CITY OF CHAMBLEE
5468 PEACHTREE ROAD CHAMBLEE, GA 30341

STAFF REPORT

TO: Mayor & Council
FROM: Jon Walker
SUBJECT: Traffic Calming

1. Executive Summary:

Attached is a traffic calming program to address residential requests. The program is fairly standard and based on a compilation of other communities, including Dunwoody. The primary talking points include:

- Application by an HOA or three residents will trigger the request
- City staff will meet with applicants to determine study area
- Applicants will need to gain signatures from 20% of households in study area
- Upon gaining 20%, the City will enter an agreement with a firm to conduct a traffic design study
- Once the study is complete and traffic calming options identified, city staff will meet with the applicant or neighborhood to discuss options
- Applicant must gain signatures of 75% of households in area (or approval of the HOA board) for staff to advance the request to Mayor & Council
- Nothing precludes the Mayor & Council from considering a request absent the required signatures.

2. Discussion:

The purpose of using an outside vendor for the traffic design study is twofold. First, it provides an unbiased outside perspective of the request. Second, a professional firm may recognize other traffic calming methods that would increase the success of the program for a particular neighborhood.

Traffic calming devices will need to be replaced each time the road is repaved. The funds collected from a neighborhood district will be held by the City to pay for these expenses as well as repair and maintain the structures.

3. Fiscal Impact:

The cost of a Traffic Design Study would be determined based on the number of streets and intersections in the affected area.

4. Suggested Motions:

- Approved the "Neighborhood Traffic Calming Program" as submitted.

5. **Attachments:**

1) Neighborhood Traffic Calming Program

City of Chamblee
Neighborhood Traffic Calming Program

1. APPLICATION AND INTENT

Residents are often concerned about excessive traffic volumes and speed through their neighborhoods. Because of increased congestion on the City's arterial and collector road network, combined with driver's desires to find shorter travel routes, drivers frequently seek alternate travel routes. Frequently, the routes include the City's local and residential neighborhood streets. Many of these streets have experienced increases in volume and speeding that has diminished the quality of life and the safety of residents, pedestrians, bicyclist, and other motorists

To help the residents to address these potential safety issues and continue to protect the quality of neighborhood life, the City of Chamblee maintains a Neighborhood Traffic Calming Program. **The Neighborhood Traffic Calming Program specifically applies only to local access roads in residential neighborhoods.** A local access road is the lowest level road in the hierarchy of roadways as defined by American Association of State Highway and Transportation Officials (AASHTO). The primary function of a local access road is to provide access to individual properties for motorized vehicles, bicycles, and pedestrians. It is intended to carry traffic that has either an origin or a destination on that road or from within the local neighborhood. The Neighborhood Traffic Calming Program does not apply to collector roads, minor arterials or principal arterials.

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.

The intent of Chamblee's Neighborhood Traffic Calming Program is to encourage all motorists to drive in a responsible manner. However it is impossible in practice to ensure all of the drivers to drive close to the posted speed limit. Therefore, it is understood that the program will benefit about 85% of the roadways users in general.

Traffic calming techniques can generally be classified as physical devices or psychological 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 and traffic circles. 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.
While each neighborhood and each situation may be somewhat unique, it is important to realize that a systematic approach must be used by the Traffic Calming Program. Thus, the same definitions and criteria, as outlined in this policy, are applied in all cases. As a part of that approach, the transportation system of the City needs to be considered as a whole. Solving a problem on one neighborhood or street should not cause another problem to appear somewhere else.

2. GOALS

The City of Chamblee supports any traffic calming measures that are proven in the transportation industry to enhance public safety without delaying emergency response vehicles and personnel. Ideally, traffic calming measures should be seen as an amenity to the community. Measures that are perceived by local residents as having a degrading effect on property values are generally not considered. The goals of Chamblee's Neighborhood Traffic Calming Program are:

a. Increasing the quality of life for city residents.
b. Reduction in speed for 85% of vehicles to a safe and legal speed limit.
c. Encouraging through traffic to avoid using local roads and to stay on collectors and arterials.
d. Deterring truck traffic and other inappropriate vehicles from using local roads.
e. Effectively balance traffic calming needs with emergency vehicle responsiveness.
f. Encouraging and enhancing of pedestrian and bicycle access and usage.
g. Continuous improvement in the use of effective, efficient, economical and environmentally sustainable traffic calming measures.
h. Minimize the adverse impact of causing traffic to divert from one street to another.
i. Focus on clear communication with and involvement of neighborhood associations and residents.
j. Collection of Input from public safety officials, emergency responders, school officials, planners and engineers.

Traffic calming has the ability to provide solutions for cut-through traffic, speeding, safety, and aesthetics. However, engineering solutions will not produce sufficient results by themselves. Successful traffic calming applies the Three E's: Education, Enforcement, and Engineering.

Education – It is essential that residents and neighbors understand the need to obey the posted speed limit. When there is a perceived speeding problem within the neighborhood, the residents themselves are commonly contributing to this problem. Education can occur by reminding motorists of the potential risk to the neighborhood children and adults; this can be done by means ranging from newsletters and brochures to e-mails and social media. Additionally, general education on the traffic calming program can improve the neighborhood's understanding of possible solutions.

Enforcement – Police officers are the usual source for increased enforcement of traffic laws. Law enforcement can monitor vehicular speeds and the observance of stop signs, issuing citations in response to violations. A temporary police presence results in temporary improvements, as motorists are more likely to exceed posted speed limits in the absence of police officers. However, random police presence can have a continuous benefit as long as the random enforcement continues. The temporary placement of a radar trailer can also be used to inform motorists of the speed they are traveling compared to the posted speed limit.

Engineering – Through proper engineering the roadway can be physically modified in some manner, with the purpose of encouraging a change in motorist behavior by reducing speed, increasing awareness of pedestrians and bicyclists, or diverting traffic to a more appropriate street (arterial or collector). Engineering solutions are intended to be "self-enforcing" and should be considered after education and enforcement activities have been performed. Sound engineering judgment should be used for any proposed modification of a neighborhood roadway involving traffic calming measures, installation of new signage, and additional pavement markings.

3. DEFINITIONS

For purposes of this Policy, certain terms and words are defined. Where words have not been defined, but are defined in a subsequent section of this Policy, those words shall have the meaning as defined therein. The following words, terms and phrases when used in this Policy shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

AASHTO means the American Association of State Highway and Transportation Officials.

Affected Area means a geographic portion of a neighborhood consisting of all property owners whose quality of life as a resident in the neighborhood, and not necessarily as a traveler through the neighborhood, is being directly impacted by the cut-through or speeding traffic problem being addressed. The affected area will include all lots from which residents must traverse the traffic calming measure. The affected area will also include all lots from which residents may have an alternate route without traffic calming measures but whose lots have driveways that access the residential street for which traffic calming measures are sought.

Department means the Public Works Department.

Eligible Petitioner means the person whose name is recorded as a property owner in the tax records maintained by the Dekalb County's tax commissioner and board of tax assessors for the address listed on the petition that falls within the affected area.

Initiator is a real property owner who has initiated a request for traffic calming measures and/or has assumed a primary role in circulating the subsequent traffic-calming petition and undertakes to serve as the City's sole contact with respect to the progress of any subsequent traffic study and traffic- calming petition.

I. T. E. means the Institute of Transportation Engineers.

M U T CD means the Manual on Uniform Traffic Control Devices.

Real property owners means homeowners or other real property owners as indicated in the tax records maintained by the Dekalb County tax commissioner and board of tax assessors.

Reference number means the number assigned to a completed initial interest request which meets the City's criteria for a study that will be used to determine the order in which traffic studies will be conducted.

Residential street means a street classified and defined as "residential" in the records of the City of Chamblee Development Department.

Traffic-calming measures means those methods and processes, prescribed by "AASHTO" or other nationally recognized organizations, that the City may use to reduce aggressive driving behavior that impairs the quality of life of its citizens in any neighborhood in which the posted speed limit is no greater than twenty five (25) miles per hour. Such measures include, but are not limited to, speed tables, bicycle lanes, center traffic islands, splitter islands, and striping and turn restriction lanes.

4. TRAFFIC CALMING PROCESS

4.1 Request

A Homeowners Association (HOA), neighborhood group, or citizen 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 City Manager explaining the traffic concerns of the community. Requests submitted by an individual must include signatures from two (2) additional property owners along the same roadway within 1,000 feet of the property owned by the citizen representative submitting the request.

In order for any traffic calming measures to be considered, the requested local street must be a minimum of 1,320 feet in length, and at least 1,000 feet of each street must have grades less than 7% and horizontal curves less severe than a radius of 300 feet.

The City will conduct an initial meeting with the applicant to review the perceived problems and discuss:

- Application Process
- Affected Area
- Traffic Study Process
- Petition Requirements
- Financial Participation
- Potential Passive Traffic Calming Solutions

After meeting with the City the applicant can initiate the process with a traffic and speed study by submitting an application form and petition with signatures of a minimum of 20% of the residents within the affected area requesting traffic calming.

4.2 Study

Public Works will make a field review of the area and conduct a speed study and investigate any reported crashes. For the purposes of the Neighborhood Traffic Calming Program, a traffic speeding problem on a local street is considered to exist if the 85th percentile speed is greater than 10 miles over the posted speed limit. If the results of the study indicate that traffic speeds do not meet this criteria Public Works will inform the applicant in writing and will continue to monitor the area.

4.3 Plan Development

If the results indicate that the traffic speeds do meet the criteria for traffic calming measures, Public Works will contact the applicant and schedule a neighborhood meeting to review the results of the study, identify the problems, and present potential solutions. The affected area will be identified and the petition process will be explained.

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.

Public Works will prepare a preliminary design of the proposed passive and active measures and prepare the formal petitions for the initiator or neighborhood coordinator to distribute for signature.

4.4 Neighborhood Support

The City of Chamblee requires that there be wide support from the community for implementing traffic calming in neighborhoods. The impacted property owners as defined by the City in the affected area shall be contacted and given an opportunity to sign a petition, indicating their opinion concerning the installation of traffic calming measures. 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% of the homeowners in the affected area must vote in favor of installing the traffic calming measures for the petition to be accepted. The percentages will be calculated, based on individual lots where the owners sign affirmatively, divided by the total number of lots in the affected area. Each lot counts as only one lot regardless of the number of owners signing. The affected area (limits of the affected land

owners) will be provided by the Chamblee Public Works Department based on the definition in Section 3. Public Works and the City Manager reserve the right to set a reasonable expiration date on petition signatures.

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 the Director of Public Works where it will be verified against tax records, land lot and parcel maps to ensure that it meets all requirements. Once the petition is verified, Public Works will develop a final project design and cost, based on the suggested passive and active measures. The verified petition and final project design will be provided to the City Manager for action.

If a petition fails to obtain the required 75% approval, City staff will not advance the request to council. The roadway will not be considered for traffic calming for twelve (12) months. This twelve (12) month waiting period may be waived at the discretion of the City.

4.5 Approval

Final design and cost for any active measures will be presented to the Mayor and City Council for funding and approval.

4.6 Implementation

The City will fund 100% of the cost necessary for construction of any active traffic calming measures. Funding available for the construction of active traffic calming measures will be limited to the amount budgeted for traffic calming for that current fiscal year and allocated to neighborhoods in the order that their petition is approved by the City Council. Any neighborhoods that are approved for the construction of active traffic calming measures after the current year's budget has been expended will be funded out of future year's budgets in the order that their petition was approved by the City Council.

Passive measures and/or any needed modifications or temporary measures may be implemented and studies for effectiveness before active measures are installed.

Upon City Council approval and the allocation of funds in the City budget, the traffic calming project will be implemented at the direction of the Public Works Department.

Each property in the affected area will be assessed a $25 fee per year on their property tax bill for maintenance of the Traffic Calming Devices, beginning the year after the devices are installed.

Within 6 months of project installation, Public Works staff will conduct follow-up studies to measure project effectiveness.

4.7 Post Implementation

The City shall collect "post-implementation" information and data along the roadway(s) in the project. This data collection shall occur between ninety (90) and one hundred and twenty (120) days following completion of construction. The purpose of this effort is to determine whether the objectives for traffic calming have been satisfied along the roadway(s).

If the City determines that the objectives have been satisfied, then the project is considered complete.

If the City determines that the objectives have not been satisfied, then the City has the option to modify or remove the traffic calming measures. If this option is pursued, the traffic calming review process would follow the same guidelines beginning with the evaluation phase

5. REMOVAL OF TRAFFIC CALMING DEVICES

If the neighborhood decides that they no longer want previously installed traffic calming devices, they must follow the same procedure to obtain 75% support by petition as listed above for installation. Active traffic calming devices should remain in place at least 12 months before removal. If devices are removed, the road must also be brought back to City standards. The City of Chamblee reserves the right to remove speed tables for any reason.

6. TRAFFIC CALMING TOOLBOX

This "toolbox" of traffic calming measures provides guidance and information to the City and citizens. It provides the description, advantages, and disadvantages of various traffic calming measures. There are three (3) primary types of traffic calming: passive, vertical, and horizontal. Measures that are not considered traffic calming are also described and explain the reasons for not being appropriate traffic calming measures. Smaller and less expensive alternatives to the vertical and horizontal measures are also described, and can be applied either instead of or in conjunction with the physical measures. Traffic management techniques, which are not considered traffic calming, are also briefly described with advantages and disadvantages.

Below is a summary of the traffic calming measures included in this toolbox:

- Passive
  - Education
  - Radar Trailer Placement
  - Targeted Speed Limit Enforcement
- Vertical
  - Speed Table
  - Raised Crosswalk
  - Speed Cushion
- Horizontal
  - Neighborhood Traffic Circle
  - Choker
  - Chicane
  - Center Island Median
  - Intersection Bulbout
- Not Traffic Calming
  - STOP Sign
  - Rumble Strip
  - CHILDREN AT PLAY Sign
  - Speed Bump
  - SPEED LIMIT Sign
- Alternatives
  - Additional Signs
  - High Visibility Crosswalk
  - Lane Striping
- Traffic Management
  - Modified Intersection

6.1 Passive Traffic Calming Measures

Passive traffic calming measures do not require construction of physical modifications to the roadway. Passive traffic calming often results in lower cost and prevents constructing a more-permanent change to the roadway. Physical (vertical and horizontal) traffic calming measures will be considered by the City when either the passive measures have not alleviated the neighborhood concerns or the City determines the need for their installation.

Passive traffic calming measures include education, targeted speed limit enforcement and radar trailer placement.

6.1.1 Education

Activities that change people's perceptions and help alter driver behavior are most preferred. Meetings and workshops with neighbors and the City can help implement and direct traffic calming applications. Most traffic problems are a result of human behavior. Through outreach programs and neighborhood watch programs, residents can play a big part in spreading the information.

Advantages:
- Flexible in the duration of meetings, workshops, etc.
- Inexpensive compared to other alternatives

Disadvantages:
- Difficult to measure the effectiveness
- May take time to be effective
- Potential challenge in generating citizen participation

6.1.2 Targeted Speed Limit Enforcement

The City can provide targeted speed limit enforcement in response to citizen concerns. Targeted speed limit enforcement may be considered for evaluating the level of speed reduction possible with more permanent measures. Targeted enforcement can also be used in conjunction with new physical traffic calming measures to help drivers become aware of the new traffic calming restrictions. This measure typically only provides a temporary benefit, since speed limit enforcement typically is not performed on a regular, on-going basis.

Advantages:
- Inexpensive if used temporarily
- Does not require time for design
- Does not slow emergency vehicles
- Effective in reducing speeds in a short timeframe

Disadvantages:
- Effectiveness may be temporary
- Expensive to maintain a continued program of enforcement

6.1.3 Radar Trailer Placement

A radar trailer is a temporary device that measures an approaching vehicle's speed and displays it next to the posted speed limit. This can serve as a reminder to the driver of both the vehicle's speed and the posted speed limit. In order to be most effective, the placement of the trailer should be in the clear view of the oncoming driver's line of sight. These trailers can be easily placed on a roadway for a limited amount of time and then relocated to another roadway, allowing a single trailer to be effective in many locations. Like targeted speed limit enforcement, the placement of a radar trailer provides a temporary benefit for reduction of vehicular speeds; speeds tend to increase after the trailer is moved.

Advantages:
- Inexpensive if used temporarily (less expensive if purchased)
- Does not require time for design
- Does not slow emergency vehicles
- Effective in reducing speeds in a short timeframe

Disadvantages:
- Effectiveness may be temporary
- Aesthetics are not pleasing
- Only effective for one direction of travel
- Subject to vandalism

6.2 Vertical Traffic Calming Measures

Vertical traffic calming measures provide an obstruction that vehicles are able to travel over. The change in pavement height (and sometimes pavement materials) can cause discomfort to the occupants of vehicles that are exceeding the design speed of the traffic calming measure. It should be noted that most vertical traffic calming measures are not preferred along roadways that are emergency vehicle routes or transit routes. To reduce the chances of potential liability issues, vertical traffic calming measures should be signed and marked in accordance with reference material provided by the Institute of Transportation Engineers (ITE) and the Manual on Uniform Traffic Control Devices (MUTCD).

Vertical traffic calming measures typically perform better when they are installed in a series, as opposed to a single isolated measure. The deceleration and acceleration of a vehicle, while negotiating a series of vertical traffic calming measures, is dependent on the number and spacing of the installations. ITE states that the typical spacing for speed tables is 300 to 600 feet; however, this spacing guidance can be applied to all vertical traffic calming measures.

The implementation of vertical traffic calming measures can result in some traffic diverting onto parallel streets. This essentially moves the cut-through problem instead of solving it. Consideration should be placed on the concept of improving the neighborhood (not just improving the street).

Vertical traffic calming measures include speed cushions, speed tables and raised crosswalks.

6.2.1 Speed Cushion

Speed cushions are narrower speed humps that are typically installed in the center of each travel lane. Speed cushions typically are six (6) feet in width. Speed cushions typically range in length between seven (7) and ten (10) feet. Passenger vehicles will traverse the speed cushions in the same manner as a speed hump. However, emergency vehicles are able to straddle the speed cushions due to their wider wheel track. Thus, response times for emergency vehicles are not increased as much (if at all).

Advantages:

- Less expensive than speed humps
- Effective in reducing vehicle speed
- Does not impact emergency vehicle response time as much as speed humps

Disadvantages:

- Increases noise and air pollution in neighborhood
- Passenger vehicles with larger axle widths may be able to straddle the speed cushions
- May be damaged by snow plows

6.2.2 Speed Table

Speed tables are flat-topped speed humps. Speed tables typically measure between three (3) and four (4) inches in height and 22 feet in length, with the flat portion being ten (10) feet in length. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on the flat top. Their long flat fields give speed tables higher design speeds than speed humps. The brick or other textured materials are usually used on the flat top to improve the appearance of speed tables, draw attention to them, reduce speed, and may enhance safety. Like speed humps, discomfort increases as the speed of the vehicle traveling over the hump increases. Speed tables are good for locations where low speeds are desired but a somewhat smooth ride is needed for larger vehicles.

Advantages:

- Quicker response time for emergency vehicles than speed humps
- Effective in reducing vehicle speed, but not as well as speed humps
- Addition of brick or textured materials can improve aesthetics

Disadvantages:

- More expensive than speed humps
- Increases response time for emergency vehicles
- Increases noise and air pollution in neighborhood
- May be damaged by snow plows

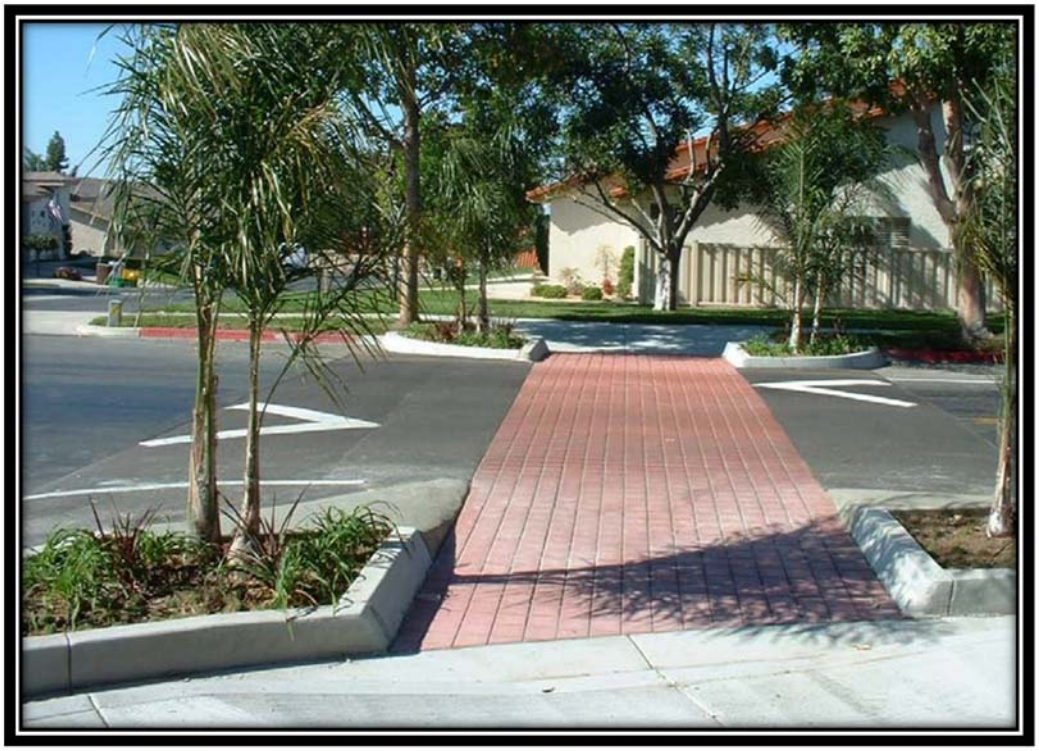
6.2.3 Raised Crosswalk

Raised crosswalks have a similar shape to a speed table, but the flat top contains a striped pedestrian crosswalk. These measures should be elevated to a height that matches the adjacent sidewalk, such that the raised crosswalk is flush with the curb or top of sidewalk elevation at each end. There are not presently many curbs or sidewalks within the City. However, raised crosswalks must be installed with the appropriate sidewalk transitions on both sides in order to be compliant with the Americans with Disabilities Act of 1990.

Advantages:
- Provides a more visible pedestrian crossing
- Quicker response time for emergency vehicles than speed humps
- Effective in reducing vehicle speed, but not as well as speed humps
- Addition of brick or textured materials can improve aesthetics

Disadvantages:
- More expensive than speed humps
- Increases response time for emergency vehicles
- Increases noise and air pollution in neighborhood
- May be damaged by snow plows

NOTE: Lack of sidewalk infrastructure may result in a raised crosswalk not being applicable in the City. Raised crosswalks can be constructed without the presence of sidewalks, as long as there are ADA-compliant pedestrian landing areas with detectable warning strips on both ends of the raised crosswalk.



6.2.4 Raised Intersection

Raised intersections can be used as a traffic calming measure while also alerting drivers to the potential for pedestrians or vehicles at an intersection. The physical attributes are similar to a speed table in that each intersection approach elevates to a height of three (3) inches over a length of six (6) feet. The flat top, also similar to a speed table, is provided throughout the entire intersection.

Advantages:
- Provides a more visible pedestrian crossing
- Provides traffic calming along two roads
- Quicker response time for emergency vehicles than speed humps
- Effective in reducing vehicle speed, but not as well as speed humps
- Addition of brick or textured materials can improve aesthetics

Disadvantages:
- Very expensive compared to speed humps and speed tables
- More expensive than speed humps
- Increases response time for emergency vehicles
- Increases noise and air pollution in neighborhood
- Could create drainage impacts
- May be damaged by snow plows May be damaged by snow plows

6.3 Horizontal Traffic Calming Measures

Horizontal traffic calming measures incorporate raised islands and curb extensions to prevent vehicles from traveling in a straight line at excessive speeds. Vehicles either slow down while maneuvering around the horizontal obstacle, or slow down due to the physical perception of a narrower roadway. To reduce the chances of potential liability issues, horizontal traffic calming measures should be signed and marked in accordance with reference material provided by the Institute of Transportation Engineers (ITE) and the Manual on Uniform Traffic Control Devices (MUTCD).

The implementation of horizontal traffic calming measures can result in some traffic diverting onto parallel streets. This essentially moves the problem instead of solving the problem. Consideration should be placed on the concept of improving the neighborhood (not just improving the street).

Horizontal traffic calming measures include neighborhood traffic circles, chicanes, intersection bulbouts, chokers and center island medians.

6.3.1 Neighborhood Traffic Circle

Neighborhood traffic circles are raised islands placed in intersections, forcing traffic to circulate around the raised island. The traffic circle is typically circular in shape and can include landscaping within the raised island. The raised island in the center of the intersection typically measures between 16 and 24 feet in diameter. Neighborhood traffic circles can be controlled by YIELD signs on all approaches, STOP signs on all approaches, or a combination of free-flow conditions along the major street and STOP signs along the minor street. Traffic circles prevent drivers from speeding through intersections by impeding the through movement. Neighborhood traffic circles are most effective when there is vertical planting material in the center. This adds to its visibility to the driver and provides aesthetics to the neighborhood.

Advantages:
- Effective in reducing vehicle speed
- Can reduce severity of motor vehicle collisions
- Opportunity for landscaping and improved aesthetics

Disadvantages:
- Difficult for left-turning emergency vehicles
- Possible need for right-of-way, depending on size of raised island
- Increased cost/labor for maintenance of landscaping

6.3.2 Chicane

Chicanes are curb extensions that alternate from one side of the street to the other, creating S-shaped travel patterns. Raised landscaped islands or delineators are usually provided at both ends of a chicane in order to enhance the drivers awareness of the need for a lateral shift. Along a section of roadway that contains a chicane, off-street parallel parking may be restricted along property frontages due to curb and gutter.

Advantages:

- Discourages high speeds by forcing horizontal deflection
- Easily negotiable by emergency vehicles
- Opportunity for landscaping and improved aesthetics

Disadvantages:

- Must be designed carefully to discourage drivers from deviating out of the appropriate lane
- Curb realignment and landscaping can be expensive, especially if there are drainage issues
- Increased cost for maintenance of landscaping

6.3.3 Intersection Bulbout

A bulbout can also be called a neckdown, intersection narrowing, or curb extension. These curb extensions reduce the roadway width at intersections, thereby reducing speeds when drivers experience the physical perception of a narrow roadway. The curb extensions may consist of concrete curbing, a line of bollards, or any other obstruction deemed appropriate. When using bollards or any other obstruction, the spacing of these objects should be between four (4) and six (6) feet such that the opening is smaller than the width of a vehicle. Intersection treatments reduce vehicle travel speeds by tightening the curb radii. Bulbouts improve pedestrian safety by providing a refuge and shortening the crossing distance.

Intersection treatments can be retrofitted into an existing intersection without modifying the existing drainage, or they can be designed to provide additional sidewalk width for increased pedestrian use or street furniture. The effects are increased pedestrian comfort and safety at the intersection.

Advantages:
- Encourages a safer pedestrian environment by providing a shorter crossing distance
- Through and left-turn movements are easily negotiable by large vehicles
- Prevents parking too close to intersections
- Opportunity for landscaping and improved aesthetics

Disadvantages:
- Effectiveness is limited by the absence of vertical deflection
- Difficult for right-turning emergency vehicles
- Increased cost for maintenance of landscaping
- May require bicyclists to briefly merge with vehicular traffic

6.3.4 Choker

Chokers are curb extensions at mid-block locations, whereas bulbouts are at intersection locations. Chokers reduce the roadway width by widening the sidewalk or planting strip. The presence of curb extensions reduces speeds when drivers experience the physical perception of a narrow roadway. The curb extensions may consist of concrete curbing, a line of bollards, or any other obstruction deemed appropriate. When using bollards or any other obstruction, the spacing of these objects should be between four (4) and six (6) feet such that the opening is smaller than the width of a vehicle. If chokers are marked/striped as crosswalks, they are also called safe crosses. Chokers cause the roadway cross section to be narrower than the normal cross section.

Advantages:
- Easily negotiable by emergency vehicles
- If designed well, can have a positive aesthetic value
- Opportunity for landscaping and improved aesthetics

Disadvantages:
- Effectiveness is limited by the absence of vertical deflection
- May require bicyclists to briefly merge with vehicular traffic
- Increased cost for maintenance of landscaping

6.3.5 Center Island Median

Center island medians are raised islands located along the centerline of a street that narrow the travel lanes at that location. The presence of a median, resulting in a smaller roadway width, reduces speeds when drivers experience the physical perception of a narrow roadway. The medians are often landscaped to provide visual amenity; they can also contain curb extensions that consist of concrete curbing, a line of bollards, or any other obstruction deemed appropriate. When using bollards or any other obstruction, the spacing of these objects should be between four (4) and six (6) feet such that the opening is smaller than the width of a vehicle. The median island can act as a "gateway" when placed at the entrance to a neighborhood. A median island of adequate width can also be referred to as a "pedestrian refuge" if located at a crosswalk and the median is accommodating for pedestrians.

Advantages:
- If designed well, can have a positive aesthetic value
- Opportunity for landscaping and improved aesthetics

Disadvantages:
- Effectiveness is limited by the absence of vertical deflection
- May interrupt driveway access to adjacent properties
- Increased cost for maintenance of landscaping

6.4 Not Traffic Calming Measures

Measures that are not considered to achieve traffic calming include STOP signs, CHILDREN AT PLAY signs, SPEED LIMIT signs, rumble strips, and speed bumps.

6.4.1 STOP Sign

Studies show that unjustified STOP signs reduce speed near the signs, but increase speeds along the roadway immediately after the signs. This is caused by motorists "making up for lost time". Inappropriate STOP signs also increase air pollution, waste fuel, and create more traffic noise. When confronted with unreasonable and unnecessary restrictions (such as inappropriate STOP signs), motorists are more likely to violate them and develop contempt for all traffic signs. Studies have also shown that there are a high number of intentional moving violations when STOP signs are installed as "speed breakers".

The Manual on Uniform Traffic Control Devices (MUTCD) provides guidance and warrants for placement of a STOP sign in Section 2B. Placement of STOP signs should not be considered as a means to help calm traffic in a neighborhood unless the MUTCD criteria have been satisfied.

In summary, STOP signs are not considered appropriate traffic calming measures. The installation of inappropriate STOP signs can result in an increase in speeds, accidents, and pollution.

6.4.2 CHILDREN AT PLAY Sign

Studies have shown that many signs in residential areas, which are installed to "warn" people of normal conditions, fail to improve safety. Warning signs can be effective tools if used sparingly and only to warn motorists of uncommon hazards that are not apparent to drivers. CHILDREN AT PLAY signs can give parents a false sense of security since drivers often disregard these signs. The Manual on Uniform Traffic Control Devices (MUTCD) rejects these signs because they openly suggest that playing in the street is acceptable. Since children live on nearly every residential block, CHILDREN AT PLAY signs would need to be placed on every roadway. Residential blocks with no signs might imply that no children live there, so it is acceptable to exceed the posted speed limit.

In summary, CHILDREN AT PLAY signs are generally disregarded by motorists and give parents a false sense of security.

6.4.3 SPEED LIMIT Sign

The posted speed limits for roadways are typically established based upon recognized engineering criteria related to the roadway design. For this reason, additional signage and/or adjusting the posted speed limit of a roadway are not considered to be traffic calming measures. These requests can be submitted to the City, but not as traffic calming measures.

6.4.4 Rumble Strip

These measures are raised pavement sections that can be closely spaced along a roadway at regular intervals. Rumble strips are a road safety feature used to caution inattentive motorists of potential danger. As the motorist travels over the rumble strips, the vehicle experiences both noise and vibration to alert the motorist.

They are typically installed along freeways and higher speed roadways to alert motorists that may begin to veer from the travel lane to the shoulder. Their purpose is to reduce the number of vehicles that depart the roadway; this is a common example of rumble strips used to enhance safety. Rumble strips can also be installed across the travel lane itself when unusual conditions exist ahead. They can be installed along the travel lanes of a higher speed roadway that contains an isolated all-way stop controlled intersection. A motorist may grow accustomed to traveling at a certain speed and otherwise may not expect to stop; the purpose of the rumble strip is to alert the driver. This is a common example of rumble strips to alert motorists of a condition that is unusual to a specific roadway.

Rumble strips should not be used as traffic calming measures. These measures become less effective over time as the motorists grow accustomed to them. Rumble strips also increase noise levels for nearby residents and commonly require additional maintenance.

6.4.5 Speed Bump

These measures should not be confused with speed humps. Speed bumps are vertical obstructions often found in privately-owned parking lots (shopping centers, schools, churches, parks, etc). Speed bumps typically measure between three (3) and four (4) inches in height and twelve (12) inches in length, and are often designed for a design speed that is much lower than a typical posted speed limit along a public roadway. In contrast, a speed hump is typically twelve (12) feet in length. Traffic calming measures should be designed and implemented with the purpose that vehicles will be able to comfortably travel at the posted speed limit. In contrast, speed bumps require vehicles to travel much slower to attain a comfortable travel speed. The necessary braking and slow speeds can create a safety hazard, possibly causing rear-end collisions. In summary, speed bumps should not be installed on public roads and are not considered to be a traffic calming measure.

6.5 Alternatives to Traffic Calming Measures

6.5.1 Additional Signs

Signs are an effective tool for advising drivers of the numerous situations encountered on roadways. For example, residential roadways should not act as cut-through routes for trucks and heavy vehicles. If the amount of cut-through traffic is deemed unacceptable, NO TRUCKS signs can be installed to regulate the number of heavy vehicles that travel along the residential roadway.

6.5.2 Lane Striping

Lane striping can be used to create dedicated bicycle lanes, parking lanes, or pavement edge lines. Pavement markings can be implemented to narrow the vehicular travel lanes, giving the perception of a higher speed to encourage drivers to reduce their speed. Lane striping typically has a relatively low cost for design and construction. However, the reduction in speed has not been conclusively demonstrated based on past evidence. The increase in the maintenance required may offset the benefits derived from the installation of new lane striping.

6.5.3 High Visibility Crosswalk

High visibility crosswalks can use pavement markings and colorless RPMs to enhance visibility. The pavement markings are typically solid white in color, eight (8) feet long, and twelve (12) inches wide. Drivers tend to be more aware of the high visibility crosswalks and usually slow down when they are approached. However, due to the higher cost, this measure should be restricted to locations that have both high vehicular volumes and pedestrian volumes.

7. TRAFFIC MANAGEMENT

Diversion devices use a combination of raised islands and curb extensions to preclude particular vehicle movements at an intersection. These measures are considered to be traffic management, not traffic calming.

7.1 Forced Turn Island

Forced turn islands are raised islands that block certain movements on approaches to an intersection

Advantages:

- Can improve safety at an intersection of a local street and a major street by prohibiting dangerous turning movements
- Reduces traffic volumes

Disadvantages:

- If designed improperly, drivers can maneuver around the island to make an illegal movement
- May simply divert a traffic problem to a different street

CITY OF CHAMBLEE

TRAFFIC CALMING PETITION AND COVER LETTER

The objective of the City of Chamblee Traffic Calming Program is to provide property owners a means of addressing speeding related problems in their communities. This petition provides that the opportunity for the attached area, determined to be the "affected area". The City's program provides a process by which traffic calming measures such as speed tables, bike lanes, center traffic islands, splitter islands, and striping can be implemented on the City-maintained neighborhood roads. Engineering studies must support the desired results and 75% or more of the affected property owners must favor the installation.

THE PETITION PROCESS

To have Speed Tables or a combination of other active traffic calming measures installed in a City of Chamblee neighborhood, a completed petition must be submitted to the City of Chamblee Public Works. All affected property owners in the subdivision should be contacted by the stakeholder(s) or liaison and given an opportunity to sign this petition indicating a yes or no response to traffic calming. Unless the property is undergoing a change of ownership (documentation needed), a wife's or husband's signature alone will not be acceptable if that person is not the legal homeowner. If both husband and wife are joint legal owners, both signatures are required (a Mr. & Mrs. signature is not acceptable; owners must sign individually). ALL PROPERTY OWNERS OF RECORD MUST SIGN THE PETITION. This also applies to owners of undeveloped lots. Rental tenants are not an acceptable substitute for the legal homeowner. All valid signatures must be on the official traffic calming final petition form. Any other deviations will be an invalid part of the final petition certification process. Witness signatures are required to verify property owners' signatures. The determining percentage will be calculated based on individual lots where owners sign affirmatively, divided by the total number of lots in the Affected Area. Homeowners representing 75% or more of the affected properties must vote in favor of traffic calming measures before petitions can be presented to the Board of Commissioners. For subdivisions not completely built out, a minimum of 80% of the total units must be occupied before a petition for the installation of speed tables will be considered.

Removal of Previously Installed Traffic Calming Measures can proceed if the City is presented a petition requesting removal. At least 65% of the property owners must vote in favor of removal. Rules governing the signing of the petition and procedure for calculating approval percentages are the same as those used in the installation approval process. Such a petition for removal will only be considered after a period of at least one year after installation.

Completed petitions must be signed, witnessed, and returned to this office where signatures will be verified using tax records and land lot maps. Petitioners will have 90 days from the date of the announced proposal to submit the petition; otherwise the proposal will be automatically rejected. Petitions meeting verification and qualification requirements will be presented to the Board of Commissioners. A public hearing will be announced and the Board of Commissioners will approve or disapprove all qualifying petitions at that time.

ADDITIONAL INFORMATION

The installation of traffic calming measures will not be considered final until the measures are inspected by Traffic Calming for compliance with design specifications. Annual maintenance charges will be added to the property tax bills at the end of the year in which the measures are installed. Each platted lot in the affected area, whether developed or not, will be subject to the assessed charges. A yes or no vote can NOT be changed, removed, or altered after the petition has been received or stamped by the City Traffic Calming.

RETURN COMPLETED PETITIONS TO:

City of Chamblee
Public Works Department
3210 Cumberland Drive
Chamblee, GA 30341

ALL PETITIONS MUST BE SUBMITTED ON OFFICAL PREPRINTED FORMS
COVER SHEET ON THE OTHER SIDE

STREET NAME

CITY OF CHAMBLEE TRAFFIC CALMING PETITION

The undersigned property owners understand the purpose of this petition and hereby accept or reject, as indicated herein, the proposal being presented. It is further understood that an acceptance of 75% or more of property owners in the affected area on this petition, indicated by the number of "yes" votes, signifies approval for the City of Chamblee to implement a proposed measure. This approval and selection of a particular measure allows the City to assess annual maintenance charges for the installed measure(s) to all property designated to be in the "Affected Area" upon the approval of this petition by the Board of Commissioners.

Street Name _____ Subdivision Name _____

1.

No Yes

Print Name (Last, First) _____ Print Name (Last, First) _____

Home Address _____ Daytime Telephone Number _____

Signature _____ Signature _____

Witness _____

2.

No Yes

Print Name (Last, First) _____ Print Name (Last, First) _____

Home Address _____ Daytime Telephone Number _____

Signature _____ Signature _____

Witness _____

3.

No Yes

Print Name (Last, First) _____ Print Name (Last, First) _____

Home Address _____ Daytime Telephone Number _____

Signature _____ Signature _____

Witness _____

4.

No Yes

Print Name (Last, First) _____ Print Name (Last, First) _____

Home Address _____ Daytime Telephone Number _____

Signature _____ Signature _____

Witness _____