

**NEIGHBORHOOD
TRAFFIC CALMING
MANUAL**

Public Works Department

**Adopted
October 21, 2008**

INTRODUCTION

The desire to find shorter routes and increased congestion on arterial and collector streets may encourage drivers to seek alternate routes. These routes may include local or neighborhood streets, and some neighborhoods have experienced increased traffic volumes and speeding that may negatively impact pedestrians, bicyclists and other motorists.

Traffic calming techniques may offer ways to help restore neighborhood streets to a more livable condition. The Institute of Transportation Engineers (ITE) defines traffic calming as “the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users.” Traffic calming techniques can influence motorists to drive more slowly, to drive with more care, and in some cases, to divert to more appropriate routes. These techniques may help to restore a sense of livability and safety to neighborhood streets.

Traffic calming techniques can generally be classified as physical devices or psychological devices. Physical devices interrupt stretches of stretch by changing the street’s direction or by breaking the road into smaller visual units using techniques such as chicanes and roundabouts. Psychological devices change the psychological feel of the street using different surface types, vertical landscaping, or narrowed lanes create space for a more pedestrian-friendly environment. These psychological changes give motorists clues that they are no longer on a major roadway but are in a different environment that is shared with pedestrians and bicyclists.

PROCESS FOR TRAFFIC CALMING REQUESTS AND INSTALLATION

Initial Request and Meeting

Traffic calming projects may be requested by neighborhood associations, interested groups, or individual residents (in the absence of a recognized association). An application form must be submitted to request installation of traffic calming devices. Staff will conduct an initial meeting with the applicant to discuss the application process, petition requirements, financial participation, and the study process. Potential non-traffic calming solutions will also be considered. An Application form is included in the Appendix.

Minimum Requirements

Streets or neighborhood areas must meet the following criteria in order to be considered for traffic calming:

- Only local residential streets will be eligible for a neighborhood traffic calming plan, this would be roads with a speed limit of 30 mph or less. Collector and arterial streets are not eligible for traffic calming.
- Daily traffic volumes must be between 400 and 4,000 vehicles per day, or peak hour volumes must exceed 100 vehicles,
- The 85th percentile speed of the local residential roadway must be an average of 11 mph higher than the posted speed limit.
- Traffic calming techniques should not divert traffic to other local streets within the study area.
- Emergency vehicle access must be preserved.
- Bicyclist and pedestrian access must be preserved.
- Traffic calming techniques will be planned and designed with sound engineering judgment and planning practices.

Once the application is received, staff will collect data, conduct a traffic analysis, and identify potential traffic calming solutions and associated costs.

Plan Development

Citizen participation is an essential ingredient in the development and implementation of a successful neighborhood traffic plan. Neighborhood residents offer insight into the nature and extent of traffic and safety problems, they are most directly affected by the problems and potential mitigating measures, and are frequently the source of innovative solutions. Staff will work with the applicant and others in the neighborhood to identify the problems, review the results of the study, and present potential solutions. Further, the plan must incorporate an agreement between the City and an appropriately organized entity representing the neighborhood to cover further costs of maintenance of the device in a form to be approved by the City Attorney.

Phase I Solutions

Phase I solutions shall be implemented prior to looking at phase II solutions. Phase I solutions would be setting out radar trailers that will provide motorist with feedback on how fast they are driving and the use of Police enforcement to issue tickets or warnings to motorist who are considered speeding.

Phase II Solutions

In the event that speeding is still present after phase I solutions have been used then staff will go through the remaining types of devices for inclusion into the traffic calming plan.

Neighborhood Consensus

The person(s) requesting a neighborhood traffic calming plan will also be responsible for the circulation of petitions to endorse the Traffic Calming Plan that is mutually developed by the neighborhood and the City. At least 90% of the property owners within the defined study area must sign the petition for the process to be considered for implementation. A petition form is included in the Appendix.

Cost Sharing

The City will fund 50% of the cost, and the neighborhood will fund 50% of the cost necessary for construction of the preferred devices and the execution of the agreement. Funding available for traffic calming will be dependent on the City's budget for the current fiscal year. In cases where the neighborhood would like to pay 100% of the cost of the installation of the traffic calming devices and they meet the criteria set forth in this document, the City may grant them permission to proceed with the installation of the traffic calming devices. City staff will act as program manager in these cases.

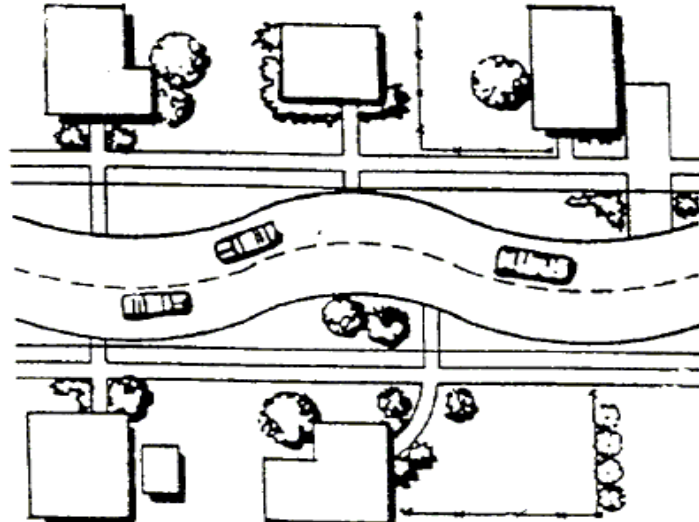
Implementation

With approval of the plan by the community, funding in the City's budget, and payment of 50% of the fees, City staff will initiate the design and implementation process for the proposed traffic calming technique(s).

**EXAMPLES OF
TRAFFIC CALMING DEVICES**

CHICANES

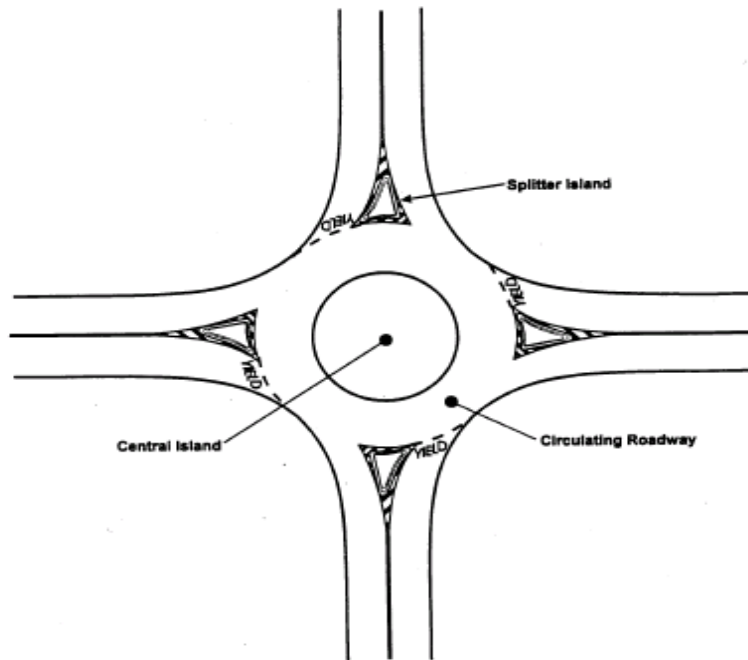
Chicanes are mainline deviations to deter the path of travel so that the street is not a straight line. Chicanes are created by the installation of offset curb extensions.



Advantages	Disadvantages
<ol style="list-style-type: none">1. Imposes minimal inconveniences to local traffic.2. Provides large area for landscaping maintained by residents.3. Provides a greater visual obstruction.4. Cost of device is limited by length.5. A very effective method of changing the conflicts and initial impression of the street. If done correctly drivers will not be able to see through (appears as a road closure yet allows through movement.)6. Accepted by public as a speed control device.7. Aesthetically pleasing.8. Reduces speed without significantly impacting emergency response.	<ol style="list-style-type: none">1. Increases the area of landscaping to be maintained2. Cost is greater than many other devices.3. May create opportunities for head-on collisions

ROUNDBABOUTS

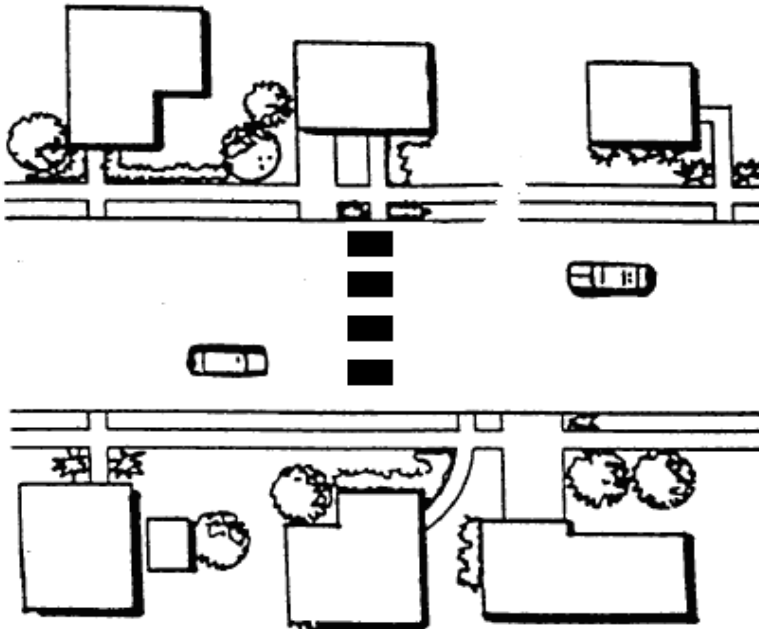
Roundabouts are raised circular areas placed at intersections. Drivers travel in a counterclockwise direction around the circle. Modern roundabouts are “yield upon entry”; meaning that cars in the roundabout have the right-of-way, and cars entering the roundabout must wait to do so until the path is clear. When a roundabout is placed at an intersection, vehicles may not travel in a straight line.



Advantages	Disadvantages
<ol style="list-style-type: none"> 1. Reduces the number of conflict points at intersections. 2. Reduces speed at intersection approach. 3. Provides space for landscaping. 4. Effective at multi-leg intersections. 5. Provides equal access to intersections for all drivers. 6. May increase volumes on adjacent streets. 7. Does not restrict movements. 	<ol style="list-style-type: none"> 1. May be restrictive for larger vehicles. 2. Will require additional signage. 3. Expensive to construct. 4. Additional right-of way may be required. 5. Initial safety issues as drivers adjust. 6. Provides a good environment for cyclists and pedestrians. 7. Maintenance responsibility if landscaped. 8. May impact drainage.

SPEED CUSHIONS

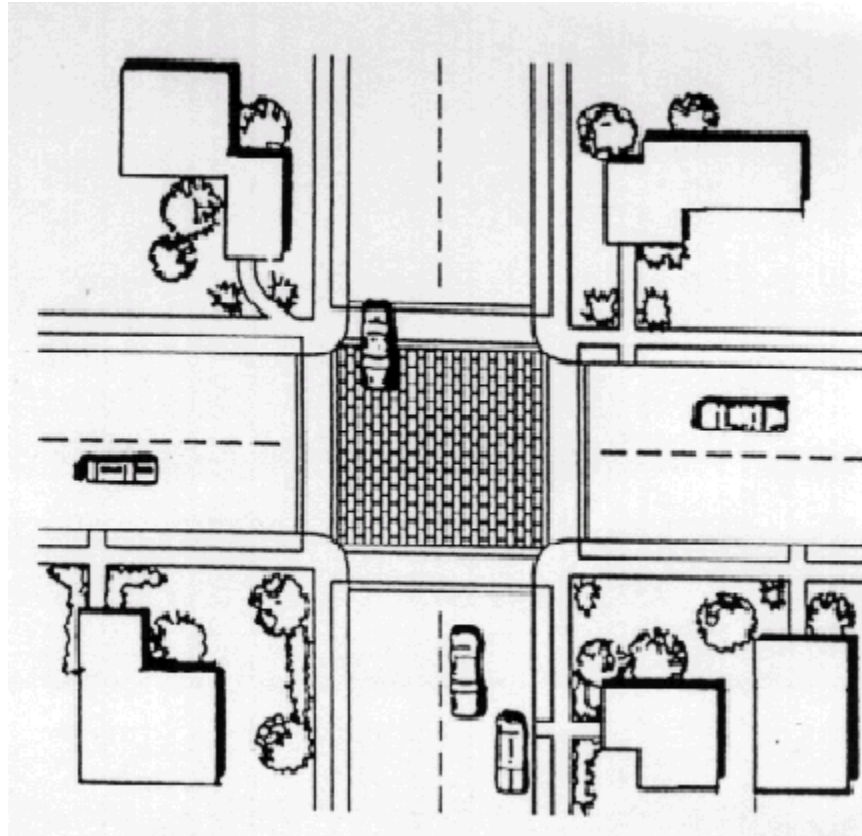
Speed cushions are raised areas in the pavement surface extending transversely across the travel way in segments. Speed cushions are similar to speed humps, but they are spaced to allow fire vehicles to straddle the cushions. This has less impact on response time than speed humps.



Advantages	Disadvantages
<ol style="list-style-type: none">1. Self enforcing.2. Relatively inexpensive3. Slows traffic	<ol style="list-style-type: none">1. Can increase noise and pollution.2. Increased maintenance.3. Could affect drainage.4. Impacts emergency vehicle response time.

RAISED INTERSECTION

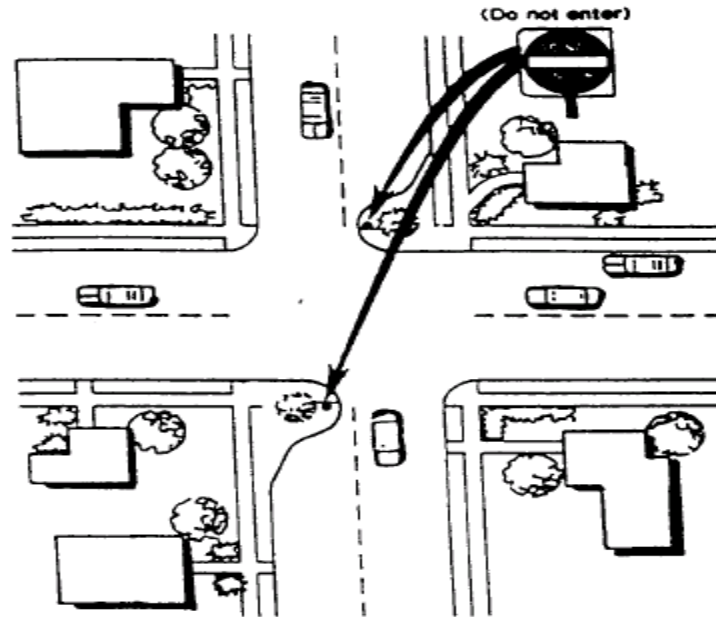
A raised intersection is a raised plateau where roads intersect. The plateau is generally 3 to 4 inches higher than the surrounding street.



Advantages	Disadvantages
<ol style="list-style-type: none">1. Slows vehicles in the intersection.2. Highlights intersection3. Effective speed reduction.4. Pedestrian safety treatment5. Aesthetically pleasing if well designed.	<ol style="list-style-type: none">1. Can increase noise level.2. Expensive to construct and maintain.3. Could affect drainage.4. Increased difficulty of making a turn.5. Requires adequate signage and driver education.

PARTIAL STREET CLOSURE

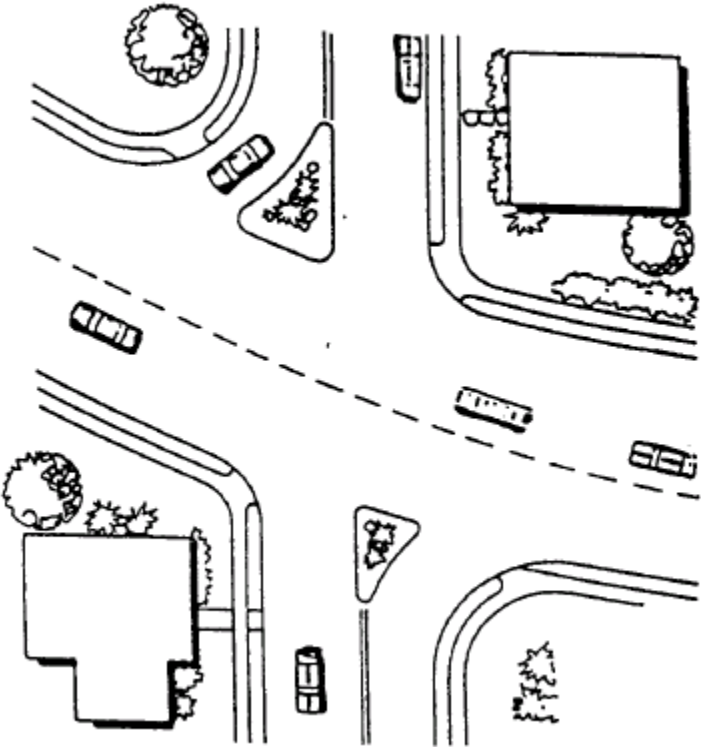
A partial street closure is a physical blockage of one direction of traffic on a two-way street. The open lane of traffic is signed "One Way," and traffic from the blocked lane is not allowed to enter.



Advantages	Disadvantages
<ol style="list-style-type: none">1. Reduces through traffic in one direction.2. Allows two-way traffic in the remainder of the street.3. Shorter crossing distance for pedestrians.4. Provides space for landscaping.5. Can be designed to provide 2 way access for bicycles.	<ol style="list-style-type: none">1. May increase trip length for some residents.2. Expensive to construct and maintain street.3. Could affect drainage.4. Reduces access for residents.5. Emergency vehicles have to proceed with care.6. Compliance is not 100%

CHANNELIZATION

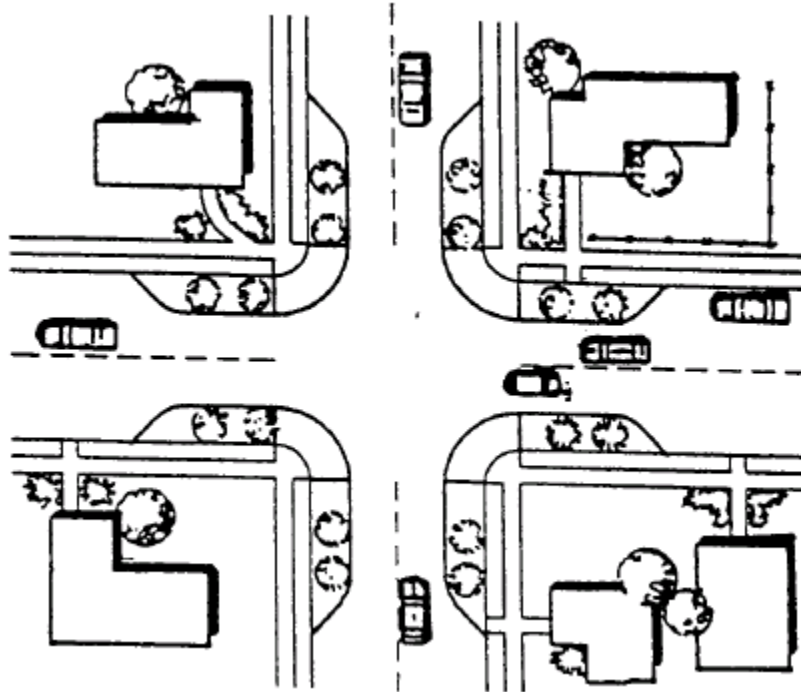
Channelization uses raised traffic islands to prevent certain turning movements at an intersection.



Advantages	Disadvantages
<ul style="list-style-type: none">1. Changes driving patterns.2. May reduce cut through traffic.3. May be attractive if landscaped.	<ul style="list-style-type: none">1. May increase trip length for some drivers.2. Aesthetically unattractive if not landscaped.3. Maintenance responsibility if landscaped.4. Expensive to construct.

NECKDOWN

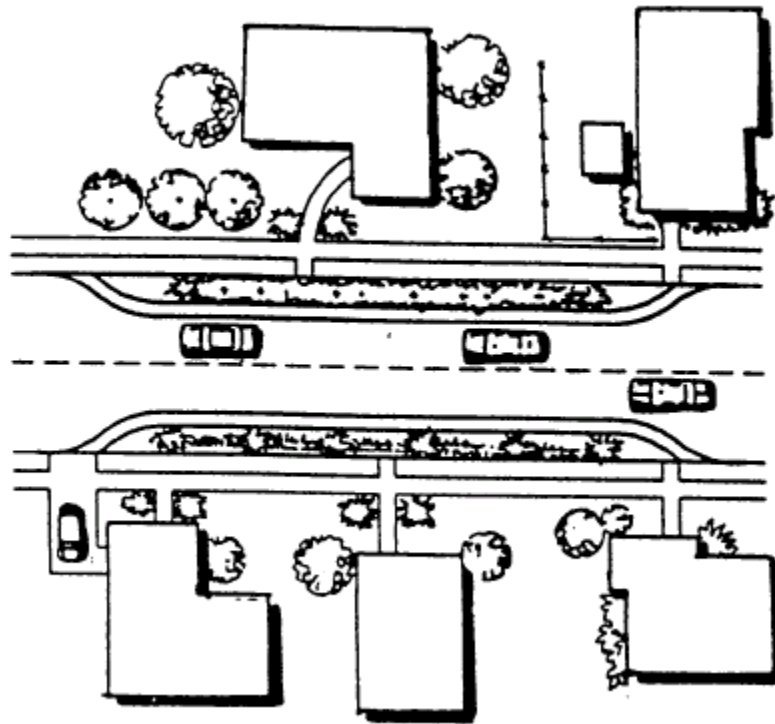
A neckdown is a physical reduction of road width at intersections.



Advantages	Disadvantages
<ol style="list-style-type: none">1. May improve sight distance.2. May reduce approach speeds.3. May be aesthetically pleasing if landscaped.4. Shortens pedestrian crossing distance.5. Can be used in multiple applications.	<ol style="list-style-type: none">1. Unfriendly to cyclists unless designed for them.2. Landscaping may cause sight line problems.3. Increased maintenance if landscaped.4. Expensive to construct.5. Possible drainage problems.

LANE NARROWING or STREET NARROWING

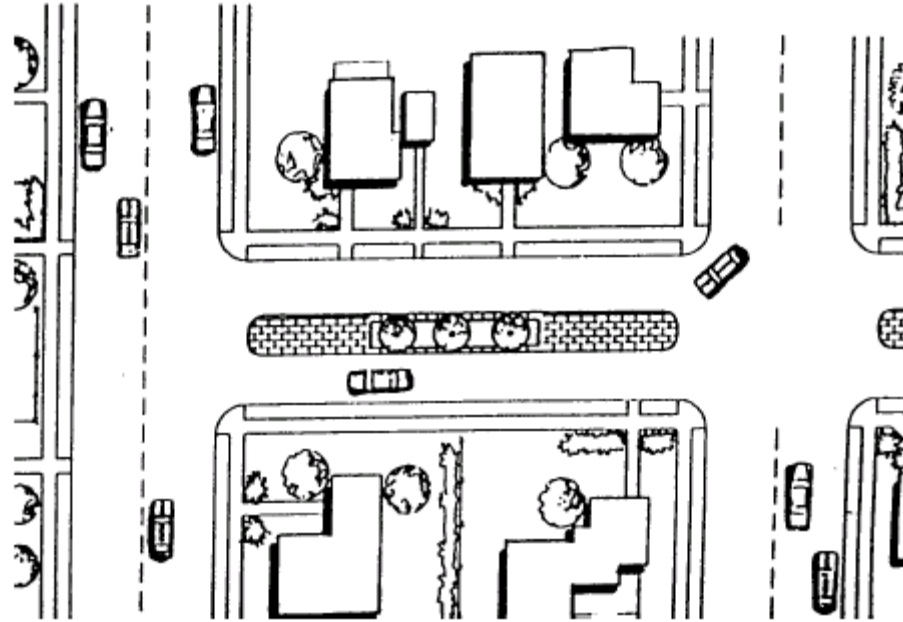
Lane or street narrowing physically narrows the street or gives the illusion of narrowing the street.



Advantages	Disadvantages
<ol style="list-style-type: none">1. Provides space for landscaping.2. Good for pedestrians due to shorter crossing3. Slows traffic without seriously affecting emergency time.4. Effective when used in series.	<ol style="list-style-type: none">1. Partially effective as a visual obstruction.2. Unfriendly for cyclists.3. Possible drainage concerns.4. Potential driveway conflicts.5. Expensive to construct and maintain.

TRAFFIC MEDIAN

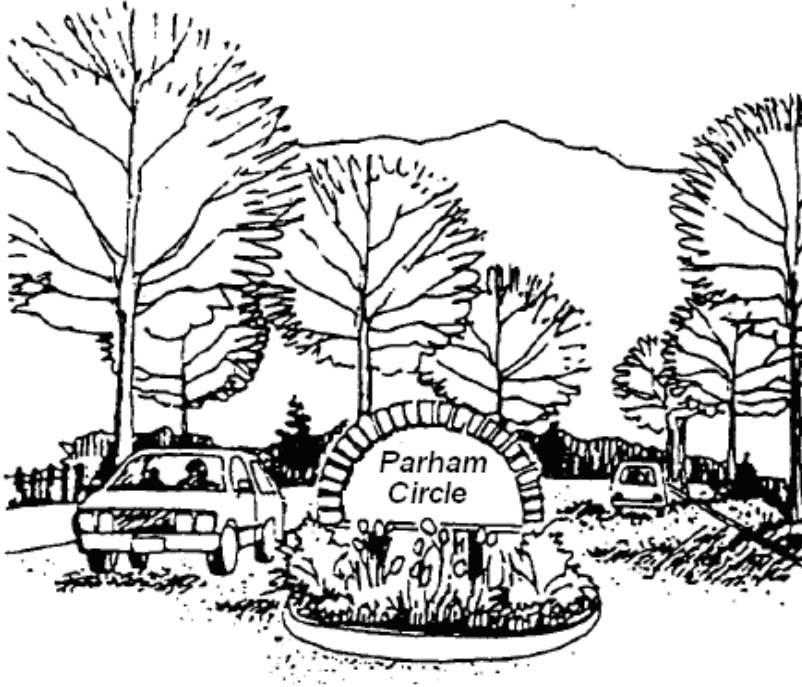
A median is an island or barrier in the center of a street that serves to separate traffic.



Advantages	Disadvantages
<ol style="list-style-type: none">1. Provides a refuge for pedestrians and cyclists.2. Provides a barrier between lanes of traffic.3. May be attractive if landscaped.4. Narrows pavement width.	<ol style="list-style-type: none">1. May reduce sight lines if over landscaped.2. Possible driveway conflicts.3. Maintenance responsibility if landscaped.4. Expensive to construct.5. May reduce access for residents.6. Eliminates on street parking.

NEIGHBORHOOD IDENTIFICATION ISLAND

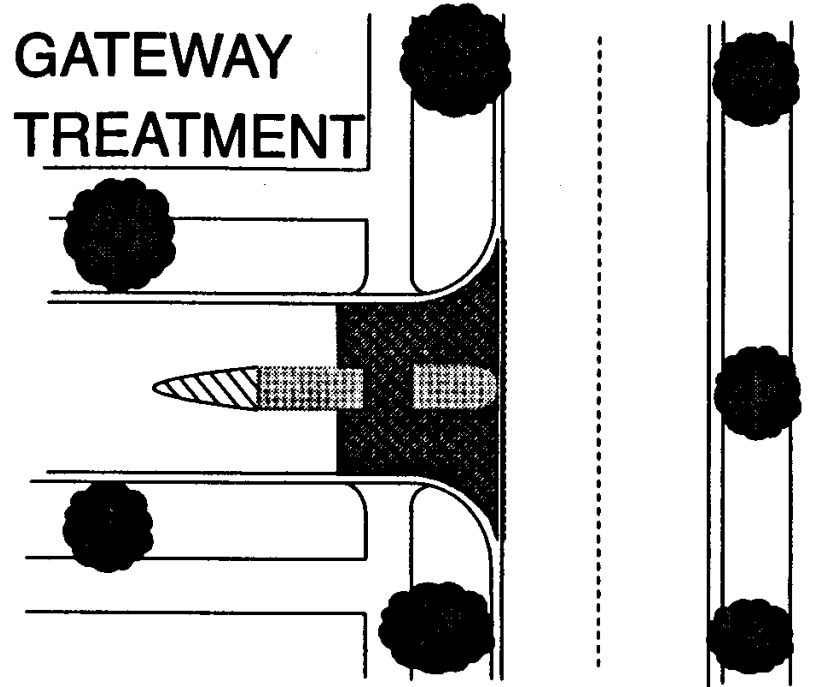
A neighborhood identification island may include a sign, landscaping or other structure to help communicate a sense of neighborhood identity.



Advantages	Disadvantages
<ol style="list-style-type: none">1. Alerts drivers to a change to a residential roadway environment.2. Reduces entry speed.3. Provides space for landscaping the median.4. Helps give neighborhood a sense of identity.	<ol style="list-style-type: none">1. Additional right of way may be required for roadway environment.2. Expensive to construct.3. Maintenance responsibility if landscaped.

GATEWAY TREATMENTS

Gateway treatments may include decorative entrances or pavement textures indicating transition from one area to another.



Advantages	Disadvantages
<ol style="list-style-type: none">1. Versatile and individualized for each neighborhood.2. Aesthetically pleasing.3. Easy implementation.	<ol style="list-style-type: none">1. Limited utility in speed reduction

SPEED MONITORING TRAILER

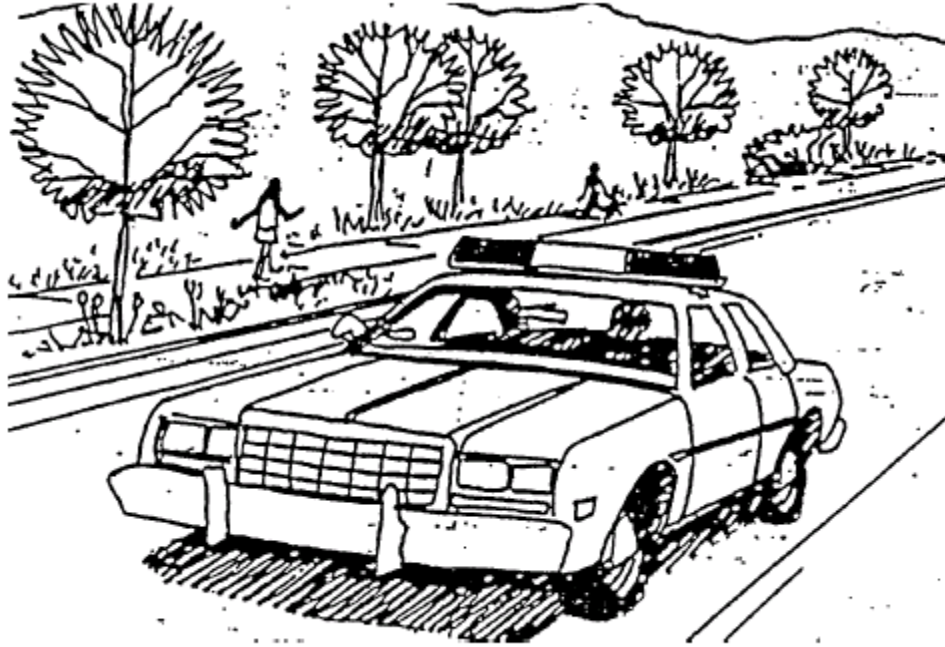
A speed monitoring trailer indicates the posted speed limits and the speed limit of the vehicle to advise motorists of their speed.



Advantages	Disadvantages
<ol style="list-style-type: none">1. Educational tool.2. Public relations tool.3. Useful especially in school and construction zones where spot speed reduction is important.	<ol style="list-style-type: none">1. Requires periodic enforcement.2. Effective for limited duration.3. Unit moves frequently which requires personnel.

TRADITIONAL ENFORCEMENT

Traditional police enforcement includes monitoring speeding and other violations.



Advantages	Disadvantages
<ol style="list-style-type: none">1. Good temporary public relations tool.2. Serves to inform public that speeding is undesirable behavior for which there are consequences.	<ol style="list-style-type: none">1. Effect is not permanent.2. Enforcement is an expensive tool

APPENDIX

TRAFFIC CALMING APPLICATION FORM

Contact Name: _____ Phone: _____

Address: _____

Zip Code: _____

Description of traffic concerns and requests:

This completed application form should be sent to:

**Public Works Department
City of Sandy Springs
7840 Roswell Rd, Ste 500
Sandy Springs, Ga. 30350**

Office Use Only:

Project Number _____ Date Application Received _____

Date Traffic Study Completed _____

Date Councilperson Contacted _____

Date of Neighborhood Workshop _____ Date Petition Received _____

Funding Source(s) _____

Date Project Design Complete _____ Date Construction Complete _____

