



Neighborhood Traffic Calming Manual

City of Sandy Springs
Public Works Department

Policy and Procedure
Adopted October 21, 2008
Amended November 19, 2013
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SANDY SPRINGS
PUBLIC WORKS

1.0 Application and Intent

The desire to find shorter routes and to avoid increased congestion on arterial and collector streets may encourage drivers to seek alternate routes utilizing local or neighborhood streets. This increase in traffic volume, and in some cases, faster moving vehicles, may negatively impact pedestrians, bicyclists and other motorists within these neighborhoods.

The primary purpose of the City's Neighborhood Traffic Calming Manual is to support the livability and vitality of residential areas. Traffic calming measures can be achieved by reducing vehicle speeds or volumes on a single street or a street network. Traffic calming measures consist of horizontal deflection, vertical deflection, and roadside features that use self-enforcing physical means to produce desired effects.

The traffic calming techniques in this manual are generally classified as physical devices. Physical devices interrupt the flow of traffic by changing the street's direction or by breaking the road into smaller visual units using techniques such as chicanes, splitter islands, speed cushions and mini-roundabouts.

This manual does not address traffic calming in commercial areas. Current policy does not permit lane narrowing less than the City standard lane width of 11 feet. This manual does not address psychological traffic calming devices which change the psychological feel of the street using different surface types, vertical landscaping (such as planting trees near the road), or narrowed lanes to create space for a more pedestrian-friendly environment.

1.1 Traffic Enforcement

In addressing speeding, drivers running stop signs, and violations of other traffic control devices, a neighborhood's first step is to contact the Police Department's Traffic Enforcement Unit. Traditional traffic enforcement serves to inform the public that speeding is undesirable behavior for which there are consequences.

The enforcement unit can deploy speed-monitoring trailers which display the posted speed limit and advise motorists of their speed. This has a positive effect, but it is often effective for a limited time.

2.0 Request, Installation and Removal Process

2.1 Neighborhood Traffic Calming Request Process

- A. "Homeowners Association" (HOA), neighborhood group, or individual (if no HOA exists) may submit a request for the City to investigate speeding, cut-through traffic, or related safety problems. All requests must be submitted in writing to the Public Works Department, explaining the traffic concerns of the neighborhood. In order for traffic calming measures to be considered, the requested local street must meet the minimum safety requirements as established in Section 3. The City of Sandy Springs Traffic Calming Request Application can be found here: spr.gs/TrafficCalmingApplication
- B. The City will conduct an initial meeting with the applicant to review the perceived problems, discuss what traffic calming measures could address the problems, define the "Area of Impact," and discuss in detail the process the applicant must complete for the implementation of traffic calming measures.

- C. The Public Works Department will undertake a traffic study to verify the Area of Impact meets the minimum safety standards found in Section 3 of this document. If the minimum safety or operational requirements are not met, the Department will inform the applicant in writing and will continue to monitor the area. If conditions are met, the traffic study is presented to the applicant and stakeholders for discussion, including potential treatment methods and locations, if identified.
- D. Staff will work with the applicant to determine the traffic calming measures that will mitigate the problem and can be supported by the residents in the Area of Impact. An opinion of cost will be provided for inclusion in the petition process and will represent the expected cost of implementing the measures based on past comparable projects. The actual cost to install a traffic calming measure will depend on contractor quotes/bids and may vary.
- E. The properties within the Area of Impact must show support for the proposed solution by submitting a petition to the Director of Public Works for verification. Once the petition is verified, a recommendation is presented by the Public Works Director to the City Manager.
 - 1. The traffic calming project list is updated and presented to the City Manager on a quarterly basis for funding and implementation. Projects are presented based on the submission date of the completed application.
- F. If directed by the City Manager, Public Works staff will develop a final project design and cost, which will be presented to the applicant and stakeholders.
- G. Once the applicant and property owners within the Area of Impact can provide the matching funding, the final design and cost is presented to the City Manager for consideration of approval and funding.

2.2 Plan Development

Citizen participation is an essential ingredient in the development and implementation of a successful neighborhood traffic-calming plan. Neighborhood residents offer insight into the nature and extent of traffic and safety problems. Residents 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 the property owners within the Area of Impact to identify the problems, review the results of the study, and present potential solutions. The Plan must incorporate an agreement between the City and an appropriately organized entity representing the properties within the Area of Impact to cover further costs of maintenance of the device in a form to be approved by the City Attorney.

2.3 Neighborhood Petitions

The City of Sandy Springs requires that there be wide support from the neighborhood in the Area of Impact for implementing traffic calming measures. The impacted property owners, as defined by the City in the Area of Impact, shall be contacted and given an opportunity to sign a petition, indicating their opinion concerning the installation of a traffic calming measure and the associated cost. Any abstention or indication other than a "yes" will be considered a "no."

All owners must sign the petition individually, including owners of undeveloped lots. Renting tenants are not an acceptable substitute for the legal homeowner. A spouse's signature will not be acceptable if he or she is not the legal owner. If both husband and wife are joint legal owners, both signatures are required. A "Mr. and Mrs." signature is not acceptable.

At least 75 percent of the homeowners in the Area of Impact must vote in favor of installing the traffic calming measures for the petition to be accepted. The percentages are calculated, based on individual lots where the owners sign affirmatively, divided by the total number of lots in the Area of Impact. Each lot counts as only one lot regardless of the number of owners signing. The Area of Impact (limits of the affected landowners) will be provided by the Sandy Springs Public Works Department based on the definition in Section 2.4.

If a neighborhood has a HOA or other legal mechanism allowing a group less than the previously stated required percentages to represent their position, this mechanism may replace the petition process as approved by the City Manager after consultation with the City Attorney.

The completed petition must be returned to Public Works where it will be verified against tax records, land lot and parcel maps to ensure that it meets all requirements. The petition is then presented to the City Manager for action. Public Works and the City Manager reserve the right to set a reasonable expiration date on petition signatures.

2.4 Area of Impact Definition Criteria

The Area of Impact is defined as:

- A. Every parcel having frontage on the street segments within the project area, and
- B. Every parcel on cross streets up to the next major intersecting street that must use the project street as its primary access.

2.5 Cost Sharing

The City will fund 50 percent of the cost, and the neighborhood will fund 50 percent 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 agrees to pay 100 percent of the cost for the installation of the traffic calming devices, and they meet the criteria set forth in this document, the City may grant permission to proceed with the installation of the traffic calming devices. City staff will act as program manager and will have the final decision as to the location of the measures.

2.6 Implementation

With approval of the plan by the neighborhood, funding available in the City's budget, and payment totalling 50 percent of the fees from the neighborhood, City staff will initiate the design and implementation process for the proposed traffic calming measures.

2.7 Removal of a Traffic Calming Device

A traffic-calming device may be removed under this policy. The process is similar to the process for installation of a new device, but it only includes an application, initial meeting, a petition with 75 percent support, and a 50 percent neighborhood cost share.

A traffic-calming device may be removed at the City's discretion if the device does not meet the minimum Traffic Calming Safety and Operational Warrants as defined in Section 3. If the removal is justified in this manner, no cost will be borne by the applicant.

3.0 Safety and Operational Warrant Criteria

Potential traffic calming treatment locations must meet all of the minimum safety requirements as defined below to be considered for traffic calming installation. If a location does not meet all of the criteria, it will not be considered for traffic calming.

3.1 Traffic Calming Safety Warrants

- A. Streets must be classified as minor streets and shall have a posted speed limit less than or equal to 30 mph. Streets classified as collector or arterial streets are not eligible for traffic calming.
- B. The minimum length of the roadway must be greater than 1,000 feet.
- C. At least 1,000 feet of each street must have grades less than 7 percent.
- D. The minimum centerline radius must be greater than 375 feet at the location of the device for a 25 mph speed limit, and a 450-foot radius for a segment with a posted speed limit of 30 mph.
- E. Traffic calming measures must meet the minimum sight distance criteria per the Sandy Springs Development Ordinance, Section 103-77.
- F. Bicyclist and pedestrian access must be preserved.
- G. Traffic calming measures should not divert traffic to other minor streets within the study area.
- H. Traffic calming measures shall not impede the flow of stormwater to an appropriate outfall.
- I. Traffic calming measures will be signed and striped according to governing laws, standards, and policies as determined by the City.
- J. Device spacing shall comply with design standards as determined by the City.

4.0 Alternative Treatments For Traffic Calming

Some locations will not meet the safety criteria for traditional traffic calming measures; however, they may meet some or all of the operational warrants. In this situation, an alternative treatment may be considered. For example, the installation of a radar speed feedback sign, enhanced pavement markings, or other alternative measures as defined herein. Sections 1 and 2 of the Traffic Calming Policy, as outlined above, are fully enforced for the entirety of Section 4, Alternative Treatments for Traffic Calming. Section 3, Safety and Operational Warrant Criteria is modified as described in each section below.

4.1 Radar Speed Feedback Signs (RSFS) Warrants

RSFS is intended to make drivers aware of excessive speed and encourage speed reduction by providing immediate positive reinforcement for an appropriate response, the reduction of speed. A location must demonstrate excessive speeding to be considered for this type of installation.

A. Required Warrants (Must Meet All Criteria)

1. A sign may be considered when the observed 85th percentile speed at a site exceeds the posted speed limit by 8 mph or more.
2. A sign can be considered if the location has a minimum of 400-foot line of sight distance.
3. The posted speed limit must be 35 mph or greater.
4. The average daily traffic volume must exceed 2,000 vehicles per day.

B. Operational Warrants

RSFS may be considered when all Required Warrants are met and some or all of the following Operational Warrants are met. Compliance with any or all of the above criteria does not necessarily guarantee approval of the application. The installation of an RSFS will always require an engineering study to determine the necessity and feasibility of installation.

1. The observed mean speed at a site exceeds the posted speed limit by 5 mph or more.
2. There have been a minimum of three (3) documented vehicle/bicycle or pedestrian crashes per year over the past two (2) years.
3. Is located within a quarter (1/4) mile of a school zone or park.
4. The 85th percentile speed in a school zone or park area exceeds the posted speed limit by 8 mph or more.
5. The observed mean speed in a school zone or park area exceeds the posted speed limit by 5 mph or more.
6. The location is where a speed transition zone exists (high to low speed).
7. The location is where a curve speed warning advisory sign exists (high to low speed) with documented accidents of three (3) per year for the past two (2) years.
8. A temporary sign may be considered when the observed 85th percentile speed in a temporary work zone exceeds the posted speed limit by 8 mph or more.
9. A temporary sign may be considered when the observed mean speed in a work zone exceeds the posted speed limit by 5 mph or more.

4.2 Neighborhood Self Improvement Program

The purpose of the Neighborhood Self Improvement Program is to offer a mechanism for residents to provide additional traffic control devices that are not warranted per City policies, guidelines and programs, but do not violate the safety of pedestrians, vehicles or other transportation infrastructure and its intended use. The following examples describe application of this program, but are not intended to be all-inclusive.

A. Pavement Marking and Raised Pavement Markers

Should a neighborhood desire pavement markings or raised pavement markers on a minor street, the measures can be employed provided the applicant meets all criteria established in Sections 2.1, 2.3, and 2.4, of this Manual.

1. Pavement markings and raised pavement markers will be applied according to governing laws, standards and policy as determined by the City.
2. Device spacing shall comply with design standards as determined by the City.
3. The City shall negotiate, contract, and implement all work to be completed within the public rights-of-way.

B. Alternative Measures

Alternative Measures may be considered under Section 4.0 of this manual, including enhanced signage and/or other undefined measures. The City shall consider all measures that comply with the appropriate safety guidelines as determined by the Director of Public Works and are supported by the City's Public Safety officials.

4.3 Project Approval

The Public Works Director shall review neighborhood requests and determine if a measure shall be considered for implementation. No neighborhood shall commission or otherwise direct any construction activity within the right-of-way of the City or State.

4.4 Project Funding

The neighborhood shall pay 100 percent of all costs, including but not limited to, the design, materials and installation of any measures implemented under Section 4.0 of the manual. The City will prepare contracts and/or utilize existing City vendor contract prices to determine the project cost. The City will begin work when the full payment is received from the neighborhood.



Appendix:

Examples of Traffic Calming Devices

Radar Speed Feedback Signs (RSFS)

RSFS alert drivers to posted speed and their actual travel speed providing real-time feedback on non-compliance to posted speed limit.



These are highly visible, but have limited effectiveness, with an estimated 4 mph reduction in average speed. Ongoing maintenance is required. The cost of a RSFS in 2020, is approximately \$8,000, including materials and labor.

Chicanes

Chicanes are a series of lateral displacement devices, such as alternating curves or lane shifts that are located in such a position to force a motorist to steer back and forth, and not in a straight travel path. The curvilinear path is intended to reduce the speed at which a motorist is comfortable travelling.



While chicanes are effective in reducing vehicle speeds, the cost of construction can be quite high and is not something the average neighborhood can afford, nor does the average two-lane neighborhood street have the right-of-way needed to accommodate curvilinear chicanes.

Less expensive chicanes can be made of rows of plastic bollards installed along one side of the street, 50 to 100 feet long, and other sections of bollards installed further down the street, alternating from one side to another, spaced 150 feet apart from the end of one section to the beginning of another.

Mini Roundabouts

A mini-roundabout is a type of intersection that can be used at physically constrained locations in place of stop-controlled intersections to help improve safety problems and reduce excessive delays. Mini-roundabouts generally have an inscribed circle that is small enough to stay within the existing right-of-way (or within the existing curb lines if adequate space is available). Mini-roundabouts operate similarly to larger roundabouts, with yield control on all entries and counterclockwise circulation around a mountable center island.



Source: Georgia Department of Transportation

A mini-roundabout has a center island, over and around which traffic circulates. The center island forces a motorist to use reduced speed when entering and passing through an intersection, whether the vehicle path is straight through or involves a turn onto an intersecting street. It is expected to reduce the number of angle and turning collisions. The center island of a mini-roundabout is fully traversable. The edge of the center island is flush with the pavement. Its cross section can be flat or dome shaped, up to four inches high. Passenger cars circulate around it, and larger vehicles wheel paths can track up and over the center island. Mini-roundabouts use splitter islands to direct traffic entering the intersection. In order to accommodate trucks, fire trucks, school buses and vehicles towing trailers, the splitter islands can be either mountable or at-grade.

Mini-roundabouts differ from neighborhood traffic circles primarily by their traversable islands and yield control on all approaches, which allows them to function as other roundabouts do. Neighborhood traffic circles are typically built at the intersections of local streets for reasons of traffic calming and/or aesthetics. They typically are operated as two-way or all-way stop controlled intersections and frequently do not include raised channelization to guide approaching traffic into the circulatory roadway. By contrast, at some neighborhood traffic circles, left-turning vehicles must turn in front of the central island, potentially conflicting with other circulating traffic.

A video that explains and demonstrates mini-roundabouts can be accessed at the following hyperlink:

spr.gs/miniroundabout

(Source: Virginia Department of Transportation)

Speed Cushions



Speed cushions are raised areas in the pavement surface, extending transversely across the travel way in segments, that require vehicles to travel at reduced speeds. Speed cushions can be used along streets with demonstrated speeding problems and few crossing intersections. 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.

When used in a series on a street, the distance between adjacent arrays of speed cushions should be between 300 and 500 feet.

Splitter Island



Source: Ken Sides

A splitter island (or median island) is a raised traffic island in the middle of the road that separates traffic in opposing directions of travel and narrows the travel lanes at that location. It provides a lateral displacement of traffic width and less lane width, causing vehicles to slow down. Because it is in the center of the road, splitter islands may pose a potential striking hazard, so it must exhibit some reflective materials and be constructed of materials that are resistant to being struck by vehicles. The presence of a splitter island, resulting in a smaller roadway width, reduces speeds when drivers experience the physical perception of a narrower roadway. Splitter islands can be constructed of curb with landscaping, to provide a visual amenity, or may contain a line of plastic bollards.

References

In developing this policy, the City of Sandy Springs Public Works Department studied other similar community traffic calming programs as well as related research. For the reader's ease of reference, the following research identifies a variety of traffic calming measures and techniques, some of which are included in the City of Sandy Springs Traffic Calming Policy.

1. Traffic Calming: State of the Practice ITE/FHWA", August 1999

This report, published jointly by the Institute of Transportation Engineers (ITE) and the Federal Highway Administration (FHWA) in 1999, contains data collection and synthesis of traffic calming experiences to date in the United States and Canada. It includes information on traffic calming in residential areas. The report draws detailed information collected on traffic calming programs in twenty featured communities, another 30 communities surveyed less extensively.

The report can be accessed here: https://safety.fhwa.dot.gov/ped_bike/docs/ite_intro.pdf

2. Traffic Calming Facts Sheets - Introduction

ITE and FHWA recently produced a series of fact sheets which document the results of several decades of traffic calming experience in the United States, presenting a thorough review of current traffic calming practices. <https://www.ite.org/pub/?id=29d042e8%2De97e%2Da03f%2D216f%2Dddb3d50e42e8>

3. ITE/FHWA Traffic Calming ePrimer

The Traffic Calming ePrimer is a free, online resource openly available for public use. It can be found here: https://safety.fhwa.dot.gov/speedmgt/traffic_calm.com. The ePrimer presents a thorough review of current traffic calming practice and contains the information needed to understand this complex field. The ePrimer is presented in eight modules developed to allow the reader to move between each to find the desired information, without a cover-to-cover reading. The ePrimer presents:

1. a definition of traffic calming, its purpose, and its relationship to other transportation initiatives (like complete streets and context sensitive solutions);
2. illustrations and photographs of 22 different types of traffic calming measures;
3. considerations for their appropriate application, including effects and design and installation specifics;
4. research on the effects of traffic calming measures on mobility and safety for passenger vehicles; emergency response, public transit, and waste collection vehicles; and pedestrians and bicyclists;
5. examples and case studies of both comprehensive traffic calming programs and neighborhood-specific traffic calming plans;
6. case studies that cover effective processes used to plan and define a local traffic calming program or project and assessments of the effects of individual and series of traffic calming measures.



Next Steps:

You can find the City of Sandy Springs Traffic Calming Request Application here: spr.gs/TrafficCalmingApplication

The Traffic Calming Petition Form can be found on the next page

If you have any other questions or concerns, you can call the Public Works Department at 770.730.5600 or email transportation@sandyspringsga.gov