to multiple response events. Emergency Response Roads may be any category above.

Said map shall be presented to the Legislative Body for approval with written endorsement of the City/Town Engineer, Director of Public Works, Chairman of the Board of Education, The Police Chief, the Fire Chief Director of Emergency Medical Services., and

---

Once approved by this body the map shall guide the Traffic Calming Program. The map may be amended from time to time by resubmission to this body of a similarly endorsed plan as outlined above.

### **Traffic Calming Program Regulations**

Traffic Calming is intended improve the quality of life in neighborhoods and as such is a community sensitive program.

It is the policy of the (Legislative Body) that the implementing authority shall develop program guidelines which will insure public participation and access to the program.

Such Regulations shall state the means by which a resident shall request traffic calming services, the methods to be used by the Authority in advising the potentially affected neighborhood and the evaluation criteria to be used in measuring the relative benefits of each traffic calming program.

Regulations shall provide for contacting the neighborhood, insuring community consensus, public hearings and notices of construction.

It is deemed essential that the traffic calming devices installed under this ordinance be monitored to determine effectiveness. The implementing authority shall provide in Regulations for this program requirements for continuing monitoring of Traffic Calming projects for a period of at least six months following placement to review safety, success and effectiveness.

Such regulations shall be submitted to the Legislative Body by the implementing authority and shall be considered at a Public Hearing of the Legislative Body duly noticed and conducted for the purpose of receiving public comment thereon. Subsequent to this hearing the Legislative Body may approve, modify and approve, or disapprove the Regulations. Once approved the Regulations shall become part of this ordinance. Until Regulations are submitted and approved by the Legislative body traffic calming devices shall not be installed under this ordinance.

### **Funding of Traffic Calming Programs**

The Implementing Authority shall annually present as part of its budget submission for Capital Programs a plan of implementation for Traffic Calming Improvements which shall be considered in accordance with normal budget practices and procedures. The submitted plan shall list projects and priority evaluations indicating the order of implementation and relative cost of each. Following approval of a budget for Traffic Calming Programs the Implementing Authority is authorized to install such devices in accordance with the priorities for each project to the limit of the approved funding each year.

### **Amendment**

This ordinance may be amended from time to time in accordance with applicable provisions of the Charter of the City/Town of \_\_\_\_\_ and the General Statutes of the State of Connecticut.