Neighborhood
Traffic Calming Program

Adopted by Resolution R08-33

December 23, 2008

Neighborhood Traffic Calming Program

"Traffic Calming is the combination of mainly physical measures that reduce the negative effects of motor vehicles, alter driver behavior and improve conditions for non-motorized street users".

-Adopted by ITE International, 1997

Background

Syracuse City Staff has been approached often by City residence with the concerns of speeding in residential neighborhoods, and request that the City construct "speed humps" or other types of traffic calming devices in residential neighborhoods. Until now there has not been a set of guidelines or criteria in which these requests can be accurately evaluated or even warrant a traffic calming devices.

This document was developed with input from various City departments and several Governing bodies. These include: Police, Fire, Public Works, City Engineer, and Community Development Departments; the City Council and Planning Commission. While opinions vary regarding how traffic calming should best be applied this document represents the City's attempt to produce a fair policy for all of the residents of Syracuse City.

For the development of this document, the traffic calming policies from the following City's and Organizations were reviewed to determine what accepted practices were being used, and try to use some of those accepted and tested practices that would apply to our community.

- City of Auburn, WA
- City of Bellevue, WA
- City of Boulder, CO
- City of Concord, CA
- City of Grand Rapids, MI
- City of Greeley, CO
- City of Eden, NC
- City of Federal Way, WA
- City of Franklin, TN
- City of Hilliard, OH
- City of Huntsville, AL
- City of Issaquah, WA
- City of Jackson, MS
- City of Kirkland, WA
- City of Lake Forest Park, WA
- City of Lee's Summit, MO
- City of Littleton, CO
- City of Livermore, CA
- City of Loveland, CO
- City of Madison, WI
- City of Mankato, MN
- City of Melbourne, FL
- City of Mercer Island, WA
- City of Missoula, MT
- City of Monterey, CA
- City of Murray, UT
- City of Newport, VA
- City of Oak Ridge, TN
- City of Park City, UT
- City of Redmond, WA
- City of Salt Lake City, UT
- City of San Leandro, CA
- City of San Mateo, CA
- City of Sebastopol, CA
- City of St. George, UT
- City of Stockton, CA
- City of Weatherford, TX
- City of Wilmington, NC
- City of Westfield, IN
- City of Woodland, CA
- County of Arlington, VA
- Safe Routes to School Program (SRTS)
- Town of Los Gatos, CA
- Town of Lewisville, NC
- Town of Yarmouth, ME
- Traffic Calming "State of the Practice"

GENERAL PURPOSE

Syracuse City is dedicated "to provide quality, affordable services for its citizens, while promoting community pride, fostering economic development and managing growth" (*Syracuse City Moto*). The purpose of the Syracuse City Neighborhood Traffic Calming Program is to improve both the safety and quality of life within residential neighborhoods with an attempt to reduce the negative impact of traffic (volumes, speeds, and/or accidents).

The Neighborhood Traffic Calming Program is a process, rather than a fixed solution. Ongoing communication and assessment are essential to the success of the effort and will help ensure that neighborhood safety concerns are addressed in an effective and sustainable manner.

The purpose of this program is to promote safe and pleasant conditions for pedestrians, bicyclists and motorists on residential streets by using a process in which residents work with City staff to address traffic and safety problems. This can be achieved through the following means (the three "E's"):

- Education: Increase awareness of residents in neighborhoods that there are traffic related concerns such as excessive speed, non-local (cut-through) traffic, and accidents.
- Enforcement: Encourage compliance with speed limits on local streets through speed reducing tactics provided by Syracuse City Police Department, which includes, but not limited to, traditional enforcement, the Neighborhood Speed Watch Program, and the use of speed trailers (S.M.A.R.T).
- Engineering: Evaluate the affected street for speeding, traffic volume, and accidents to determine if traffic calming measures are warranted.

OBJECTIVES

Syracuse City strives to ensure overall safety and enhance the quality of life for its residents. Traffic conditions on residential streets certainly affect the residence "livability". Traffic that is traveling at improper speeds and an excessive amount of non-local traffic that is consistently using residential streets can affect a neighborhood's "livability", including pedestrian and bicyclist activities.

Installing traffic calming devices on every street is not always the answer. Syracuse City Neighborhood Traffic Calming program was designed to serve as a guide for city staff, elected officials, and residents throughout the traffic calming study, planning, and implementation processes. The program is only a guideline and, therefore, subject to change. Under this program, staff will work with residents to identify traffic issues in their neighborhoods and seek appropriate solutions.

The goal of the program is to affect driver behavior in order to improve safety and the quality of life for residents, pedestrians, bicyclists, and motorists. This is to be balanced with providing streets that do not hinder quick response time for emergency service vehicles including fire trucks, police cars, and

ambulances and streets that are accessible by large vehicles, such as school buses and trucks used for essential City services. Throughout the study process, Syracuse City Planning staff will work with representatives of neighborhoods, the Syracuse City Police Department, the Syracuse City Fire Department, and the Syracuse City Public Works Department to develop workable solutions to problems identified.

Objectives are as follows:

- Reduce motorist speed in residential neighborhoods;
- Reduce number and severity of accidents;
- Reduce neighborhood cut through traffic;
- Increase the safety of children, pedestrians, bicyclists, and motorists;
- Create and/or enhance attractive streetscapes;
- Establish clear guidelines of the process and procedures to evaluate traffic calming requests;
- Partner with residents for the best overall program for the affected streets;
- Implement self-enforcing rather than regulatory measures;
- Maximize street life and pedestrian activity;
- Prevent crime; and
- Enhance urban redevelopment.

PROCEDURES

This process is to ensure that there is a fair and effective consideration at minimal taxpayer expense. This program encourages a collaborative approach by residents, working with City Staff in all steps of the Neighborhood Traffic Calming Program. Projects that are being considered for the Neighborhood Traffic Calming Program must follow the procedure that is outlined below. A flowchart summarizing this procedure is provided in Appendix A.

PHASE I

IMPLEMENTATION PROCESS

The traffic calming process begins once a Citizen submits a completed Citizen Action Request application (CAR) into the City. The request must identify the perceived traffic problem and must include contact information for a neighborhood representative and must include four (4) additional signatures of residents within the affected area that share the same concerns as the applicant (only one signature per household will be accepted). There will be a required application fee of $100 that must be submitted with the CAR into the Syracuse City Office by the first Monday in November for the application to be considered for the upcoming fiscal year. The Neighborhood Traffic Calming Program application is provided in Appendix B.

Upon receipt of the Neighborhood Traffic Calming Program application, Syracuse City 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. After traffic data is collected an Index score will be assigned to the street (*Table A-1*). If the street index is 80 points or greater the process will continue within the Neighborhood Traffic Calming Program.

TABLE A-1
STREET INDEX

CRITERIA	POINTS	BASIS	POINTS
SPEED	10 POINTS PER EVERY MPH OVER THE POSTED SPEED LIMIT	85TH PERCENTILE SPEED	
VOLUME	1 POINT FOR EVERY 100 VEHICLES	AVERAGE DAILY TRAFFIC VOLUME	
CRASHES	3 POINTS FOR EVERY CRASH	NUMBER OF REPORTED CRASHES IN LAST 3 YEARS	
EMERGENCY RESPONSE ROUTE	0 POINTS FOR YES, 3 POINTS FOR NO	IS STREET DESIGNATED EMERGENCY RESPONSE ROUTE?	
FATALITIES	15 POINTS FOR EVERY FATALITY	NUMBER OF REPORTED FATALITIES IN LAST 3 YEARS	
BIKE ROUTE	5 POINTS FOR YES, 0 POINTS FOR NO	IS STREET DESIGNATED BIKE ROUTE?	
PEDESTRIAN GENERATORS	5 POINTS FOR EACH	IS THERE A PARK, SCHOOL, CHURCH, WITHIN 500 FEET	
SIDEWALKS	0 POINTS FOR YES, 5 POINT FOR NO	IS THERE A SIDEWALK?	
TRAFFIC CALMING	-5 POINTS FOR YES, 0 POINTS FOR NO	IS THERE EXISTING TRAFFIC CALMING?	
STREET WIDTH	1 POINT FOR A STREET SEGMENT < 21' WIDE, 0 POINTS FOR A STREET SEGMENT > 21' WIDE	IS THE EXISTING STREET WIDTH GREATER THAN 21' FROM THE EDGE OF ASPHALT?	
POSTED SPEED LIMIT	1 POINT FOR 25 MPH POSTED LIMIT, 0 POINTS FOR OTHER	I THE POSTED SPEED LIMIT 25 MPH?	
* TANGENT LENGTH OF STREET	1 POINT FOR THE TANGENT LENGTH OF THE STREET TO BE < 600'	IS THE LENGTH OF THE STREET GREATER THAN 600'?	
**LOCAL STREET CLASSIFICATION	5 POINTS FOR LOCAL STREET, 1 POINTS FOR MINOR COLLECTOR	IS THE STREET A LOCAL STREET?	
		***TOTAL	

* For the street to be considered in the Neighborhood Traffic Calming Program the street tangent length shall not be less than 600 feet.
** Cul-de-sac streets and fire lanes are ineligible for the Neighborhood Traffic Calming Program.
*** 80 points or greater will be included in the Neighborhood Traffic Calming Program.

If City staff determines by the street index 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 Neighborhood Traffic Calming Program for a period of two (2) years unless City Staff determine that changing conditions have resulted in a traffic volume or speeding problems.

If City staff determines that a street segment has a traffic volume or a traffic speed problem, but the above street index requirements are not met, then staff will work with the Syracuse Police Department and the neighborhood association/group to address the problem with Level I measures. However, the

street will not be considered for Level II measures at this time. Also, the project will be ineligible for the Neighborhood Traffic Calming Program for a period of two (2) years unless City Staff determine that changing conditions during this time have resulted in a traffic volume or speeding problems.

If City staff determines that a street segment has a traffic volume or a traffic speed problem, and if the above street index requirements are met, then the project will be included in the Neighborhood Traffic Calming Program Level I process. City Staff will identify feasible and appropriate traffic calming solutions to address the identified traffic problem. Examples of traffic calming techniques are provided in Appendix F.

Once the process is reviewed by City staff an initial neighborhood meeting will be held with the assistance of those residents that signed the original CAR application. At the meeting, City staff will present findings from the initial field investigation and data collection, and will provide a presentation of the Syracuse City Neighborhood Traffic Calming Policy.

A volunteer group of residents will form the project's Community Working Group. The goal of this group is to have members that represent the various geographical areas and interests within the neighborhood.

The Community Working Group will work with City staff and meet to review existing problems, determine community goals, establish the neighborhood study boundary, discuss and evaluate various Level I measures, and gain community acceptance on which Level I measures to implement as means of addressing the problems. The group will also determine how long to implement the recommended improvements, although Level I efforts will be applied for a period of not less than three (3) months and not more than nine (9) months

The Neighborhood Traffic Calming Program Level I measures will involve the coordinated efforts of City staff, Syracuse Police Department, and the Community Working Group. The Community Working Group must actively participate in this process in order for the project to continue in this program. Upon approval from City staff, the appropriate Level I improvements will be installed. Following the pre-established implementation period, City staff will collect new data to determine the effectiveness the measures put into place. The Community Working Group will then meet to discuss if their goals have been met.

If the prescribed Level I actions have proved effective in addressing the goals, the improvements will stay in place or permanent devices will be installed. If the actions are ineffective; the Community Working Group may consider reapplying at a later time or pursue potential implementation of Level II measures.

PHASE II

IMPLEMENTATION PROCESS

Level II improvements will only be considered if Level I measures do not meet the goals established by the Community Working Group, as previously discussed. In special circumstances, City staff may determine that previously installed Level I measures cannot achieve the desired outcome and my recommend consideration of Level II measures. Projects that move into Level II consider physical travel speed and traffic volume reduction measures and therefore require increased neighborhood consensus.

Before a Level II program can commence for a particular neighborhood, residents and property owners within the study area boundary will be surveyed to determine their level of support in considering Level II improvements. The Community Working Group will conduct the survey. A minimum of 33-1/3 percent of those surveyed must agree to proceed in developing an expanded plan. If less than 33-1/3 percent agree, then Level II improvements will not be considered.

If the vote supports consideration of Level II measures, the Community Working group will be reestablished. It may be necessary to expand or otherwise alter the composition of the group due to the likely grater impacts that could result under a Level II traffic calming plan.

In addition, a Technical Working Group will be formed. The member of this group will consist of Syracuse City's Community Development, Engineering, Fire, Police, and Public Works Departments. Their perspective is essential for developing a plan that effectively address existing concerns without creating new problems that cannot be mitigated or that keep the ultimate plan form being implemented.

The Community and Technical Working Groups will meet to review the results from the Level I program, revisit existing problems and community goals, and identify the appropriateness of various Level II measures in addressing the existing problems. City staff will work with the Community and Technical Working Groups in developing a Level II traffic calming plan (Note: the plan may contain some Level I type of measures).

Next, the Community Working Group will present the provided Level II traffic calming plan (which may consist of alternatives) to the neighborhood residents and property owners at a Neighborhood Open House. In addition, the plan may be presented through a newsletter or other types of mailing. The City will assist the neighborhood in these efforts. However, it is up to the Community Working Group to gather support for the project.

All projects that reach this point will be prioritized by City staff based on a variety of factors, such as traffic speeds, traffic volumes, and implementation costs. This prioritization will be used by City staff to develop construction schedules for the projects depending on the City Councils approval.

After the project has been prioritized against other traffic calming requests, City staff will then present the project(s) to Syracuse City Council for their approval of project funding during the fiscal year budget process. 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. If there is not sufficient funding available for a project to continue, then that project will be placed on hold until the next fiscal year (July 1st). If the City Council elects not to fund the project then City staff and the Community Working Group will then have the option to go back to and develop a more feasible solution. A lower-priority project can be implemented ahead of schedule if the Community Working 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.

If funding is approved, the proposed Level II traffic calming plan will be implemented on a test basis using temporary control devices, where possible, for a period determined by City staff, but not to exceed one (1) year. Temporary devices will not be installed during the snow removal season (November- March), and if temporary device are currently installed, but the evaluation process not completed these devices will be removed and then placed back at the end of the snow removal season. Installation of the temporary traffic calming measures will be performed by Syracuse City crews or by a contractor that is selected by the City.

Following the test period, City staff will collect new data to determine the effectiveness of the measures put into place. These results will be provided to all of the neighborhood's residents and property owners. Then, residents and property owners will vote on whether or not to install a permanent device of the proposed Level II traffic calming plan. A minimum of 60 percent of residents and property owners (household locations will be determined by City staff) that could be affected by the proposed changes in traffic flow must favor implementation for the Level II measures to proceed. In addition, a minimum of 75 percent of the residents and property owners immediately adjacent to each proposed device must favor implementation. One vote will be granted to each residence and/or property owner. This voting period will last up to four (4) weeks.

Installation of the traffic calming measure will be performed by Syracuse City crews or by a contractor that is selected by the City

After the construction of the permanent Level II measures, City staff will continue to monitoring the effectiveness of the plan for up to one (1) year. City staff will prepare a report of the findings for presentation to the neighborhood. Depending on the nature of the measures, this report could include a maintenance plan for residents and property owner.

MODIFICATION OR REMOVAL

OF A TRAFFIC CALMING DEVICE

If City staff determines that a traffic calming device should be modified or removed due to public health/safety reasons, then City staff, with assistance from the Public Works Department, shall modify or remove the device. If the Community Working Group wishes to remove or significantly alter a traffic calming device, then the neighborhood must conduct the same petitioning just prior to the installation of the permanent device. 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, then the neighborhood will be ineligible to participate in the Neighborhood Traffic Calming Program for a period of five years.

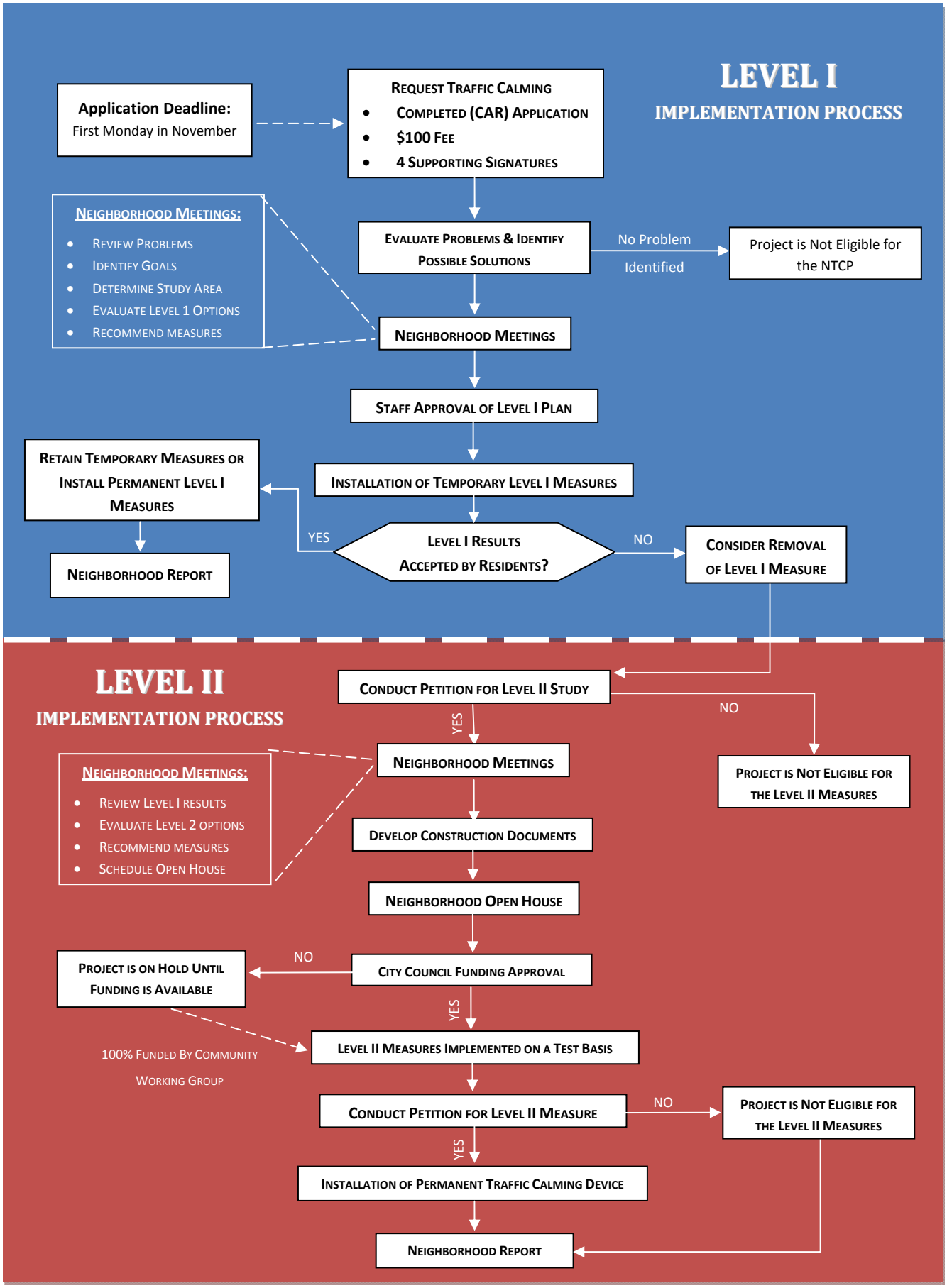
FUNDING CONSIDERATIONS

Funding for the implementation of a traffic calming plan should be considered throughout the plan development process. If funding limitations will impact the range of options available, this needs to be identified early in the process and the variety of appropriate devices should reflect these limitations. It must be reiterated that Level II devices are expensive.

However, if a neighborhood wants to implement a more extensive plan than what City staff believes is appropriate to resolve the identified problem(s), then the City Council may need to approve the plan with additional funds and/or the neighborhood may be requested to participate in funding all or a part of the project.

Appendix A

Neighborhood Traffic Calming Program
Process Flow Chart


LEVEL I
IMPLEMENTATION PROCESS
Application Deadline:
First Monday in November
Request Traffic Calming
Completed (CAR) Application
$100 Fee
4 Supporting Signatures
Neighborhood Meetings:
Review Problems
Identify Goals
Determine Study Area
Evaluate Level 1 Options
Recommend measures
Evaluate Problems & Identify Possible Solutions
No Problem Identified
Project is Not Eligible for the NTCP
Neighborhood Meetings
Staff Approval of Level I Plan
Installation of Temporary Level I Measures
Level I Results Accepted by Residents?
YES
NO
Retain Temporary Measures or Install Permanent Level I Measures
Neighborhood Report
Consider Removal of Level I Measure
LEVEL II
IMPLEMENTATION PROCESS
Conduct Petition for Level II Study
YES
NO
Project is Not Eligible for the Level II Measures
Neighborhood Meetings
Neighborhood Meetings:
Review Level I results
Evaluate Level 2 options
Recommend measures
Schedule Open House
Develop Construction Documents
Neighborhood Open House
City Council Funding Approval
NO
Project is on Hold Until Funding is Available
YES
100% Funded By Community Working Group
Level II Measures Implemented on a Test Basis
Conduct Petition for Level II Measure
NO
Project is Not Eligible for the Level II Measures
YES
Installation of Permanent Traffic Calming Device
Neighborhood Report

Appendix B

Citizen Action Request Form

SYRACUSE CITY CORPORATION
1979 West 1900 South
Syracuse, UT 84075
(801) 614-9657

FAX: (801) 614-9657

Citizen Action Request (CAR)

for the Neighborhood Traffic Calming Program

(Please Print)

Representative: _____ **Date:**_____

Applicant Street Address: _____

Phone: _____ **FAX:** _____

Email: _____

Please list at least 4 or more other occupied residence along you street or general affected area that support your concerns.

Name	Address	Phone	Signature

Name of the home owner association (if applicable):_____

Detailed Description of Concern:_____

_____

_____

_____

SAMPLE

_____

_____

_____

What day(s) of the week and time(s) does the problem appear to be the worst?_____

_____

Describe who you feel is causing the problems in your area?_____

_____

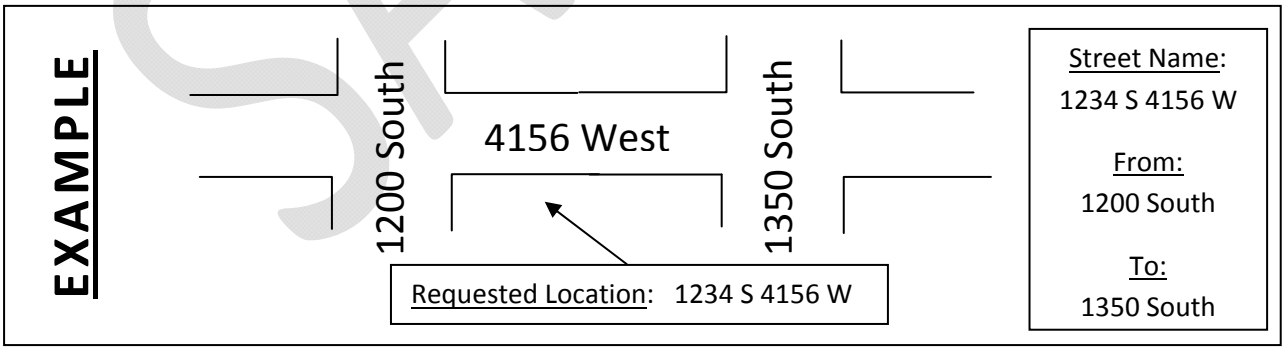
Location Requested

Please provide the approximate address to be considered. Indicate the name of the street to be considered and the boundaries of the street segment by identifying intersecting streets (from and to). Consideration will be given for only that described.

Requested Location:_____

Street Name:_____

From:_____**To:**_____



Specific Action Requested:_____

_____

SAMPLE

How long has this traffic problem existed?_____

Is school traffic a factor in your traffic problem? YES ☐ NO ☐

Have you contacted the City before about your concerns? If yes explain Yes ☐ NO ☐

I understand that submitting this application does not guarantee approval for traffic calming and that such approval is subject to the discretion of the Neighborhood Traffic Calming Program Guidelines. I accept responsibility to serve as the contact person for this request.

_____ _____

Applicant's Signature Date

APPLICATION DEADLINE FOR FUNDING DURING THE NEXT BUDGET CYCLE IS THE

FIRST MONDAY IN NOVEMBER

For Office Use Only

Application fee $250 Date paid: _____

Application taken by:_____

Project Number: _____

Date(s) of Enforcement: _____

_____

Date(s) Speed Trailer Deployed: _____

_____

Recommends Traffic Study? Yes: _____No:____

Date(s) of Traffic Study:_____

_____

Date of Design Presentation: _____

Date Petition Received:_____

Date Measures Implemented: _____

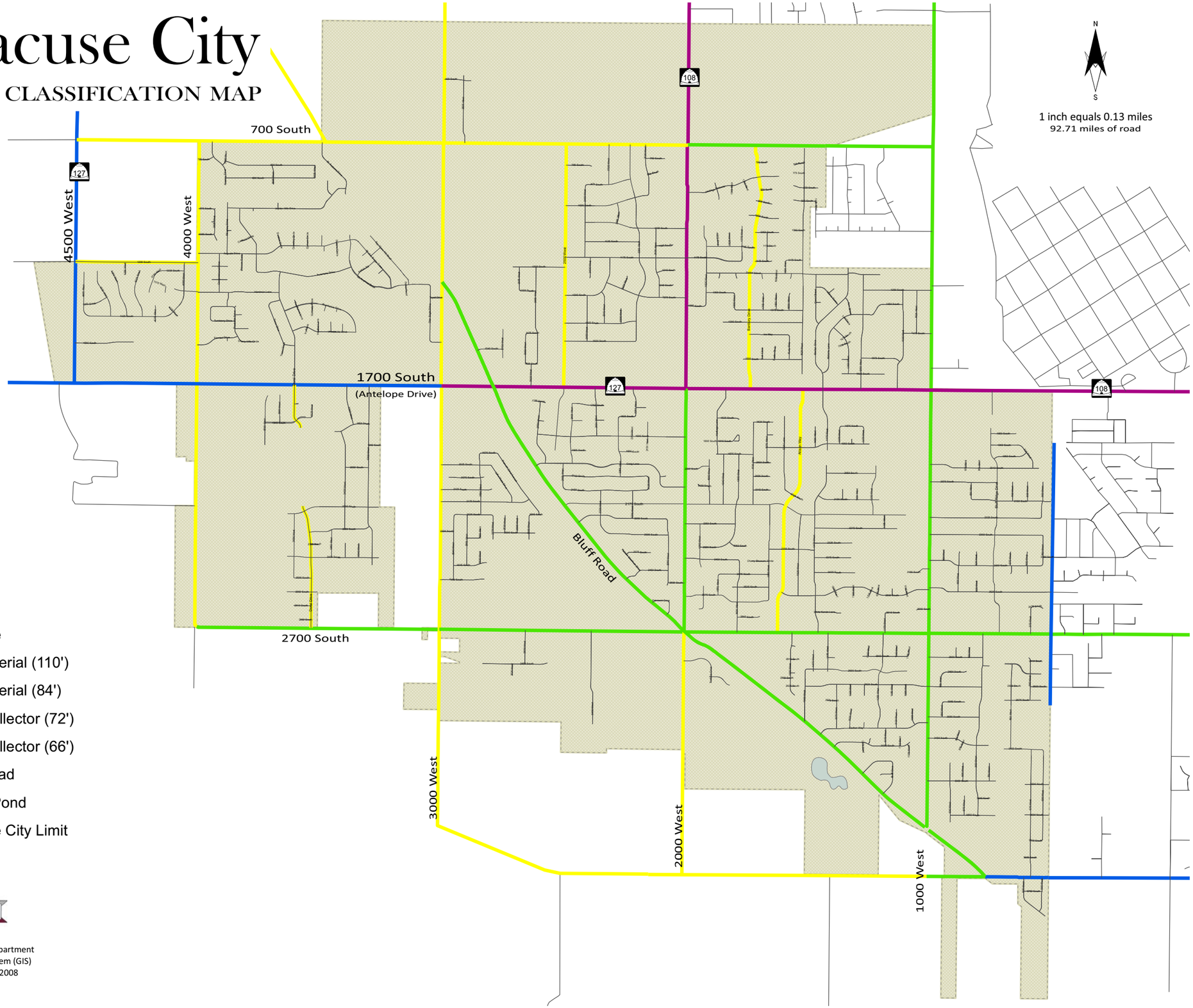
SAMPLE

Appendix C

Street Classification Map

Syracuse City

STREET CLASSIFICATION MAP



Legend

- Interstate
- Major Arterial (110')
- Minor Arterial (84')
- Major Collector (72')
- Minor Collector (66')
- Local Road
- Jensen Pond
- Syracuse City Limit

Syracuse City

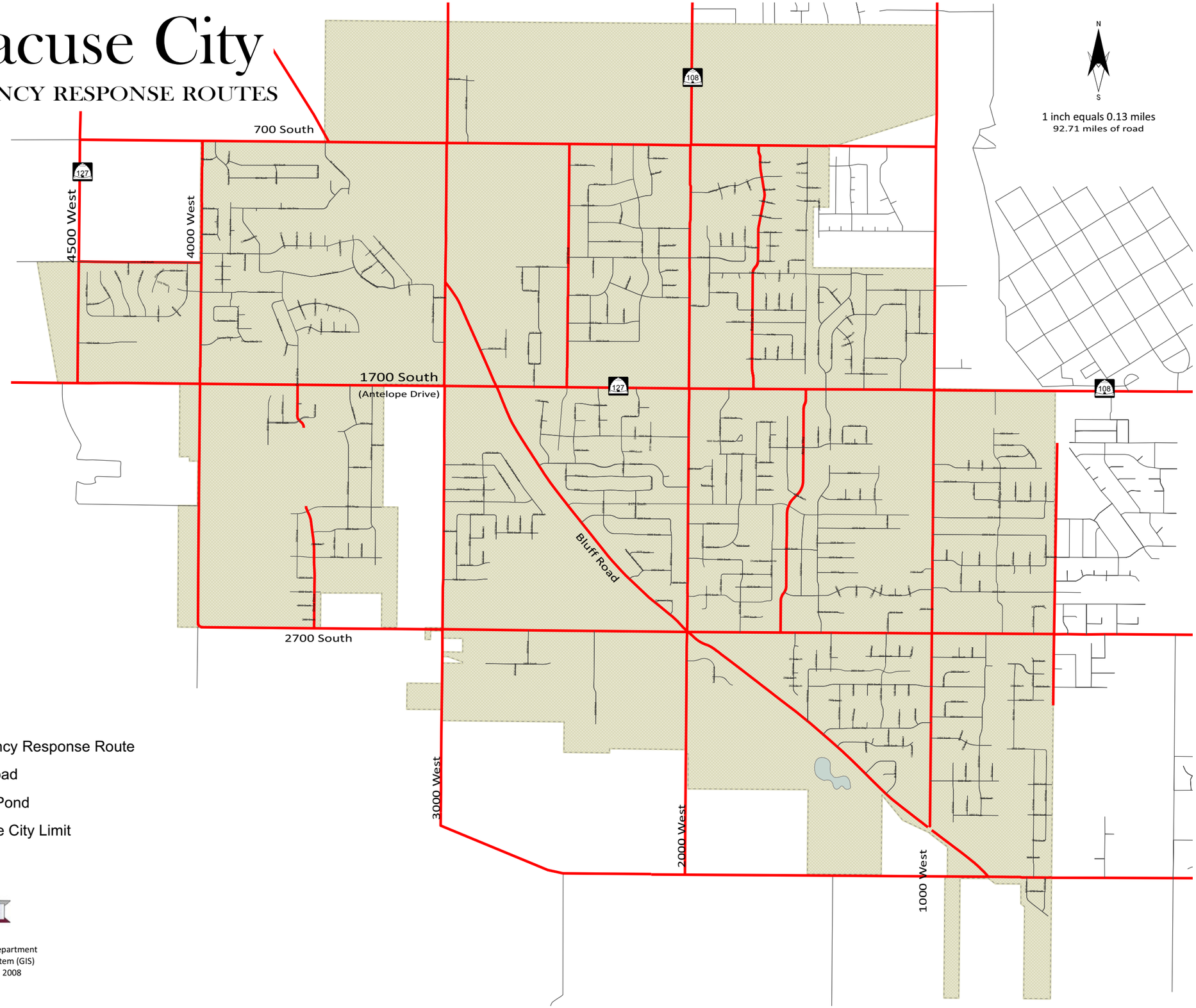
Community Development Department
Geographic Information System (GIS)
Updated: December 15, 2008

Appendix D

Emergency Response Map

Syracuse City

EMERGENCY RESPONSE ROUTES



Legend

- Emergency Response Route
- Local Road
- Jensen Pond
- Syracuse City Limit

Community Development Department
Geographic Information System (GIS)
Updated: December 15, 2008

Appendix E

Neighborhood Traffic Calming Program
Level I Measures

NEIGHBORHOOD TRAFFIC CALMING PROGRAM
LEVEL I MEASURES

Level I measures would emphasize to residents important traffic safety issues and give instructions for driving safely in accordance with the rules of the road.

NEIGHBORHOOD EDUCATION BROCHURE

Provides information describing techniques the City can use to help address traffic issues and educate the residents to be more aware of driving habits. The Citizen Action Request Form provides a method for the residents to explain perceived problems and recommend solutions that staff can review, analyze, and implement. If implementation of the more conventional solutions(s) such as installation of striping, signs and pavement markings to solve the neighborhood concerns were not successful, the Neighborhood Speed Watch Program would be implemented.

NEIGHBORHOOD TRAFFIC SAFETY CAMPAIGN

A personalized newsletter is mailed to your neighborhood. The newsletter explains traffic volumes and speed study results in your area. Recommended traffic calming measures, along with information about traffic laws, pedestrian and bicycle safety are included in the neighborhood newsletter. The goal is to heighten traffic safety awareness within the neighborhood. Many of the inattentive drivers who cause the majority of the neighborhood traffic problems live in the immediate area.

SIGNAGE

Posting appropriate traffic control signs may include speed limit, parking, dead-end, school signs, etc.

PAVEMENT MARKINGS

Painting legends and other markings on neighborhood roadways can also be a solution. Pavement markings can include centerlines, fog lines, school crossings, and speed limits.

BRUSH TRIMS

Sight distance is improved when brush is trimmed and vegetation is cleared by homeowners or City crews.

TARGET ENFORCEMENT

Increased enforcement by the Syracuse City Police Department's can be a recommended solution.

NEIGHBORHOOD SPEED WATCH

In addition, Redmond Police offer the Neighborhood Speed Watch Program. Residents who participate in Neighborhood Speed Watch are trained by police staff to use radar equipment to record vehicular speed. Records are turned over to Syracuse Staff, who contact by letter the registered owners of those vehicles

found traveling above the posted neighborhood speed limit. These letters are not citations, but serve to remind violators about the posted speed limit and the concern for community safety.

RADAR SPEED TRAILER

A portable trailer equipped with a radar unit detects the speed of passing vehicles and displays it on a digital reader board. This device shows drivers their "actual" speed versus the posted speed limit. This information helps to promote compliance with the posted speed.

Appendix F

Neighborhood Traffic Calming Program
Level II Techniques

LEVEL II
TRAFFIC CALMING TECHNIQUES

The physical traffic measures referred to in this appendix includes a combination of vertical and horizontal deflections in the road as well as obstruction and traffic regulations. Examples of these measures include speed humps, traffic circles, curb extensions and diverters. These measures used alone or in various combinations and implemented properly can be effective in reducing motor vehicle speeds, reducing traffic volume, and reducing conflicts between road users and thereby improving the immediate environment. The installation of traffic calming devices is subject to the approval of Syracuse City.

WHY STOP SIGNS AND CHILDREN AT PLAY SIGNS ARE NOT USED FOR TRAFFIC CALMING

A common request to address speeding in neighborhoods is the installation of Stop signs. This may seem like an easy way to reduce vehicle speeds, however, Stop signs used for traffic calming can actually create a less desirable situation.

Stop signs that are used as a traffic-calming measure can cause high incidences of drivers intentionally violating the stop and other traffic-related issues. When vehicles do stop, the speed reduction is often only effective in the immediate area, since motorist will then increase their speed to make up for lost time. This can result in increased mid-block speeds. There is often an increase in rear-end collisions near the inappropriate Stop sign, frequently called "cluster" accidents. In order to avoid the extra stops and starts on streets with these Stop signs, there can be a redistribution of traffic to adjacent streets.

For these reasons, the Syracuse City does not list Stop signs as an effective traffic calming measure. Instead, the City uses Stop signs to improve safety at intersections where traffic volumes or accidents warrant their installation.

Another common request in neighborhoods is the installation of "Children at Play" signs. National and statewide traffic studies have shown that "Children at Play" signs are not effective in increasing a driver's attention to the point of reducing vehicle speeds or reducing pedestrian accidents. In fact, placement of these signs can increase the potential for accidents by conveying to children and parents that the area is safe for children.

For these reasons, the Syracuse City does not use "Children at Play" signs and we encourage parents and/or guardians to find alternative play areas for children, such as a backyard or local parks.

NOT ACCEPTED CALMING DEVICES IN THE SYRACUSE CITY NEIGHBORHOOD TRAFFIC CALMING PROGRAM ARE:

Speed Humps
Rumble Strips

ACCEPTABLE TRAFFIC CALMING MEASURES

I. VOLUME CONTROL MEASURES

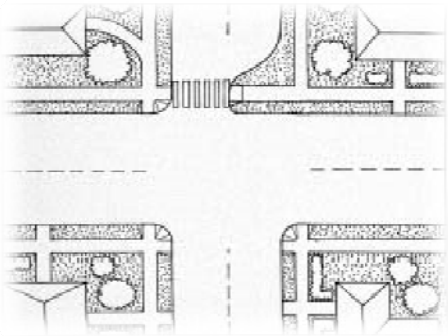
The primary purpose of volume control measures is to discourage or eliminate cut-through traffic. When a detour through a residential neighborhood allows motorists to avoid traffic, save time, or shorten their travel distance, they will use the residential cut-through as their normal route of travel. The traffic calming tools that have proven to be successful in diverting traffic and reducing cut-through traffic include:

- Half street closures;
- Median barriers; and
- Forced turn islands.

HALF STREET CLOSURES

Half street closures consist of constructed obstructions to block one side of the street. One direction of traffic is diverted to another route. Half closures are often called partial closures or one-way closures.

APPLICATIONS:



- Neighborhoods locations with non-local traffic volume problems

ADVANTAGES:

- May reduce both speeds and volumes
- Can have positive aesthetic value
- Increase pedestrian safety.

DISADVANTAGES:

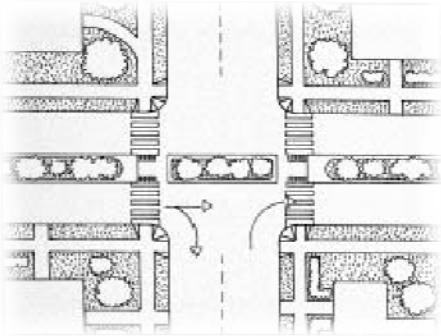
- Increase emergency response times
- May increase traffic volumes on adjacent streets
- Create circuitous routes for local residents and emergency vehicle services

MEDIAN BARRIERS

Median barriers are raised islands located in the middle of a street and continuing through an intersection. Median barriers are implemented to block cut-through movement of motor vehicle traffic at a cross street. Median barriers can block left turning motorists, which can benefit pedestrians. They are also called median diverters or island diverters

APPLICATIONS:

- Neighborhoods locations with non-local traffic volume problems



ADVANTAGES:

- May reduce both speeds and volumes
- People with mobility impairments benefit from divided and decreased crossing distances due to the presence of a pedestrian refuge in the center of the street
- Can have positive aesthetic value

DISADVANTAGES:

- Increase emergency response times
- May increase traffic volumes on adjacent streets
- Create circuitous routes for local residents and emergency vehicle services

FORCE TURN ISLANDS

Force Turn Islands or known as turn channelization, pork chops, or right turn islands which prohibit certain vehicle turning movements.

APPLICATIONS:

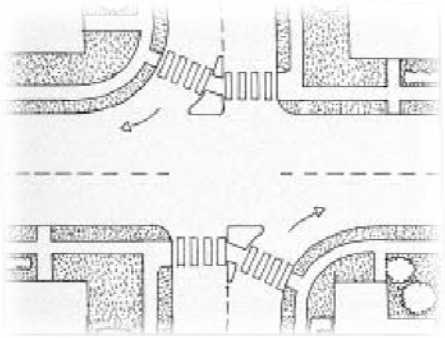
- Neighborhoods locations with non-local traffic volume problems

ADVANTAGES:

- May reduce both speeds and volumes
- Can have positive aesthetic value
- Increase pedestrian safety.

DISADVANTAGES:

- Increase emergency response times
- May increase traffic volumes on adjacent streets
- Create circuitous routes for local residents and emergency vehicle services



II. SPEED CONTROL MEASURES

SPEED CUSHIONS
TEMPORARY ONLY

Speed cushions consist of either recycled rubber or asphalt, raised about 3 inches in height. The length of the cushion is about 10 ft. The spaces between the cushions allow emergency vehicles to partially straddle the device.

APPLICATIONS:

Locations where very low speeds are desired and reasonable, and noise and fumes are not a major concern.

ADVANTAGES:

- Reduces vehicle speed
- More effective if used in a series at 300' to 500' spacing or in conjunction with other traffic calming devices
- Can reduce vehicular volumes
- No restrictions to on-street parking
- Does not restrict access to residents
- Requires minimum maintenance
- Minimal impact to emergency response times

DISADVANTAGES:

- May divert traffic to parallel streets that do not have traffic calming measures
- May increase emergency response times
- Not aesthetically pleasing

RAISED CROSSWALKS / SPEED TABLES

Raised crosswalks are flat-topped speed humps often constructed with brick or textured materials on the flat section with crosswalk markings and signage to channel pedestrian crossings. They provide

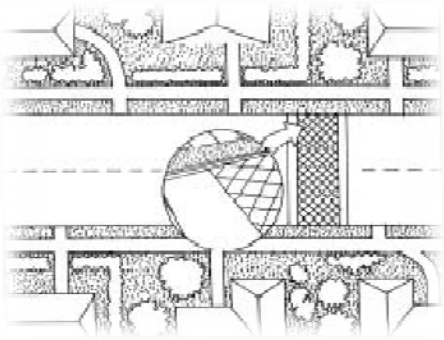
pedestrians with a level street crossing and by raising the level of crossing pedestrians they are more visible to approaching motorist. When there is no pedestrian crossing marked, Raised Crosswalks are called Speed Tables.

APPLICATIONS:

Locations where pedestrian crossings occur at unexpected locations and vehicle speeds are excessive.

ADVANTAGES:

- Improve safety for both pedestrians and vehicles
- Can have positive aesthetic value
- Effective in reducing speeds, though not to the extent of speed humps



DISADVANTAGES:

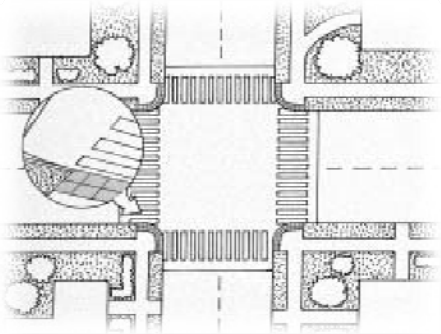
- Increases emergency response times
- Textured materials, if used, can be expensive
- Impacts on drainage should be considered
- May increase noise and air pollution
- Difficulty in snow removal

RAISED INTERSECTIONS

Raised intersections are flat raised areas covering an entire intersection, with ramps on all approaches and often with bricks or other textured materials on the flat sections. They usually rise to the level of the sidewalk, or slightly below to provide a "lip" that is detectable by the visually impaired. By modifying the level of the intersection, the crosswalks are more readily perceived by motorists to be "pedestrian territory."

APPLICATIONS:

- Intersections with substantial pedestrian activity
- Areas where other traffic-calming measures would be unacceptable because they take away scarce parking spaces



ADVANTAGES:

- Improve safety for both pedestrians and vehicles
- Can have positive aesthetic value
- Can calm two streets at once

DISADVANTAGES:

- Increases emergency response times
- Tends to be expensive, varying by materials used
- Impact to drainage needs should be considered
- Less effective in reducing speeds than speed humps or raised crosswalks

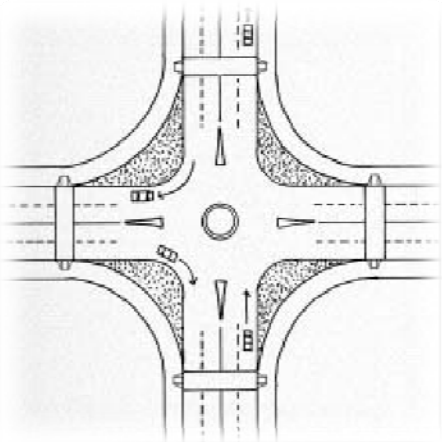
ROUNDABOUTS

Roundabouts require vehicles to circulate counterclockwise around a center island. Roundabouts may eliminate the need for traffic signals for motorists. Unlike many other forms of traffic calming, roundabout benefits are aimed primarily at motorists. The installation of roundabouts prioritizes improving traffic flow, maximizing vehicular capacity, and eliminating the need for stop signs and traffic signals. When designed correctly, roundabouts include raised splitter islands to channel incoming traffic approaching from the right.

APPLICATIONS:

Calming intersections, especially within neighborhoods where larger vehicles, speeds, volumes and safety are problems

ADVANTAGES:



- Roundabouts are very effective in moderating speeds and improving safety
- Can have positive aesthetic value
- Can calm two streets at once
- Designed to accommodate wider range of vehicles

DISADVANTAGES:

- Can increases emergency response times
- Additional right-of-way will likely be needed
- May require the elimination of some on street parking
- Landscaping must be maintained, either by the residents or by municipality
- Expensive to install

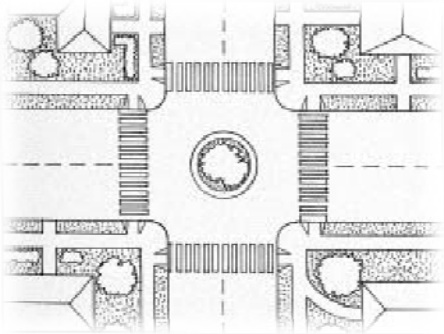
TRAFFIC CIRCLES

Traffic Circles are raised islands, placed in intersections, around which traffic circulates. They are designed according to the existing geometry of each intersection and sized to accommodate the passage of an emergency vehicle.

APPLICATIONS:

- Calming intersections, especially within neighborhoods where large vehicles are not a major concern, but speeds, volumes and safety are problems

ADVANTAGES:



- Traffic circles are very effective in moderating speeds and improving safety
- Can have positive aesthetic value
- Can calm two streets at once

DISADVANTAGES:

- Difficult for large vehicles (such as fire trucks) to circumnavigate
- May require the elimination of some on street parking
- Landscaping must be maintained, either by the residents or by municipality
- Expensive to install

CHICANES

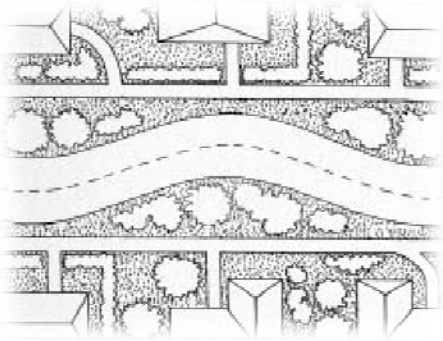
Chicanes are curb extensions that alternate from one side of the street to the other, forming S-shaped curves. Chicanes can also be created by alternating on street parking, either diagonally or parallel, between one side of the street and the other. Each parking bay can be created either by restriping the roadway or by installing raised landscaping islands at the end of each parking bay.

APPLICATIONS:

- Locations where speeds are a problem but noise associated with the speed humps and related measures would be unacceptable

ADVANTAGES:

- Discourage high speeds by forcing a change in path or direction
- Easily negotiable by large vehicles (such as fire trucks)



DISADVANTAGES:

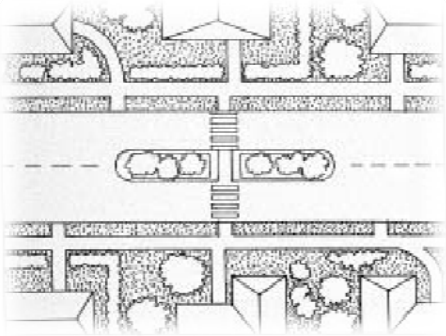
- Must be designed carefully to discourage drivers from deviating out of the appropriate lane
- Curb realignment and landscaping can be costly, especially if there are drainage issues
- May require the elimination of some on-street parking

CENTER ISLAND NARROWINGS

A center island narrowing is a raised island located along the centerline of a street that narrows the travel lanes at that location. Center islands Narrowings are often landscaped to provide a visual amenity. Placed at the entrance to a neighborhood, and often combined with a textured pavement, they are often called "gateway islands." Fitted with a gap to allow pedestrians to walk through at the crosswalk, they are also referred to as "pedestrian refuges." Center island narrowings are also found to be very effective in reducing speeds around curves. Other names for center island narrowings include midblock medians, median slow points, or median chokers

APPLICATIONS:

- Entrances to residential areas
- Wide street where pedestrians need to cross
- Curves



ADVANTAGES:

- Increase pedestrian safety
- Can have positive aesthetic value
- May reduce traffic volumes

DISADVANTAGES:

- Speed reduction effect is somewhat limited because vehicles do not have to alter their path.
- May require elimination of some on-street parking

CHOKERS

Chokers are curb extensions at mid-block locations that narrow a street by widening the sidewalk or planting strip. If marked as crosswalks, they also known as safe crosses. Two-lane chokers leave the street cross-section with two lanes that are narrower than the normal cross section. One-lane chokers narrow the width to allow travel in only one direction at a time, operating similarly to one-lane bridges.

APPLICATIONS:

Areas with substantial speed problems and no on-street parking shortage

ADVANTAGES:

- Easily negotiable by large vehicles (such as fire trucks)
- Can have positive aesthetic value
- May reduce both speeds and volumes

DISADVANTAGES:

- Speed reduction effect is somewhat limited because vehicles do not have to alter their path
- May require bicyclist to briefly merge with vehicular traffic
- May require the elimination of some on-street parking

TABLE F-1

POTENTIAL IMPACTS OF TRAFFIC CALMING TECHNIQUES

TRAFFIC MANAGEMENT DEVICE	POTENTIAL BENEFITS			POTENTIAL DISADVANTAGES			COST
	SPEED REDUCTION	VOLUME REDUCTION	CONFLICT REDUCTION	LIMITS LOCAL ACCESS	INCREASES EMERGENCY RESPONSE TIME	EXTENT OF MAINTENANCE REQUIRED	
SPEED TABLES	●	◉	●	◎	◉	◉	$ - $$
CHOKERS	◉	◎	◎	◎	◎	◉	$ - $$
TRAFFIC CIRCLE	●	◉	●	◎	◉	◉	$$ - $$$
MEDIAN BARRIER	◉	◎	◉	◉	◎	◉	$ - $$
LOWER SPEED LIMIT	◉	◎	◎	◎	◎	◎	$
CHICANE	●	●	●	◎	◉	◉	$$ - $$$
CURB EXTENSION	◉	◎	◎	◎	◎	◉	$ - $$
EDUCATION	◉	◎	◉	◎	◎	◎	$
ENFORCEMENT	◉	◎	◉	◎	◎	◎	$ - $$

● SUBSTANTIAL BENEFITS / DISADVANTAGES
◉ MINOR BENEFITS / DISADVANTAGES
◎ NO BENEFITS / DISADVANTAGES

$ LOW COST
$$ MODERATE COST
$$$ HIGH COST

Appendix G

Neighborhood Traffic Calming Program
FAQ's
(Frequently Asked Questions)

NEIGHBORHOOD TRAFFIC CALMING PROGRAM

FAQ

Q: What is "traffic calming"?

A: Traffic calming is the use of roadway geometrics and other physical measures to reduce unwanted effects of vehicular traffic, including excessive speeds, volumes (number of cars), and noise.

Q: What types of roadway geometrics or physical measures are used by Syracuse City?

A: The City will consider using, the following types of traffic calming measures: half street closures, median barriers, forced turn islands, speed cushions, speed tables, raised intersections, roundabouts, traffic circles, chicanes, center island narrowings, & chokers. "Dips", or valley gutters, are installed only for drainage purposes and will not be installed for traffic calming purposes, due to significant impacts on emergency vehicle response time. Speed humps and rumble strips are not recommended devices in this policy.

Q: Are certain traffic calming measures better than others?

A: There isn't one method that is "best"; each measure has its pros and cons. Moreover, it depends on whether the desired effect is to reduce volume or to reduce speed.

Measures such as diverters or road closures primarily attempt to reduce traffic volumes along a local street. Measures such as speed tables and "chokers" attempt to reduce vehicle speeds. Some of these measures are at least partially successful at reducing both speeds and volumes.

In general, the more restrictive the measure (e.g., speed tables, diverters, road closures), the greater effect it will have on reducing speeds or volumes, but it will also have a negative impact on those vehicles that may need to exceed the speed limit - for example, emergency vehicles. Also, the measures apply to everyone, so that residents are subjected to the same restrictions that are placed on the offending drivers. Drivers who do obey the speed limit may resent the more restrictive measures, and may complain that they are being penalized for the actions of a minority.

Less restrictive measures (such as medians, traffic circles, and curb-outs) have a less pronounced effect on reducing overall speeds or volumes, but do not have as adverse an impact upon emergency vehicles.

Q: What is the "85th Percentile Speed"?

A: The 85th percentile speed is the most common measure that traffic engineers use when trying to describe the speed of a group of vehicles; for example, all cars traveling northbound on 1500 West at 3200 South over a 24 hour period. Rather than an "average speed" of the pack, it is the speed that 85% of the cars are traveling at or below.

It is important to remember that 15% of the measured speeds are faster than this value, so that even though a street has an 85th percentile speed of (say) 25 MPH, it doesn't mean that there are not some cars traveling 45 MPH or more.

Q: How do I request traffic calming for my street?

A: A homeowner's association or homeowner's group consisting of at least three (3) separate occupied household residents within the general area must submit a Citizen Action Request application (CAR). This application can be downloaded from the Syracuse City website or picked up from the Syracuse City offices located at 1979 West 1900 South. 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 Neighborhood Traffic Calming Program.

Q: Do residents who don't live on a street in question, but who use that same street to get to and from their house, get a "vote" in whether traffic calming devices are to be installed on that street?

A: No. People who regularly traverse a street, but don't live on it, are far less likely to vote "Yes" regarding installation of devices that will force them to drive the speed limit. They do not live on the street, and therefore have no motivation to solve the speeding or cut-through traffic problems.

By contrast, people who live on the street in question have to deal with adverse traffic problems 24 hours a day, 7 days a week. They have more of a stake in this process, and they are the ones who must make a decision: whether they are willing to trade personal inconvenience for slower (or less) traffic on their street.

Q: Why all of this red tape? Since we have a problem, why can't the City just come out and install the devices? Why can't we just circulate a petition, and if everyone on our street wants them, the City will come out and install them?

A: Syracuse City has an established a set of guidelines or criteria in which these requests can be accurately be evaluated or even warrant for such calming devices. The City has limited available funding set aside for traffic calming, thus the City has to look at each request case by case and then rate them by priority and severity. A neighborhood can elect to pay for 100% of the cost to construct the approved device as long as it has been warranted through the guidelines of the Neighborhood Traffic Calming program.

Appendix H

Resolutions