

Transportation Commission



June 11, 2024
Town Hall
2121 Cross Timbers Road
Flower Mound, TX 75028

6:30 p.m.

AGENDA

A. CALL TO ORDER

B. PLEDGE OF ALLEGIANCE TO THE AMERICAN FLAG

C. PUBLIC COMMENT

The purpose of this item is to allow the public an opportunity to address the Board/Commission regarding any item on this agenda that is not a "Public Hearing." Issues regarding daily operational or administrative matters should first be dealt with by calling Town Hall at 972- 874-6000 during business hours. To speak to the Board/Commission during public comment, please fill out a comment form, which is located in the lobby of Town Hall.

In accordance with the Texas Open Meetings Act, the Board/Commission is restricted from discussing or acting on items not listed on the agenda.

- Speakers are limited to 3 minutes; a tone will sound at 30 seconds left and when time has expired, and times may be adjusted by the Chair depending on the number of speakers.
- Speakers must address their comments to the Board/Commission.
- Please state your name and address when speaking.

D. ELECTION

1. Vice Chair

E. ASSISTANT DIRECTOR REPORT

1. Update status report related to operational issues, capital improvement projects and TxDOT projects
2. Future Transportation Commission meeting dates
3. Future Agenda Items
4. Boards and Commission Open House

F. CONSENT ITEM(S)

This part of the agenda consists of non-controversial, or “housekeeping” items required by law. Items may be removed from Consent by any Commissioner by making such request prior to a motion and vote.

1. Consider approval of the minutes from 05/15. - Consider approval of the minutes from May 15, 2024.

G. WORK SESSION

1. Discussion and feedback on street name change for Kirkpatrick Lane between Garden Ridge Boulevard and Blue Sky Lane
2. Initial review and discussion on the current Neighborhood Traffic Management Program (NTMP).

H. ADJOURN

I do hereby certify that the Notice of Meeting was posted on the bulletin board at the Town Hall for the Town of Flower Mound, Texas, in a place convenient and readily accessible to the general public at all times and said Notice was also posted on the Town’s website in accordance with GC Section 551.056 on the following date and time: June 7, 2024, at 5:30p.m., at least 72 hours prior to the scheduled time of said meeting.

Tina Wells, Administrative Secretary

The Flower Mound Town Hall and Jody Smith Hall are wheelchair accessible. Requests for accommodation or interpretive services must be made 48 hours prior to this meeting by contacting Town Hall at 972.874.6000. Additional time limits will be provided for members of the public that need to address the Town Council through a translator.

Transportation Commission



May 15, 2024
Town Hall
2121 Cross Timbers Road
Flower Mound, TX 75028

6:30 p.m.

DRAFT MINUTES

A. CALL TO ORDER

The Transportation Commission met in a regular meeting with the following members present:

Chris Reed, Chair, Place 6
Bjorn Vandug, Place 1
Michelle Jackson, Vice Chair, Place 2
Jason Huse, Place 4
Erica Mulder, Place 5
Charlie Landry, Place 7
John Corbett, Place 9, Alternate

with the following member(s) absent:

Ron Hogue, Place 3
Bob Morreira, Place 8, Alternate

constituting a quorum with the following members of the Town Staff participating:

Matthew Hotelling, Assistant Director of Public Works / Transportation
Thomas Peppers, Graduate Traffic Engineer
Manuel Palacios - Assistant Director of Public Works
Tina Wells, Administrative Secretary
Darren Branch - Lieutenant Professional Standards - Police
Barbara Hill - School Crossing Guard Supervisor - Police
Henry Lucio - Captain Support Services - Police

Chair Chris Reed called the meeting to order at 6:30 p.m.

B. PLEDGE OF ALLEGIANCE TO THE AMERICAN FLAG

Chair Reed led the pledge.

C. PUBLIC COMMENT

The purpose of this item is to allow the public an opportunity to address the Board/Commission regarding any item on this agenda that is not a "Public Hearing." Issues regarding daily operational or administrative matters should first be dealt with by calling Town Hall at 972- 874-6000 during business hours. To speak to the Board/Commission during public comment, please fill out a comment form, which is located in the lobby of Town Hall.

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- Speakers must address their comments to the Board/Commission.
- Please state your name and address when speaking.

None

D. ASSISTANT DIRECTOR REPORT

1. Update status report related to operational issue, capital improvement projects and TxDOT projects
2. National Motorcycle Awareness and Bicycle Safety Month
3. Future Transportation Commission meeting dates
4. Future Agenda Items
5. Transportation Commission Update Report at the May 16 Town Council work session

E. CONSENT ITEM(S)

This part of the agenda consists of non-controversial, or "housekeeping" items required by law. Items may be removed from Consent by any Commissioner by making such request prior to a motion and vote.

1. Consider approval of the minutes from 4/9. - Consider approval of the minutes from April 9, 2024.

ACTION: Marie Jackson moved to approve E.1. as presented in the agenda caption. Charles Landry seconded the motion.

AYES: Bjorn Vandug, Charles Landry, John Corbett, Marie Jackson, Jason Huse, Erica Mulder

NAYS: None
ABSTAIN: None
RESULT: 6 : 0

F. REGULAR ITEM(S)

1. Consider a recommendation for Sidewalk Links Project - Consider a recommendation to staff for a proposed list of sidewalk links locations for inclusion in the FY2024-2025 Sidewalk Links Construction Project, through the Annual Budget process.

ACTION: Michelle Jackson moved to approve F.1. as follows.
Recommend to approve Option 1 FM3040 at Tealwood - Connecting the north side to the neighborhood and Option 3 FM2499 at Market Place - Connecting the west side to the existing sidewalk. The Commission will reconvene at a later date after additional staff research into Option 2 Thorn Trail - south side and Option 4 Rock Cove at Oak Trail - south side. Furthermore, staff will provide additional pricing information for the sidewalk gap at the corner of Rolling Oaks and Sterling Parkway. Erica Mulder seconded the motion.

AYES: John Corbett, Charles Landry, Erica Mulder, Michelle Jackson, Jason Huse, Bjorn Vandug

NAYS: None
ABSTAIN: None
RESULT: 6 : 0

G. WORK SESSION

1. Sharing of information related to School Crossing Guard Index (SCGI) data collection for the Spring 2024 semester.
2. Discussion of the Results of the Sterling Parkway and Rolling Oaks Drive Speed Study

Open Public Comments by Chair Reed at 8:20 p.m.

Names listed below don't necessarily reflect the order in which each person spoke and all addresses are located in Flower Mound unless otherwise indicated.

	Speaker name and address	Subject (as written on the form)
1.	Josh Dellaria, 3601 Rolling Oaks Drive	Questions/Comments about speed study
2.	Patrick Gahan, 3221 Riley Lane	Questions/Comments about speed study

** Indicates person did not wish to speak*

Closed Public Comments at 8:25 p.m.

H. ADJOURN

Motion made by Commissioner Mulder to adjourn the meeting at 8:36 p.m. and all were in favor.



TRANSPORTATION COMMISSION AGENDA G.1. WORK SESSION

DATE: June 11, 2024
FROM: Matthew Hotelling, Assistant Director of Public Works/Transportation
ITEM: **Discussion and feedback on street name change for Kirkpatrick Lane between Garden Ridge Boulevard and Blue Sky Lane**

BACKGROUND: On February 5, 2024, the section of Kirkpatrick Lane known as Kirkpatrick III was removed from the Town's Thoroughfare Plan. As part of that change, the section of Kirkpatrick Lane located between Garden Ridge Boulevard and Blue Sky Lane is a cut-off section of Kirkpatrick Lane from the rest of the roadway. The street name change for this segment was to be sent back to the Transportation Commission for recommendation for a new street name. The initial idea was to take Bellaire Boulevard from Lewisville and extend it along this section. However, within the Lakeside DFW community there is a street with the name Bel Air Lane. These two names are too close together and could cause confusion. The item before the commission is to solicit feedback on possible new names for this segment of Kirkpatrick Lane. Staff will use that list of names and send them through the process outlined in the Code of Ordinances Section 92-320. Names that are acceptable to all required staff members will be brought back to the commission for recommendation to Town Council. There are no homes or businesses addressed off of this stretch of roadway. Vickery Elementary is addressed off of Wager Road. There is an undeveloped piece of property at the western end that is addressed off of Kirkpatrick Lane.

BOARD REVIEW/CITIZEN FEEDBACK: Purpose of this item is to solicit feedback from the Transportation Commission.

ALTERNATIVES: N/A

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

None

DRAFT MOTION: The purpose of this agenda item is to provide information to the Transportation Commission and elicit feedback. No formal action is required



TRANSPORTATION COMMISSION AGENDA G.2. WORK SESSION

DATE: June 11, 2024
FROM: Matthew Hotelling, Assistant Director of Public Works/Transportation
ITEM: **Initial review and discussion on the current Neighborhood Traffic Management Program (NTMP).**

BACKGROUND: At the May 16, 2024, Boards and Commission update to Town Council, it was requested that the Transportation Commission review the current Neighborhood Traffic Management Program (NTMP). The current version of the NTMP was approved by Town Council on June 2, 2014. Each commissioner has received a copy of the NTMP in their orientation documents and is attached to this agenda item. Staff requests each commissioner review the NTMP. An overview of the NTMP will be provided at the meeting and welcome any comments that the commission may have. Any changes to the NTMP will come back to the commission at a later date.

BOARD REVIEW/CITIZEN FEEDBACK: This item is for discussion and feedback from the Commission

ALTERNATIVES: This item is for discussion and feedback from the Commission.

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

1. Current NTMP Policy

DRAFT MOTION: The purpose of this agenda item is to provide information to the Transportation Commission and elicit feedback. No formal action is required.

TOWN OF FLOWER MOUND, TEXAS

RESOLUTION NO. 06-14

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, ADOPTING A PROGRAM FOR IMPLEMENTING NEIGHBORHOOD TRAFFIC MANAGEMENT IN CERTAIN NEIGHBORHOODS IN THE TOWN OF FLOWER MOUND; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, residents in several neighborhoods in the Town have concerns regarding excessive traffic volume and traffic speeds within their neighborhood; and

WHEREAS, the Town desires to establish certain parameters or criteria that may be relied upon by the Town's residents and Town staff to address neighborhood traffic problems that may exist in Flower Mound; and

WHEREAS, the decision regarding whether certain types of measures should be utilized to address neighborhood traffic problems shall fall within the sole discretion of the Town Council, only, and shall be performed on an individual case by case analysis; and

WHEREAS, by Resolution 34-06, The Town previously adopted a Neighborhood Traffic Management Policy; and

WHEREAS, the Town now desires to replace its Neighborhood Traffic Management Policy and adopt a Neighborhood Traffic Management Program.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, THAT:

SECTION 1

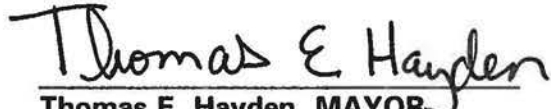
The Neighborhood Traffic Management Program attached hereto as Exhibit A is hereby adopted as the Town's official statement regarding application, eligibility criteria, responsibilities for implementation, survey procedures and funding options to address neighborhood traffic concerns or inappropriate traffic characteristics on local residential streets.

SECTION 2

This resolution shall become effective immediately from and after its passage and it is accordingly so resolved.

DULY PASSED, APPROVED, AND ADOPTED BY THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, ON THIS 2ND DAY OF JUNE 2014.

APPROVED:


Thomas E. Hayden, MAYOR

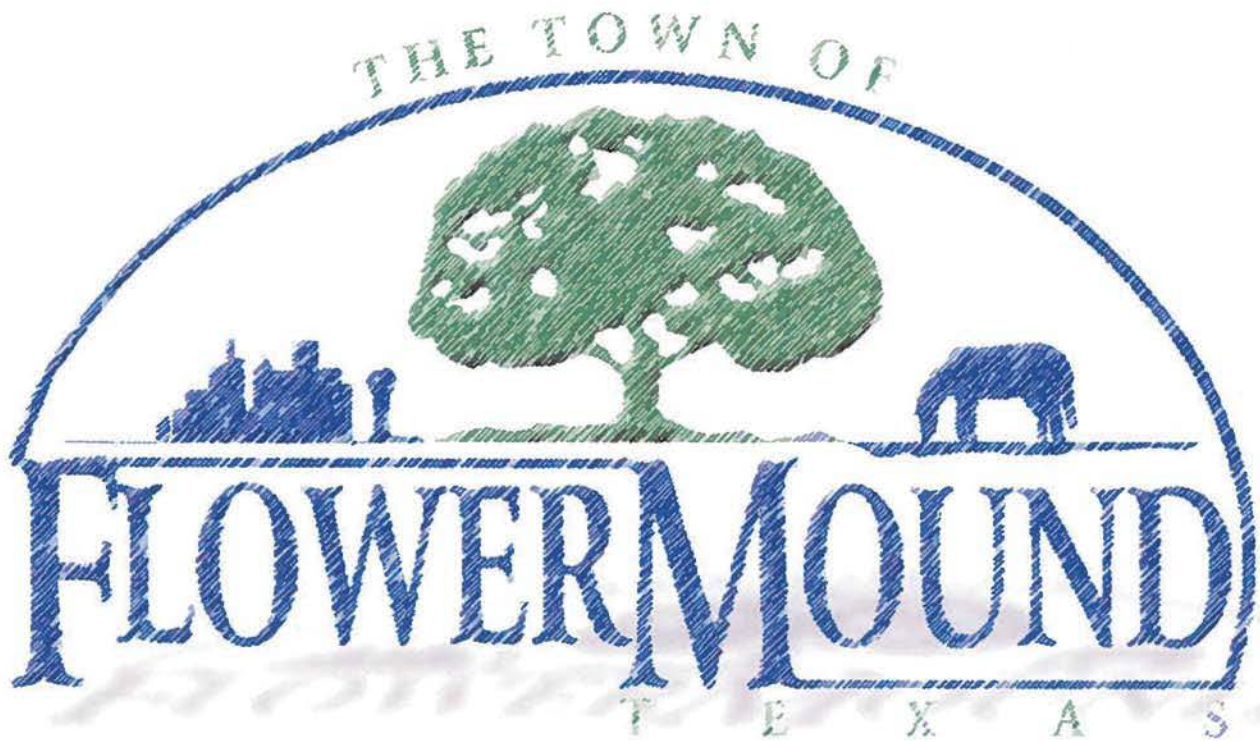
ATTEST:


Theresa Scott, TOWN SECRETARY

APPROVED AS TO FORM AND LEGALITY:


Bryn Meredith, TOWN ATTORNEY

**Flower Mound
Texas**



**NEIGHBORHOOD TRAFFIC MANAGEMENT
PROGRAM**

Town of Flower Mound
Engineering Services
2121 Cross Timbers Road
Flower Mound, TX 75028
972-874-6310
www.flower-mound.com

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NTMP clean 5 22 14.docx

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DEFINITIONS

- **85TH Percentile Speed** – Speed at which 85% of the traffic is traveling at or below. The 85th percentile speed is used as a benchmark at which most drivers are comfortable driving. It is also deemed as the reasonable, prudent and safe speed at which to drive on a roadway.
- **ADT** – Average daily traffic volume of a roadway, typically measured during a weekday.
- **Alignment** – The horizontal alignment of a roadway is comprised of curves and tangents (straightaway)
- **Appeal** – The process by which an individual, group, or entity obtains formal review of a decision.
- **Approach Volume** – The volume of traffic that approaches an intersection.
- **Arterial** – Major roadway mainly serving through-traffic; takes traffic to and from expressways and freeways; provides minimal access to adjacent properties.
- **Capacity** – The number of vehicles that can traverse a point or section of a lane or roadway during a set time period under prevailing roadway, traffic and control conditions.
- **Chicanes** – Curb extensions that alternate from one side of the roadway to the other, forming an s-shaped curve.
- **Chokers** – Narrowing of a street at an intersection, mid-block or a segment of a street in order to reduce the width of the travel way by construction of a wider sidewalk or landscape area.
- **Collector Street** – Roadway that collects and distributes local traffic to and from arterial streets, and provides access to adjacent properties within a neighborhood.
- **Decision Package** – A mechanism for Town staff to request a one-time funding request through the budget process. Town Council has approval authority.
- **Diverter** – Barriers placed diagonally across an intersection, blocking certain movements.

Exhibit A

- **Dynamic Speed Limit Sign** – Displays the speed of the approaching vehicle. May be temporary or permanent.
- **Grade** – The degree of inclination of the roadway.
- **Intersection** – Any at grade connection with a roadway, including two roads or a driveway and a road.
- **Median** – That portion of a divided highway separating the opposing traffic flows. A median may be traversable or non-traversable.
- **Neck-down/bulb out** – Physical curb reduction of the roadway width at an intersection by widening of the street corner.
- **Non-Traversable Median** – A physical barrier in a roadway or driveway that separates vehicular traffic traveling in opposite directions. Non-traversable medians include physical barriers (such as concrete barrier, a raised concrete curb and/or island, and a grass or a swale median) that prohibit movement of traffic across the median.
- **Pace speed** – A 10 mph speed range containing the largest number of vehicles.
- **Parkway** – An area between the edge of pavement and the right-of-way which is typically reserved for a landscape buffer and utilities.
- **Projected Traffic Volumes** – The number of vehicles that are expected/calculated to exist on streets after completion of the project.
- **Residential Driveway** – Provide access to a single-family residence, a duplex, or a multi-family building containing five or fewer dwelling units.
- **Roadside Friction** – Describes the density of the development adjacent to the roadway that generates traffic which effects traffic flow on the roadway.
- **Sight Distance** – The distance visible to the driver of a passenger vehicles measured along the normal travel path of a roadway from a designated locations and to a specified height above the roadway when the view is unobstructed by traffic. Measured using the American Association of State Highway and Transportation Officials (AASHTO) Policy on Geometric Design.

Exhibit A

- **Speed Cushions** – A series of three small speed humps extending across a roadway that reduces vehicle speeds, but allows for emergency vehicles to straddle them as to not slow response time.
- **Speed Hump** – A raised pavement area extending across a roadway for the purpose of slowing or discouraging traffic.
- **Stopping Sight Distance (SSD)** – The distance required by a driver of a vehicle, traveling at a given speed, to bring the vehicle to a stop after an object on the roadway becomes visible. SSD is measured using AASHTO Policy on Geometric Design guidelines.
- **Study Area** – The boundaries in which the traffic study is conducted. An example of a study area is shown in Appendix D.
- **Texas Manual on Uniform Traffic Control Devices (TMUTCD)** – State of Texas Manual that provides guidance, standards, and options for traffic control devices on public roadways.
- **Traffic Calming** – Combination of mainly physical measures that alter driver behavior by reducing speeding or cut-through traffic.
- **Traffic Circle** – A small circular island placed in the center of an existing street intersection.

CHAPTER 1

INTRODUCTION

General

Local and collector neighborhood streets are multipurpose roadways, shared by pedestrians, bicyclists, passenger vehicles, and trucks. On a majority of neighborhood streets, these various users exist harmoniously. However, traffic concerns can arise. These concerns are often related to traffic volume, vehicular speed, roadway geometry, and vehicle/pedestrian conflicts. The Neighborhood Traffic Management Program (NTMP) was created to address these traffic concerns in the residential areas of Flower Mound. The Town of Flower Mound retains the authority to install or remove traffic control or calming devices for cause independent of the guidelines and procedures set forth in this NTMP.

Goals of the Program

The primary goal of the NTMP is to design and create streets that are attractive, functional and safe. In order to meet this goal, it may be necessary to modify driver behavior through revisions to the street environment. The NTMP integrates street design with the local environment through an emphasis on community-based solutions that improve safety.

The NTMP goals are as follows:

- Promote public awareness with respect to causes and appropriate solutions for neighborhood traffic concerns.
- Identify roles of residents, resident representatives, and the Town of Flower Mound in addressing traffic-related concerns in neighborhoods and encourage neighborhood involvement as part of the solution to traffic-related concerns.
- Create clear policies and guidelines for submission of resident traffic requests and the processing of those requests by Town staff.
- Discuss advantages/disadvantages of potential solutions for traffic concerns.

There are seldom simple solutions to the problems addressed in this document. For example, the Police Department does not have the resources to issue citations for every speeding or parking violation that occurs. Additionally, the need for short

response times by emergency vehicles can be in conflict with local residents' desire to slow street traffic. These are complex issues that have to be looked at from many different perspectives to come up with balanced solutions. The Town of Flower Mound intends to establish a framework through this program that allows constructive relationships between local residents and the Town for solving traffic-related concerns in neighborhoods.

Overview of Policies and Procedures

The Town of Flower Mound receives an ever increasing number of requests each year from residents dealing with traffic-related concerns. Neighborhood traffic issues generally fall within four categories:

1. Vehicles exceeding the posted speed limit
2. Cut-through traffic
3. Parked cars impeding the traffic flow
4. Occurrence of accidents or "near" accidents.

The Town of Flower Mound uses the following traffic management strategies for handling identified traffic concerns such as those mentioned above:

- Establishing (revising) and enforcing general laws and ordinances pertaining to speed limits, intersection control and parking regulations.
- Educating residents to better understand the causes of traffic concerns, potential solutions to those concerns, and the advantages/disadvantages of implementing these solutions
- Installing traffic control devices that provide specific regulatory, warning, or guide messages to motorists judiciously and in conformance with the TMUTCD.
- Installing traffic calming design features that manage the physical movement of vehicles or pedestrians within the roadway or within a neighborhood when the first three strategies above have proven ineffective.

When a potential traffic-related concern is reported to the Town or is observed by Town staff, the first step that the Town will take is to quantify the extent of the situation. Depending on the site-specific circumstances, one or more of the

following pieces of information may be required to fully assess the situation: traffic volume counts, traffic speed survey, accident records, and reports of problems from Town staff (i.e. traffic citations, difficulties responding to emergency calls, and/or enforcement requests).

To be considered for the NMTP, an initial request for the mitigation of an adverse traffic-related issue must originate by the submittal of an application signed by at least 5 households or 10% of the households, whichever is greater, whose property is abutting the requested street segment. The application must state the reason for the application, and the street(s) being considered.

This information will be used to evaluate traffic requests and identify potential solutions to the nature of the concern.

If speeding is reported, staff will review the collected information and verify the speed limit, which is set by Town ordinance unless set by prima facie speed limit by the State. The next step is to evaluate the concern in terms of the traffic management strategies described previously. The Police Department would be informed of the speed data and determine if an increased enforcement presence should be attempted. The installation of specific warning, regulatory, and/or guidance signage or markings could also be considered by the Engineering Services Division at this time.

If actions described above are not effective in reducing the speeding concern, the Engineering Services Division will consult with the neighborhood representative to help establish a Neighborhood Traffic Volunteer Program. In this program, volunteers would pass out flyers around the neighborhood informing residents of the specific traffic concerns that are occurring and behaviors that are needed to correct the concerns. Any flyers will be prepared by the neighborhood representatives with assistance from the Engineering Services Division.

The site could be eligible for installation of traffic calming devices to attempt to reduce vehicles speeds. The specific guidelines are presented in Chapter 4. In general, for a specific device to be installed, the following must occur:

1. The Engineering Services Division must determine the appropriate devices for the identified concern.
2. The Engineering Services Division must determine where the proposed device should be located.

3. Residents potentially affected by the installation must indicate that they support the proposed location and installation of the devices through a survey/petition prepared by the Town of Flower Mound. The survey/petition could be distributed by a neighborhood representative or mailed out by the Town. The survey will also contain information about any funding responsibilities the residents have for the installation of the device.

CHAPTER 2

TRAFFIC CONTROL DEVICES

General

The Town of Flower Mound has the authority to set speed limits, locate intersection controls (stop signs and traffic signals), and designate areas for parking restrictions by ordinance or Town Manager Communication depending on the type of control. The Engineering Manager or designee recommends traffic control devices which are in compliance with the TMUTCD. The TMUTCD provides statewide standards, guidance, and options for traffic control devices on public roadways. To be effective, traffic control devices should meet five basic requirements:

1. Fulfill a need
2. Command attention
3. Convey a clear, simple meaning
4. Command respect from roadway users
5. Give adequate time for proper response

The decision to use a traffic control device should be made on a basis of either an engineering study or the application of engineering judgment.

Speed Limits

According to the TMUTCD, the following factors should be considered in an engineering investigation to determine the proper speed limit:

1. Road surface characteristics, shoulder condition, grade, alignment, and sight distance
2. The 85th percentile speed and the pace speed
3. Roadside development and culture and roadside friction
4. Safe speed for curves or hazardous locations within a zone
5. Parking practices and pedestrian activity

6. Reported accident experience for a recent 12-month period.

In accordance with Texas motor vehicle laws and Town ordinance, the prima facie speed limit on Town streets is 30 mph, unless there is a specific ordinance that designates a different speed limit on a street. The typical Flower Mound residential street is 30 mph. However some streets have been lowered to 25 mph that are within $\frac{1}{4}$ mile of a school property or temporarily within $\frac{1}{4}$ mile of a major construction project. Other streets may have been lowered through an exception to the $\frac{1}{4}$ mile boundaries. Other streets have been lowered to less than 25 mph based on the characteristics above.

The Texas Department of Transportation (TxDOT) sets speed limits on State-maintained roadways within the Town. The speed limit in public alleys has been designated as 10 mph as per the Town's code of ordinances. The Town generally will sign the entrance to a subdivision with the legal speed limit. If all of the streets are 30 mph, the speed limit may not be signed as this is the prima facie speed limit and not required to be signed.

The Engineering Services Division, through the assistance of the Public Works Department, can determine if a speeding problem exists by conducting a traffic study. A speeding problem is indicated on a residential street if the 85th percentile speed is equal to or greater than 5 mph over the posted speed limit. If a speeding concern is determined from the traffic study, the following three steps may be taken to address the problem:

1. The Police Department will be informed of the problem and increased enforcement of the existing speed limit may be implemented. The Police Department may deploy their radar trailers as well.
2. The Engineering Services Division will determine if additional signage is needed, such as speed limit, warning signs, or pavement markings. Engineering Services Division may request a radar trailer also be deployed. Guidelines for the installation of signage and markings are discussed later in this chapter.
3. The Engineering Services Division will consult with the neighborhood representatives, generally set up by the Homeowners Association (HOA) to set up a Neighborhood Traffic Volunteer Program. Details of this program are discussed in Chapter 3.

A street will be eligible for reevaluation of the speed limit on an annual basis or as changing roadway conditions dictate. All traffic studies will be conducted in accordance with established engineering practice and guidelines.

Keep Kids Alive Drive 25 Program

This program is a non-profit organization founded in 1998 in Omaha, Nebraska and is a safety campaign educating neighborhood residential drivers to observe the speed limit. Neighborhood residents can purchase the speed limit signs through the Keep Kids Alive website, www.keepkidsalivedrive25.org/, and have the signs installed on their private property and not in the right-of-way. The 25 mph informational signs will not be enforceable.

Intersection Controls

Intersection controls establish the right-of-way for motorists, improve traffic flows, and reduce intersection delays. Examples of intersection control include yield signs, stop signs, traffic signals, and turn prohibition signs. The TMUTCD has very specific guidelines and criteria for the proper use and placement of intersection controls. For instance, the TMUTCD states that stop signs should not be used for speed control.

Requests for review of intersection controls will be referred to the Engineering Services Division. A traffic study will be conducted to determine if a change in traffic controls is warranted at an intersection using the criteria in the TMUTCD. The traffic study will include the measurement of traffic volumes on all approaches, sight distance, motor vehicle delay, and accident records for the intersection. If the Engineering Services Division determines that changes to the controls at an intersection are warranted, appropriate action will be taken.

Parking Restrictions

Traffic concerns can also be caused by parking practices. For instance, traffic around schools can be problematic if motorists double park or stand in driveways while dropping children off or picking them up. Parking restrictions may become necessary to keep streets open for emergency vehicles, or address sight visibility concerns.

Most residential streets are designed to have on-street parking on both sides of the street and one through traffic lane in the center. On-street parking has an added benefit of lowering traffic speeds on residential streets. Wide open streets tend to encourage drivers to drive more quickly.

Requests for parking restrictions will be referred to the Engineering Services Division. The Engineering Services Division will examine the situation and consult with the Public Safety Departments to determine if emergency service vehicles have been experiencing problems or if potential problems exist.

Warning and Guide Signs

Most traffic controls involve the use of signs (for example, stop signs, no parking signs, speed limit signs). In addition, a number of warning and guide signs, such as "Dead End," "No Outlet," or street name signs are also available for use by the Town. The Town of Flower Mound complies with the TMUTCD for proper size, pattern, and location of all traffic signs.

As mentioned in the Speed Limits section of this Chapter, the Town of Flower Mound does not place speed limit signs on all streets because sign installation and maintenance are costly, signs can distract from the aesthetic appeal of a neighborhood, and the overuse of speed limit signs limit their usefulness. The Town of Flower Mound Engineering Services Division must carefully examine each request for signage to determine if it complies with the TMUTCD.

Request for installation of traffic signs will be processed in the order they are received and as resources become available to investigate and perform the traffic study.

Pavement Markings

Pavement markings enhance roadway delineation. The addition of audible and tactile features such as centerline stripes or raised reflective buttons alert the driver of his/her path.

Requests for installation of pavement markings will be processed in the order they are received and as resources become available to investigate and perform the traffic study.

CHAPTER 3

RESIDENT ROLES IN THE PROGRAM

Goals

Two of the goals of the Neighborhood Traffic Management Program are:

1. Promote public awareness as to the causes of and appropriate solutions to neighborhood traffic problems.
2. Encourage residents to take an active role in achieving the solutions for neighborhood traffic problems.

Neighborhood Traffic Volunteer Program

Upon completion of the traffic study, a Town representative will review the findings of the study with the neighborhood representatives. If remedial action is recommended, a Neighborhood Traffic Volunteer Program (NTVP) may be formed. If the neighborhood has an already established HOA, the HOA will serve as the NTVP.

The intent of the NTVP is to assist in solving of traffic problems within the neighborhoods. The most successful programs are a shared effort with all the parties involved. The main responsibility of the neighborhood volunteers will be to pass out information about the specific traffic problems and, if applicable, how neighborhood residents can help to correct the concerns.

Surveys

Circulation of surveys is an effective method to gauge neighborhood support for a change in traffic control. When streets are to be physically altered by a traffic calming project, the Town or neighborhood representatives will pass out a two part survey prepared by the Town. The survey must be distributed to potentially affected residents to determine the level of support for the proposal.

The survey will detail what devices are under consideration, their proposed locations, the potential advantages and disadvantages of the device, and what funding is required from the neighborhood. Completed surveys will be returned to the Town of Flower Mound for validation and further processing. Survey requirements are discussed in detail in Chapter 4.

Requests for removal of traffic calming devices must follow the same survey process used by the residents for installation of the traffic calming device.

Funding for Installation of Traffic Calming Devices

When the installation of a traffic calming device is determined to be appropriate under the NTMP guidelines, the neighborhood will be responsible for providing any required funding in the event the Town has not appropriated sufficient funds for installation. The level of neighborhood funding participation is determined on a case by case basis depending on the cost of the device and the amount of Town funds available for the Project. If sufficient Town funding is not available, a Decision Package will be submitted for the next fiscal year to pay for installation. In the alternative, the neighborhood that is affected may choose to pay the necessary costs to install the traffic calming device; however, if the neighborhood is unwilling or unable to pay such costs, the project will be put on an approved list until sufficient Town funding becomes available.

The cost of the transportation engineering studies and maintenance of the traffic calming device is the responsibility of the Town, excluding any landscaping. Landscaping will be the responsibility of the HOA or individual property owner.

CHAPTER 4

TRAFFIC CALMING DEVICES

General

Traffic calming devices are physical measures that alter driver behavior, and improve conditions for the non-motorized street users. Traffic calming devices are intended to be self-enforcing. There are numerous devices in use around the world, such as speed cushions, speed humps, traffic circles, roundabouts, and chokers. Appendix A contains many examples of traffic calming devices, lists some device specific criteria which go beyond the general requirements of this chapter, addresses some advantages and disadvantages for each device, and gives approximate costs for installing each device.

The Town of Flower Mound receives numerous requests for installation of traffic calming devices. Neighborhood traffic concerns reported to the Town of Flower Mound will be processed as detailed in the preceding chapters. Only when the Engineering Services Division determines that the installation of a traffic calming device is appropriate will the following guidelines in this chapter be applicable.

Overview

The following factors should be considered prior to the installation of any traffic calming device:

1. Impact on vehicles, motorcyclists, bicyclists and pedestrians
2. Drainage patterns
3. Vehicular speeds and volumes
4. Other streets or alleys from diverted traffic
5. Emergency response vehicles
6. Street maintenance activities
7. Neighborhood support of the device

Traffic calming devices installed in public streets are designed to not inflict damage to passing vehicles or cause drivers to lose control of their vehicles if they are driving at a reasonable speed for the conditions.

Eligible Streets

The first step in the device installation process is for the Engineering Services Division to determine whether a specific street is eligible for consideration. Streets meeting the following criteria shall be considered for traffic calming device installation:

1. The streets are paved and constructed on dedicated right-of-way.
2. The property adjacent to the street is either wholly or primarily residential.
3. The street is not adjacent to open space, parks, public school grounds, etc. where drive around problems are likely. (See Appendix B for examples of drive around problems.)
4. The street is not scheduled to be repaired or reconstructed within the next two years in accordance with the Town's Capital Improvement Program.
5. The street is not designated as a primary emergency route by the Public Safety Departments unless those departments grant an exception.
6. The street is not designated as a thoroughfare street on the Town of Flower Mound's most current Thoroughfare Plan. (Appendix C contains a copy of the Thoroughfare Plan and will be updated as the Town approves new Thoroughfare Plans.)

Streets that meet the six criteria listed above shall also meet one of the following volume and speed criteria to be eligible for a traffic calming device installation:

- a. The street has an ADT of between 500 and 2,500 vehicles per day;

or

- b. The 85th percentile speed of vehicles traveling on the street exceeds the posted speed limit by at least 5 mph.

Location of Devices

The locations for traffic calming device installation are subject to the following conditions, as determined by the Engineering Services Division:

1. Adequate stopping sight distance

Adequate sight distance must exist at the desired location to safely accommodate traffic operations after device installation.

2. Adjacent resident concurrence

A traffic calming device shall only be located adjacent to or within 100 feet, as measured along the right-of-way, of a property owner that approves the placement of the device.

3. Distance to driveways, alleys, streets or other devices

Traffic calming devices shall be located at least 20 feet from the nearest driveway or intersecting alley segment, or 100 feet of an intersecting street.

Spacing of devices will be determined by the Engineering Services Division. Some device specific spacing criteria are listed in Appendix A. For example, street speed cushions should typically be installed no closer than 300 feet to an adjacent speed cushion.

4. Street Steepness

Some devices, such as speed cushions, cannot be installed on steep streets. The grade of street must be less than 6%

5. Street alignment

Traffic calming devices will not be installed in locations where horizontal or vertical curves could cause a vehicle traveling at a prudent speed to lose control when traversing the device.

6. Drainage

Traffic calming devices may have a negative effect on storm water drainage. Care must be taken to ensure that the device does not cause an existing drainage problem to worsen or create a new and unacceptable drainage problem.

Survey Procedure

Resident support is a major factor for traffic calming device installation. When the Engineering Services Division finds that a device is appropriate and meets all of the standards above, residents potentially affected by the installation must also indicate that they support the proposed location and installation of the device through two surveys prepared by the Town. The scope of the survey process is as follows:

Survey Area

1. Survey Area 1 shall include all single family homes whose front, rear, or side yard adjoins the street or alley segment in which a proposed device would be located, as well as those homes which adjoin streets or alleys on which traffic may be diverted if the proposed traffic calming device is installed.
2. Survey Area 2 shall include all homes on the street or alley segment in which a proposed device would be located. This is to indicate support for the installation of the proposed devices adjacent to or in front of their home.
3. The Engineering Services Division will determine the two required survey areas. (See Appendix D for an example of how a survey area will be determined.)

Survey Form

- A survey form will be provided by the Town for the collection of signatures. This form will include a brief description of the request, traffic operation considerations, and instructions to the residents.
- For each street address included in the survey area, the following information must be included: street address, printed name of resident, signature of resident, and a preference (SUPPORT, OPPOSE, NO PREFERENCE).

- Up to three (3) months will be permitted for the collection of necessary signatures and survey submission to the Town. If the necessary number of signatures is not collected within this time period, a new survey must be completed.

Required Percent of Support

- At least **80%** of the homes in both survey areas must indicate support of the proposed traffic calming device (100% for full street closure). Only the "Support" preferences on the survey will be included in the calculation of the required level of support. The "Oppose" or "No Preference" indications will not be used in this calculation. If conflicting votes are received from individuals in a single home, the entire home will be registered as a vote opposed to installation.
- The Engineering Services Division will review the submitted survey to verify that the required survey area was included and to determine that at least **80%** of the homes support (100% for full street closure) the installation.

Town Council Approval

After the Engineering Services Division has determined that the installation of a traffic calming device is appropriate, and the survey requirements have been met, the item will be presented to the Transportation Commission for recommendation and then to the Town Council for final approval. No traffic calming device may be installed without the approval of Town Council.

Project Implementation

In order for the installation of a traffic calming device to occur on a street the following actions must occur:

1. When the Town Council has approved the installation of a traffic calming device, the Engineering Services Division will place the street on a list of approved traffic calming projects. The Town will send the neighborhood representative a letter advising him or her of the approved installation request. In the event the Town has insufficient funding for installation of the project, the letter will request that the neighborhood's share of the installation cost be paid to the Town and will include the name, phone number and email address of the neighborhood representative who will be responsible for collecting the funds.

2. If the neighborhood chooses to pay its funding share for the project, the Town will submit an invoice to the neighborhood representative that will reflect the amount needed. The neighborhood representative will be responsible for submitting a cashier's check to the Town. Upon receipt of the neighborhood's full payment, the traffic calming project will be installed as scheduling permits. If the neighborhood is unwilling or unable to pay its funding share, the project will be delayed until Town funds are available, as described in Chapter 3.
3. The cost for each traffic calming device will be based on the actual cost for a typical installation, including any necessary pavement markings and/or signs. The cost will be established by the Engineering Services Division and will reflect current costs. Appendix A contains a number of typical traffic calming devices and lists the approximate cost of each device, as of the date of publication.

Appeals

An affected neighborhood may file an appeal of the Engineering Services Division's initial determination that a traffic calming device is not yet warranted or appropriate. The appeal shall be submitted in writing with an explanation why the traffic calming device installation process should be initiated. The neighborhood shall designate a representative to present this appeal at the next available Transportation Commission meeting. The Transportation Commission shall make a recommendation to the Town Manager for a decision.

Appeal Guidelines

The following appeal guidelines will be used:

1. Requests for appeals shall be submitted to the Engineering Services Division and shall specify why an appeal is being requested.
2. The appeal will be set on the next available Transportation Commission meeting (Normal meeting dates are the 2nd Tuesday of the month).
3. Recommendation from the Transportation Commission will be forwarded to the Town Manager for a decision.

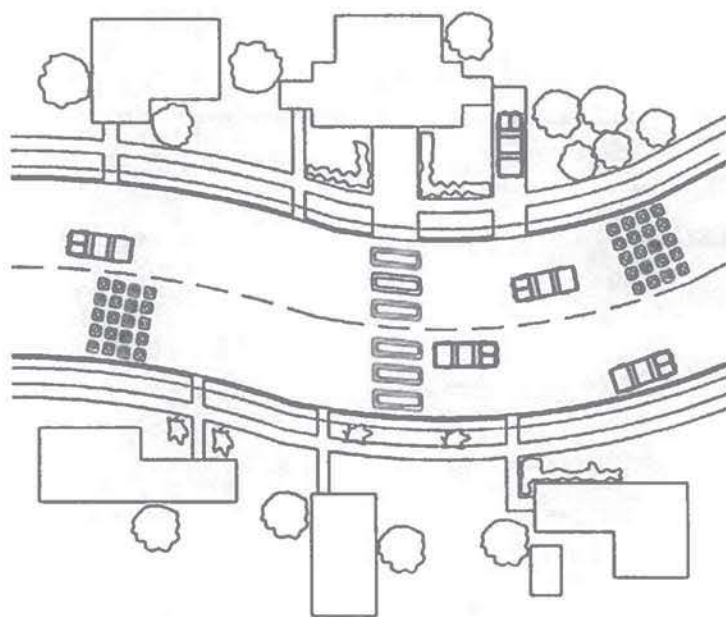
4. A formal response to the appeal request will be processed by the Town Manager. The decision of the Town Manager shall be final; provided, however that changing traffic circumstances or the failure of other traffic mitigation strategies may eventually warrant initiation of the traffic calming device process.

Removal and Alteration of Traffic Calming Devices

The process for requesting traffic calming device removal or alteration is the same as the process for installation. A traffic engineering study must be performed to determine the need for removal or alteration. A survey must be submitted to the Town with at least **80%** of the homes in the survey areas supporting the requested removal or alteration. The neighborhood's share of the cost of removal/alteration of the device will be determined in the same manner as a new installation.

APPENDIX A

DETAILS FOR SPECIFIC TRAFFIC CALMING DEVICES



RUMBLE STRIPS

Description:

- Dots or strips are glued to the pavement to create a strip that causes the vehicle to rumble as it traverses through them.

Purpose:

-To alert motorists to unusual conditions ahead.

Cost:

-Highly variable. Approximately \$1,000 - \$5,000 per location.

Locations:

- 30 mph posted speed - 200' in advance.
- 40 mph posted speed - 325' in advance.

Positive Aspects:

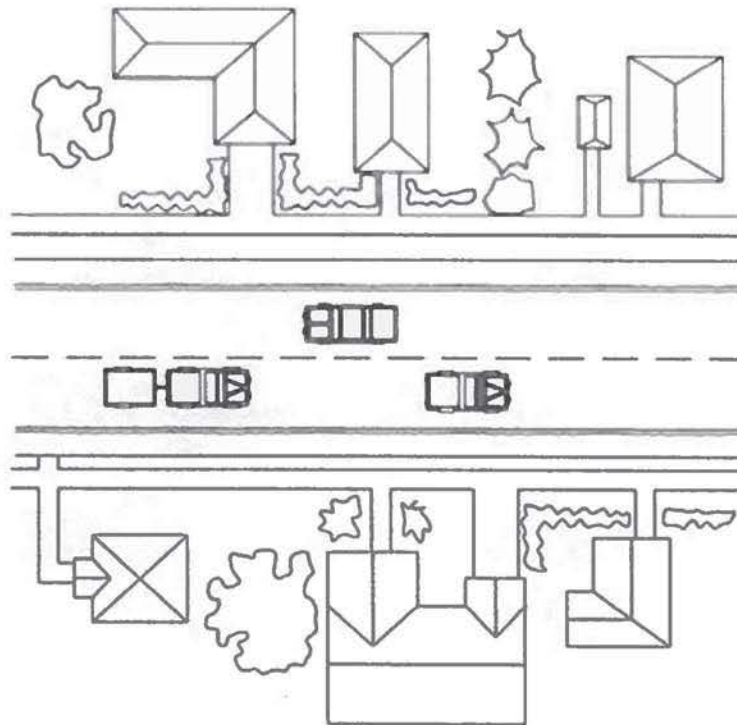
- Vehicles may be slowed down up to 5 mph.
- Driver's attention is alerted to heighten safety.
- Low cost installation than can easily be removed or changed.

Negative Aspects:

- Very high level of noise pollution for adjacent residents.
- High maintenance is required to reattach dots or strips to the pavement.

A-1

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NARROWING LANES

Description:

– Striping is used to create narrow 10 feet wide lanes. This gives drivers the feel of a narrow street that does not lend itself to high speeds.

Cost:

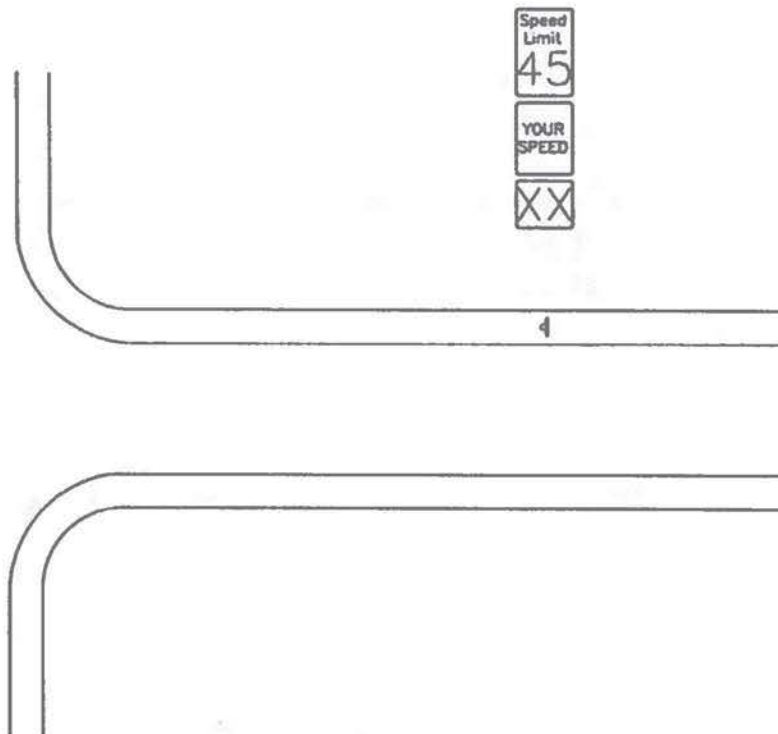
– The costs vary depending on the length of street, but are not anticipated to exceed \$3,000 per mile.

Positive Aspects:

- Changes can be quickly implemented.
- The striping can be easily modified if paint is used.
- Speed may decrease and safety is improved through the provision of positive guidance to drivers.

Negative Aspects:

- Would increase regular maintenance.
- Residents do not always perceive striping is an effective tool for speed reduction.
- Cost of resurfacing residential streets will increase.



DYNAMIC SPEED SIGNS

Description:

- Dynamic Speed Signs display the speed of the oncoming vehicle to make motorist's aware when driving above the speed limit.

Cost- Approximately \$3000 per sign

Positive Aspects:

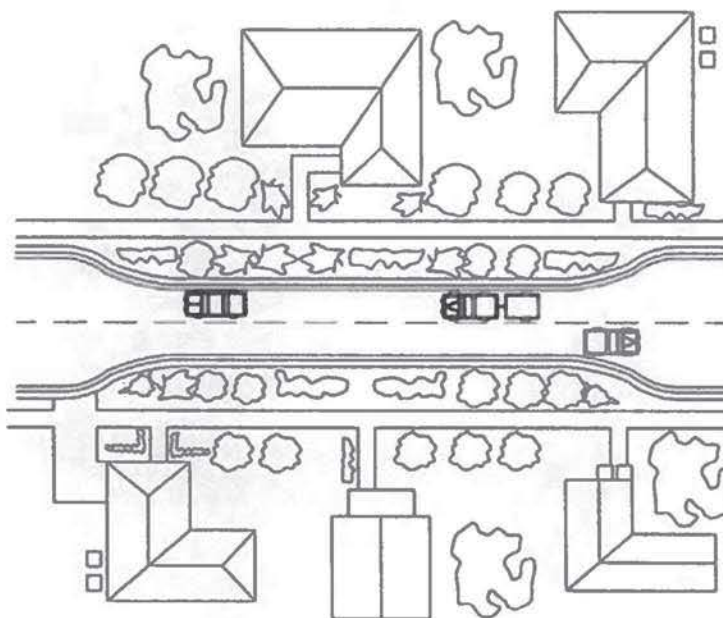
- Can be quickly implemented.
- slows vehicle speeds.

Negative Aspects:

- Would increase regular maintenance.
- Signs may detract from aesthetic quality.

A-3

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CHOKERS

Description:

- Narrowing of a street at an intersection, mid-block or a segment of a street in order to reduce width of the traveled-way by construction of a wider sidewalk or landscape strip.

Cost:

- Highly variable, Approximately \$5,000 - \$20,000 per location.

Positive Aspects:

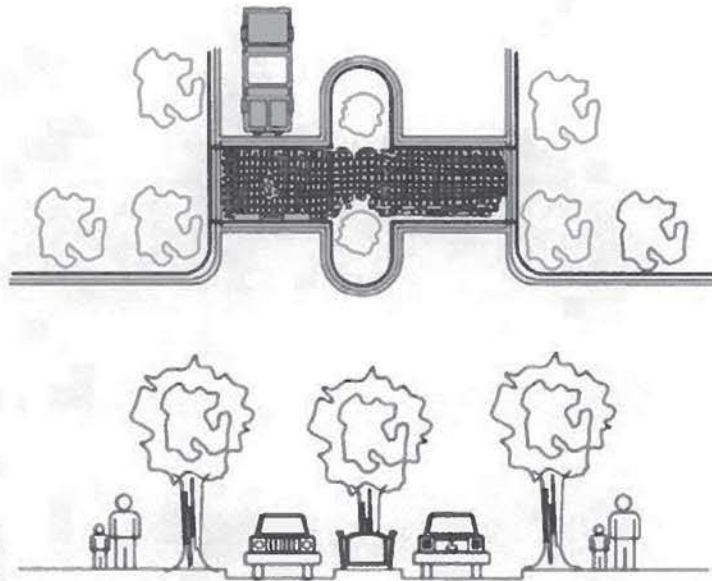
- Slight slowing is normally the result.
- Shorter pedestrian crossing distances and better motorist-pedestrian visibility of each other.
- Creates added streetscape area for pedestrians and/or landscaping.
- Can discourage truck entry.
- Allows signs to be placed closer to driver's cone of vision.

Negative Aspects:

- Potential obstacle for motorist to run into.
- May impede bicycle mobility and safety.
- Can impede legitimate truck movements.
- May require reworking of surface drainage.

A-4

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GATEWAYS

Description:

- A special entrance feature, similar to a choker, that narrows a street at the intersection in order to reduce width of the traveled-way. This is not a gate. Chokers are usually located within the block or at intersections. Gateways are considered more dramatic and provide identity to a neighborhood. The exact configuration of the gateway treatment will depend upon the location of the gateway, i.e., conflicts with driveways. Medians can also be added to street to slow turning movements and enhance the street.

Cost:

- Highly variable, Approximately \$5,000 - \$15,000 per location.

Positive Aspects:

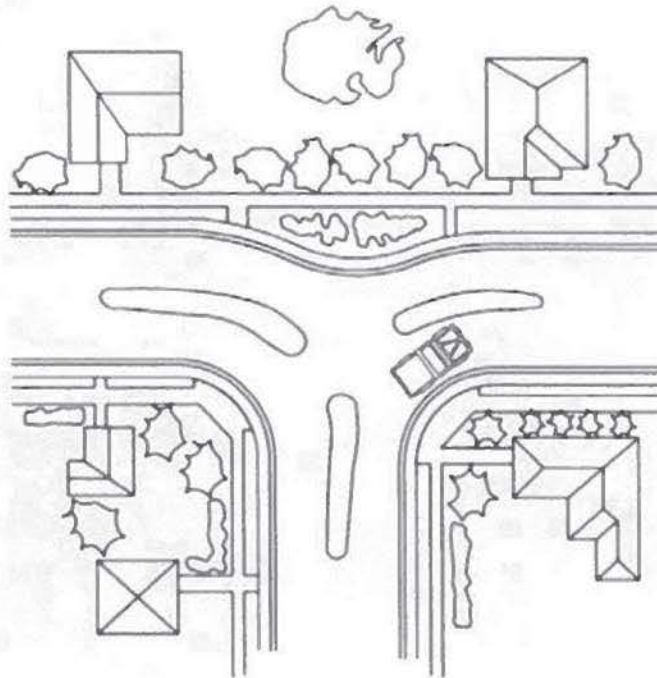
- Creates an identity to a neighborhood.
- Creates added streetscape area for landscaping or monuments.
- Can discourage truck entry.
- Allows signs to be placed closer to driver's cone of vision.

Negative Aspects:

- Can impede legitimate truck movements.
- Increased maintenance costs.

A-5

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INTERSECTION CHANNELIZATION

Description:

- T-intersections are channelized so that vehicles are not traveling in a straight path. This has the effect of slowing vehicles down.

Cost:

- Approximately \$30,000 per location.

Positive Aspects:

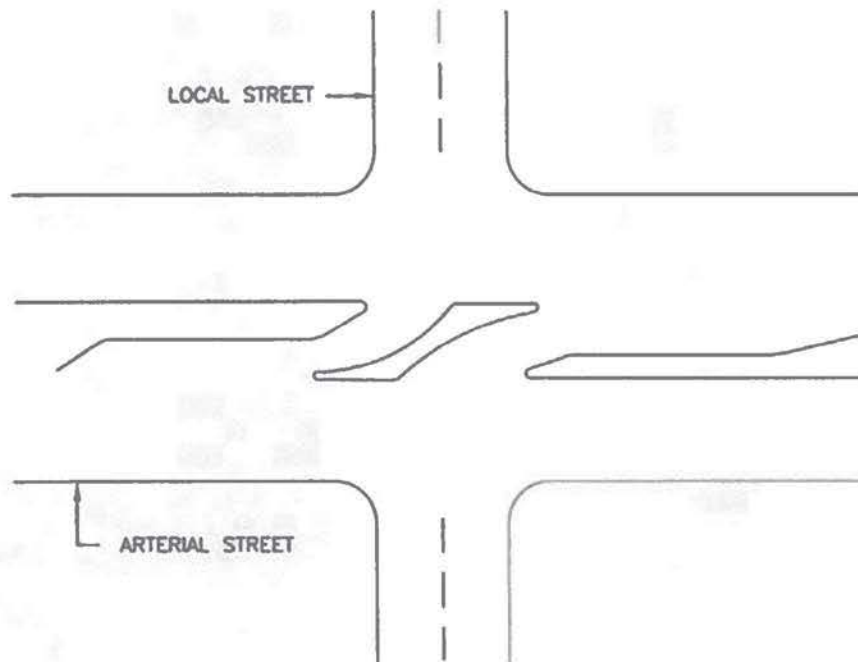
- Slows vehicle speeds.
- No significant impedance of fire and transit service.

Negative Aspects:

- Landscaping and signing/stripping maintenance will be required.
- Loss of on-street parking will occur.

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MEDIAN BARRIER

Description:

— A physical barrier on a non-local street which can effectively eliminate local street straight-through and left turn traffic across the non-local street. A median barrier can take many forms, ranging from a closely-spaced row of flexible delineator posts to a series of pre-cast curb sections affixed to the pavement to a temporarily-placed but immovable 3' high concrete barrier (K-Rail) to an asphalt/concrete curbed island with or without a decorative landscaping and surface treatment. Costs vary widely among those options. The device is also known as a "worm."

— A full median with no breaks can also be used to prohibit all left turns.

Cost:

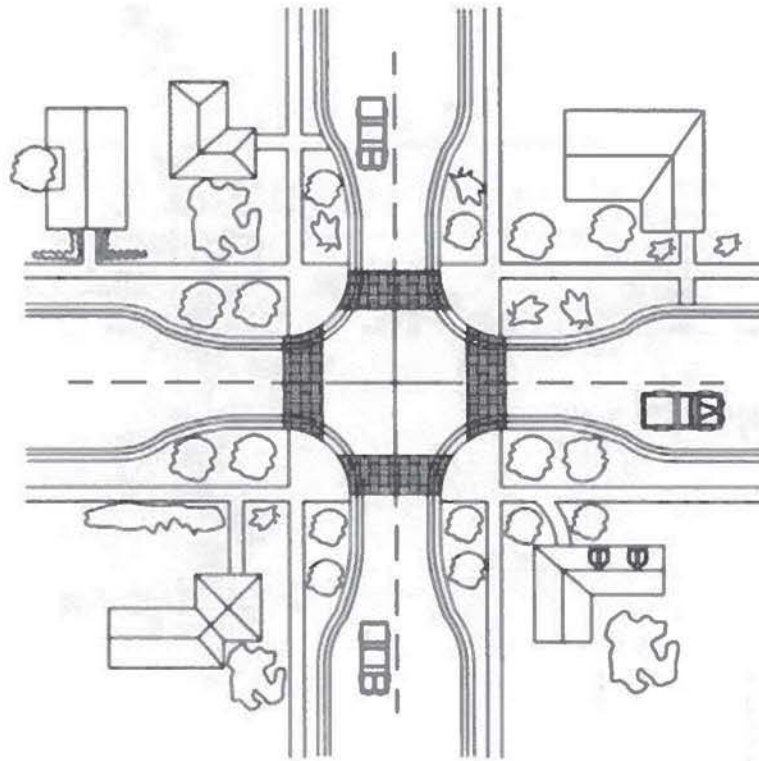
— Highly variable. Approximately \$5,000 to \$20,000 per location.

Positive Aspects:

- Makes the intersection safer by reducing the number of conflicting movements.
- Reduces local street volumes.
- Negates the possible need for future expensive traffic signal.

Negative Aspects:

- The physical barrier may shift traffic to other locations where left turn opportunities exist.
- This tool may inconvenience local residents who will be forced to drive longer more circuitous paths to reach their destination.



NECK DOWNS

Description:

- Physical curb reduction of road width at intersections by widening of street corner to discourage cut through traffic and to help define neighborhoods.

Cost:

- Highly variable. Approximately \$10,000 to \$30,000 per location.

Positive Aspects:

- May be aesthetically pleasing, if landscaped.
- Good for pedestrians due to shorter crossing.
- Can be used in multiple application.

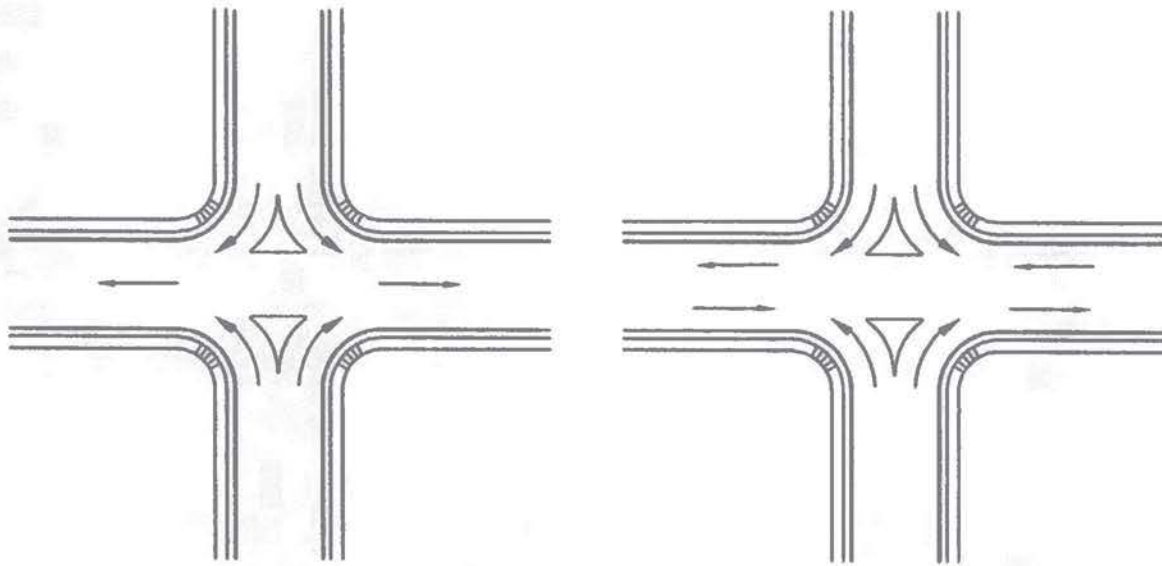
Negative Aspects:

- Increased landscaping maintenance.
- Landscaping may cause sight distance problems.

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ONE-WAY STREET(S)

Description:

- One or more streets designated as "one-way".

Cost:

- Approximately \$1,000 to \$5,000 per location.

Positive Aspects:

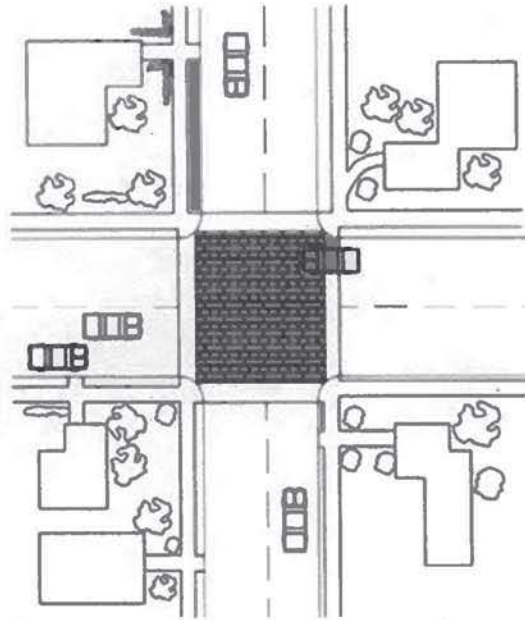
- May reduce total volume on subject street.
- Adds vehicle capacity to a street.
- Safety is inherently greater on one way segments, but care must be taken to handle intersection treatments properly.

Negative Aspects:

- Can encourage increased speeds.
- Adverse travel distance results for local residents.
- May shift diverted traffic to another street.

A-9

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RAISED INTERSECTIONS

Description:

– A raised plateau of roadway where roads intersect. The plateau is generally about 4" higher than the surrounding streets. This application is best for locations with high pedestrian volumes with significant safety concerns related to traffic speeds.

Cost:

- Approximately \$50,000 to \$100,000 per location.

Positive Aspects:

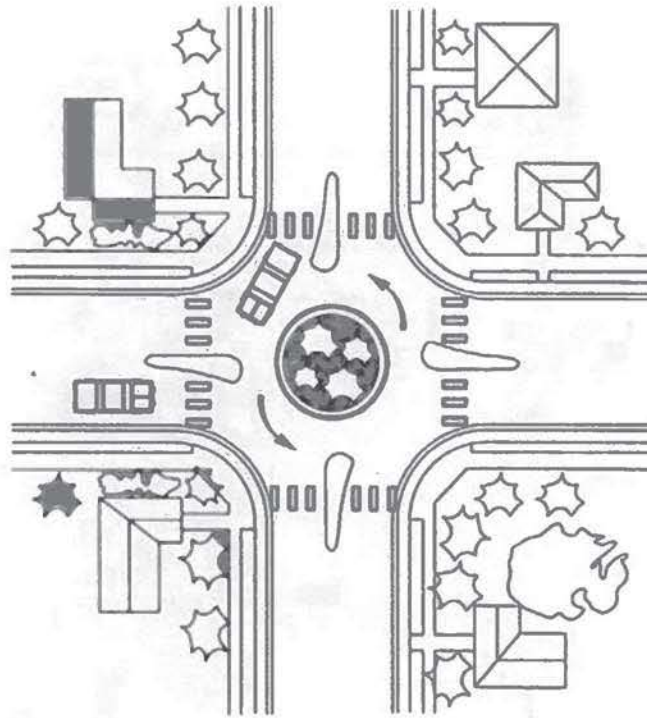
- Effective speed control.
- Aesthetically pleasing if well designed.
- Good pedestrian safety treatment.
- Can be used on higher or lower volume streets.

Negative Aspects:

- Expensive to construct and maintain.
- Affects emergency vehicle response time.

A-10

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TRAFFIC CIRCLE

Description:

- A small circular island placed in the center of an existing local street intersection. Some may also refer to this device as a "roundabout".

Cost:

- Approximately \$10,000 to \$20,000 per location.

Positive Aspects:

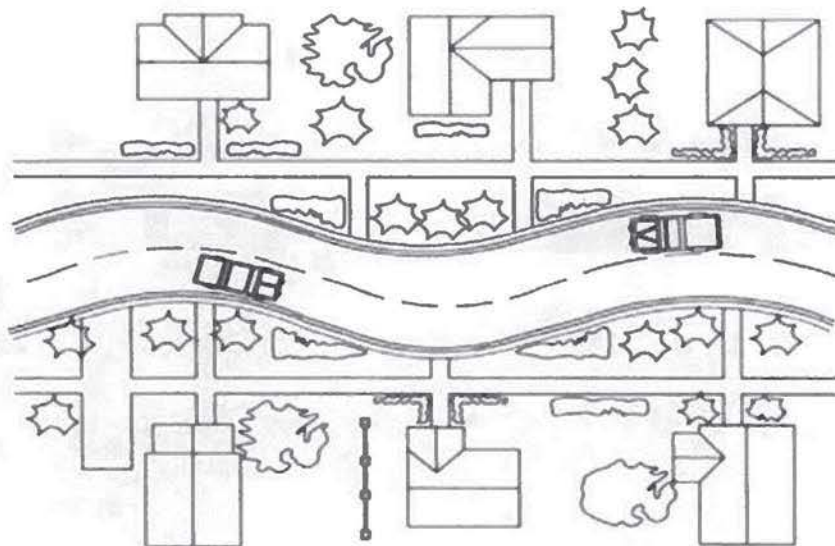
- A noticeable reduction in speeds.
- Reduces accident potential.
- Under certain conditions capacity can be increased.
- Can be used instead of stop signs.

Negative Aspects:

- Required safety signing may detract from its aesthetic quality.
- Pedestrians and bicyclists must adjust to less traditional crossing patterns.
- Some parking may be lost on approaches to accommodate vehicles' deflected paths.
- May increase accidents until drivers become accustomed to change.

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SERPENTINE

Description:

- A narrow serpentine road is created for several hundred feet using curbs and landscaping.

Cost:

- Approximately \$50,000 to \$75,000 per location.

Positive Aspects:

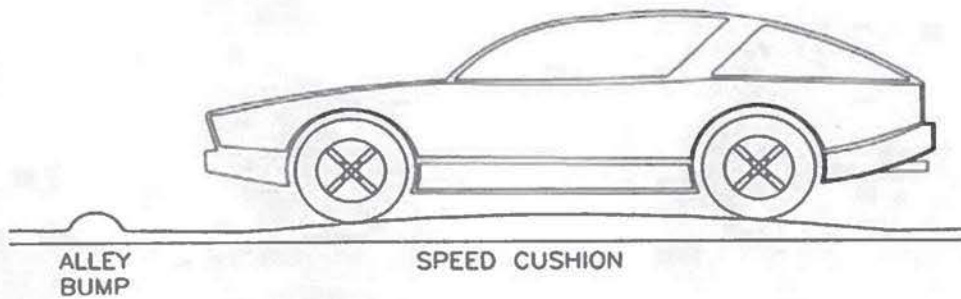
- Reduces vehicle speed.
- May reduce through traffic volumes.

Negative Aspects:

- Increased maintenance for landscaping and pavement.
- Significant loss of on-street parking.
- Most residents would have driveway affected by this type of installation.
- Fire and transit services would be affected.

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SPEED CUSHIONS

Description:

- Mounds of paving material placed across a roadway for the purpose of causing motorists to reduce their operating speed while driving on the roadway.

Cost:

- Approximately \$3,00 to \$4,000 per speed cushion.

Locations:

- Short block, single mid-block hump usually adequate.
- Longer blocks and continuous street sections, two or more humps spaced approximately 200 feet to 600 feet apart.

Positive Aspects:

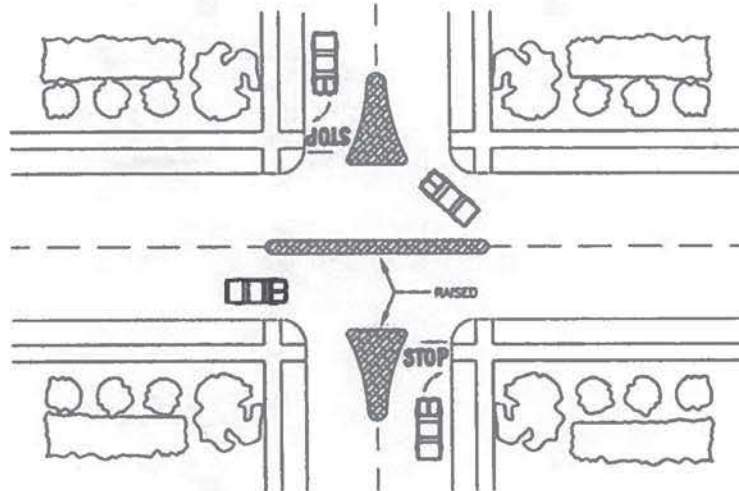
- Reduces speed.
- Can cause traffic to shift to arterial system and no longer cut through the neighborhood.

Negative Aspects:

- Can cause traffic to shift to parallel residential streets.
- Contents of vehicle can be jarred.
- Increase in noise adjacent to speed cushion.

A-13

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TURN RESTRICTION USING DELINEATORS

Description:

- Delineators glued or doweled to the pavement surface are used to create a barrier to prevent vehicles from making certain movement in and out of a local street. The delineators are typically placed along the centerline of the major collector street.

Cost:

- Approximately \$1,000 to \$10,000 depending on the number and types of delineators.

Positive Aspects:

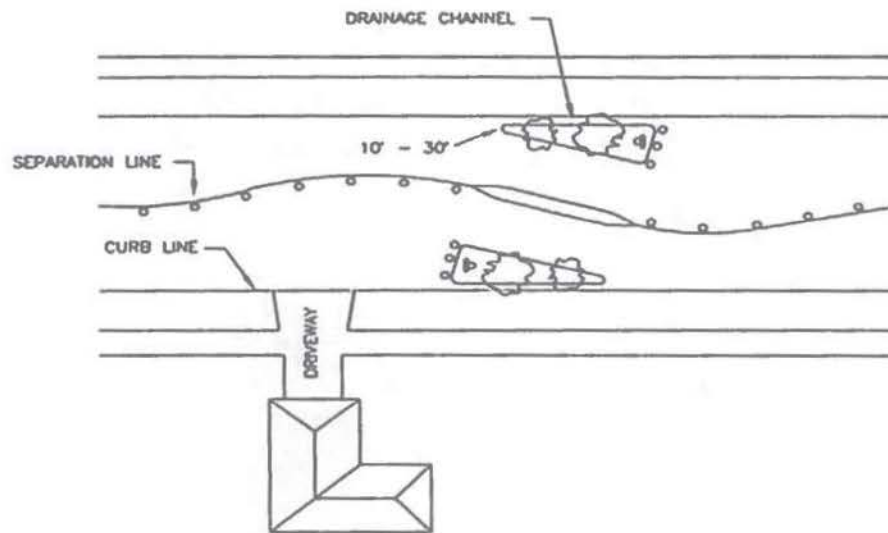
- Reduces through volume of traffic.
- Reduces rear-end and left-turn accidents at major or collector street intersection with local streets.
- Low cost installation that can easily be removed or changed.

Negative Aspects:

- Little reduction in traffic speeds.
- Could potentially make it more circuitous for residents to reach their destinations.
- May divert traffic onto adjacent streets.

A-14

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TWO LANE ANGLED SLOW POINT

Description:

— Three islands are used to create an angled path of travel for vehicles. The effect of angling the traffic path slows vehicles down. The volume of traffic may well be unaffected. The islands adjacent to the curb are typically landscaped.

Cost:

- Approximately \$10,000 to \$20,000 per location.

Positive Aspects:

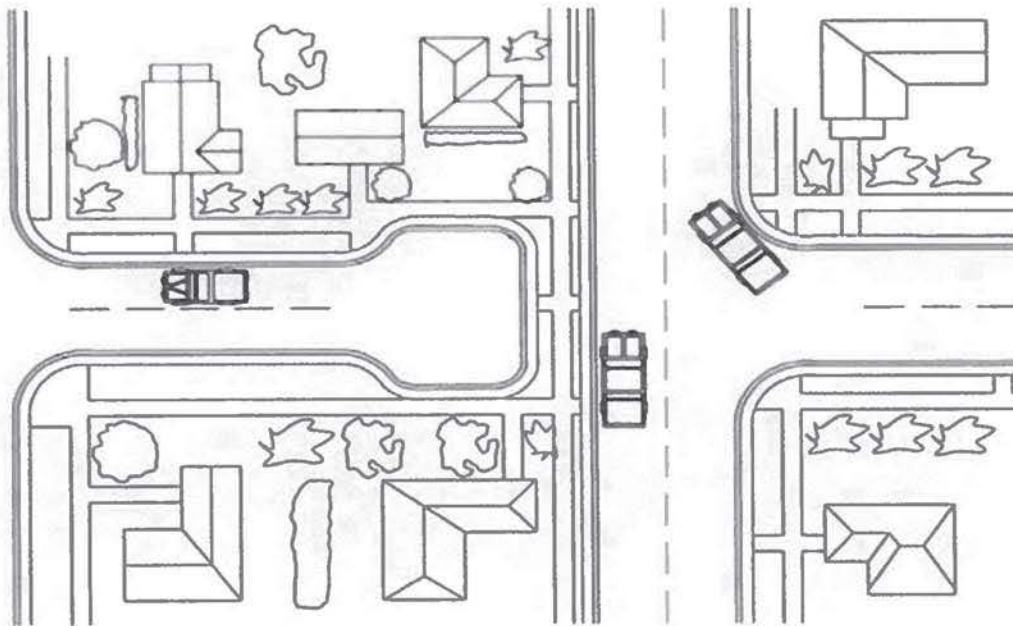
- Slows vehicle speeds.
- Fire and transit vehicles are not impeded significantly.

Negative Aspects:

- Loss of on-street parking.
- Landscaping and signing/stripping has to be regularly maintained.

A-15

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CUL-DE-SAC

Description:

- Complete closure of a street either at an intersection or at a mid-block location.

Cost:

- Approximately \$50,000 per location.

Positive Aspects:

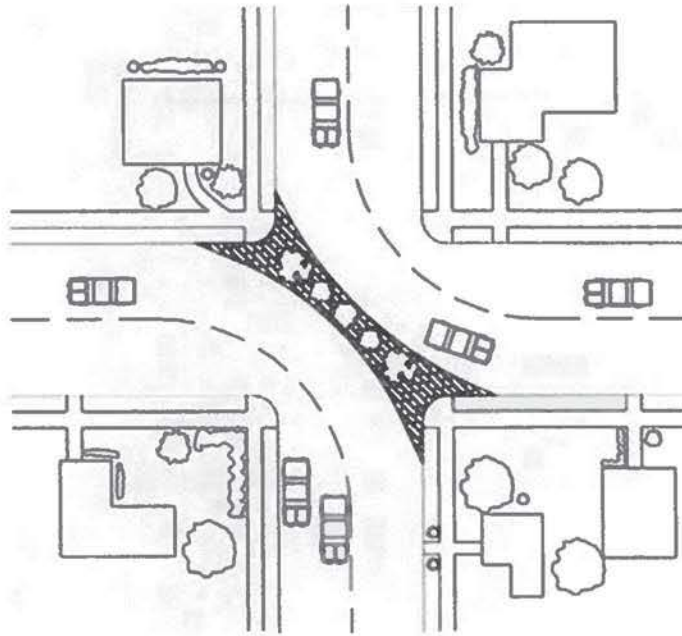
- Very effective at eliminating most of the previously speeding traffic on the block.
- Very effective at reducing volumes.
- Can be landscaped for an attractive effect to convey street discontinuity.
- Mid-block type can be effectively used where abutting land uses change.
- Improved traffic safety.

Negative Aspects:

- Can negatively affect response times for emergency service.
- In large neighborhoods, can shift a problem elsewhere unless a strategic pattern of cul-de-sacs are used.
- Can generate confusion on the part of users unless signed carefully.
- May inconvenience local residents.

A-16

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DIAGONAL DIVERTER

Description:

- Barriers between diagonally opposite corners of a 4-legged intersection, thus creating two unconnected L-shaped intersections.

Cost:

- Approximately \$10,000 to \$30,000 per location.

Positive Aspects:

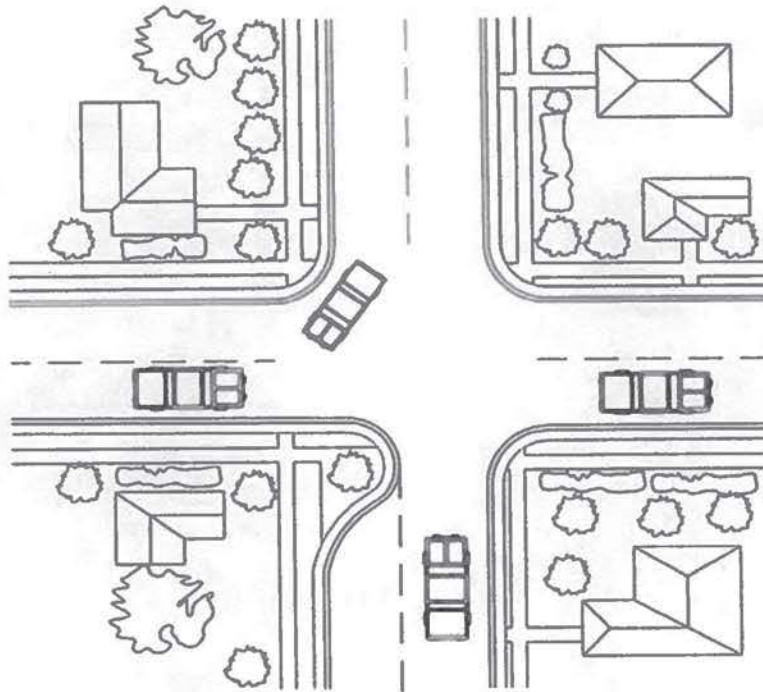
- Reduces speed.
- Can achieve a 20% to 70% reduction in volumes.
- Reduces accident potential by eliminating conflicting traffic movements.
- Advantage over complete street closure (cul-de-sac) in that it has a lesser impact on circulation, as it actually creates no dead-end streets. Local residents and service vehicles may view this as a benefit in that their routes can be more direct.
- Can be attractively landscaped.

Negative Aspects:

- In a large neighborhood, can shift problems elsewhere unless a strategic pattern of diverters is used.
- May inconvenience local residents who are forced to drive longer more circuitous paths to/from their homes.
- Can generate confusion on the part of users unless signed carefully.
- May inconvenience local residents.

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HALF CLOSURES

Description:

- The street is partially closed to traffic by the construction of a physical barrier at the entrance to the neighborhood to reduce cut through traffic.

Cost:

- Approximately \$15,000 per location.

Positive Aspects:

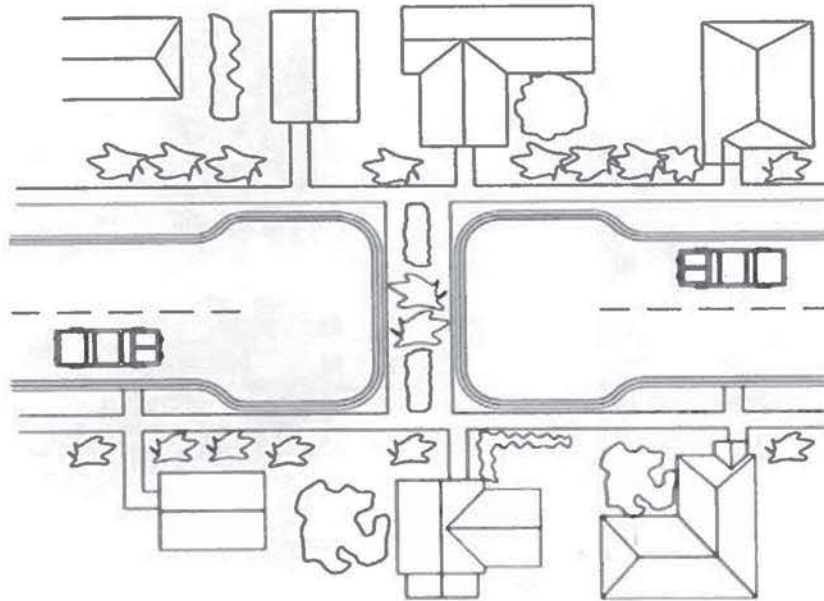
- Reduces cut through traffic.
- May reduce traffic speeds.

Negative Aspects:

- May require additional maintenance.
- Could be violated, especially in the late evening.

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MID-BLOCK ROAD CLOSURE

Description:

— Cul-de-sacs are created by closing the street mid-block using a landscaped island. Pedestrian access is provided across the island.

Cost:

- Approximately \$20,000 to \$50,000 per location.

Positive Aspects:

- Reduces through traffic volumes.
- Reduces speeds in the vicinity of the closure.

Negative Aspects:

- Traffic may be diverted onto adjacent parallel streets.
- Maintenance of the landscaped areas will have to be provided for.
- Emergency access will be impeded.
- Local residents may be forced to drive more circuitous routes.
- There is a loss of on-street parking.

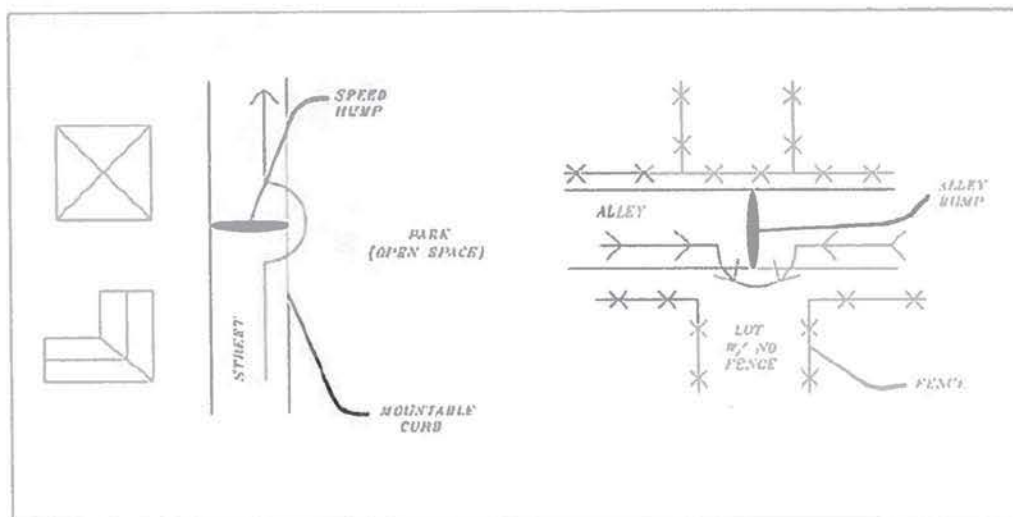
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APPENDIX B

EXAMPLES OF DRIVE-AROUND TRAFFIC

Drive-around traffic could be a potential problem with some traffic calming schemes. Two examples have been provided to illustrate the potential problems.

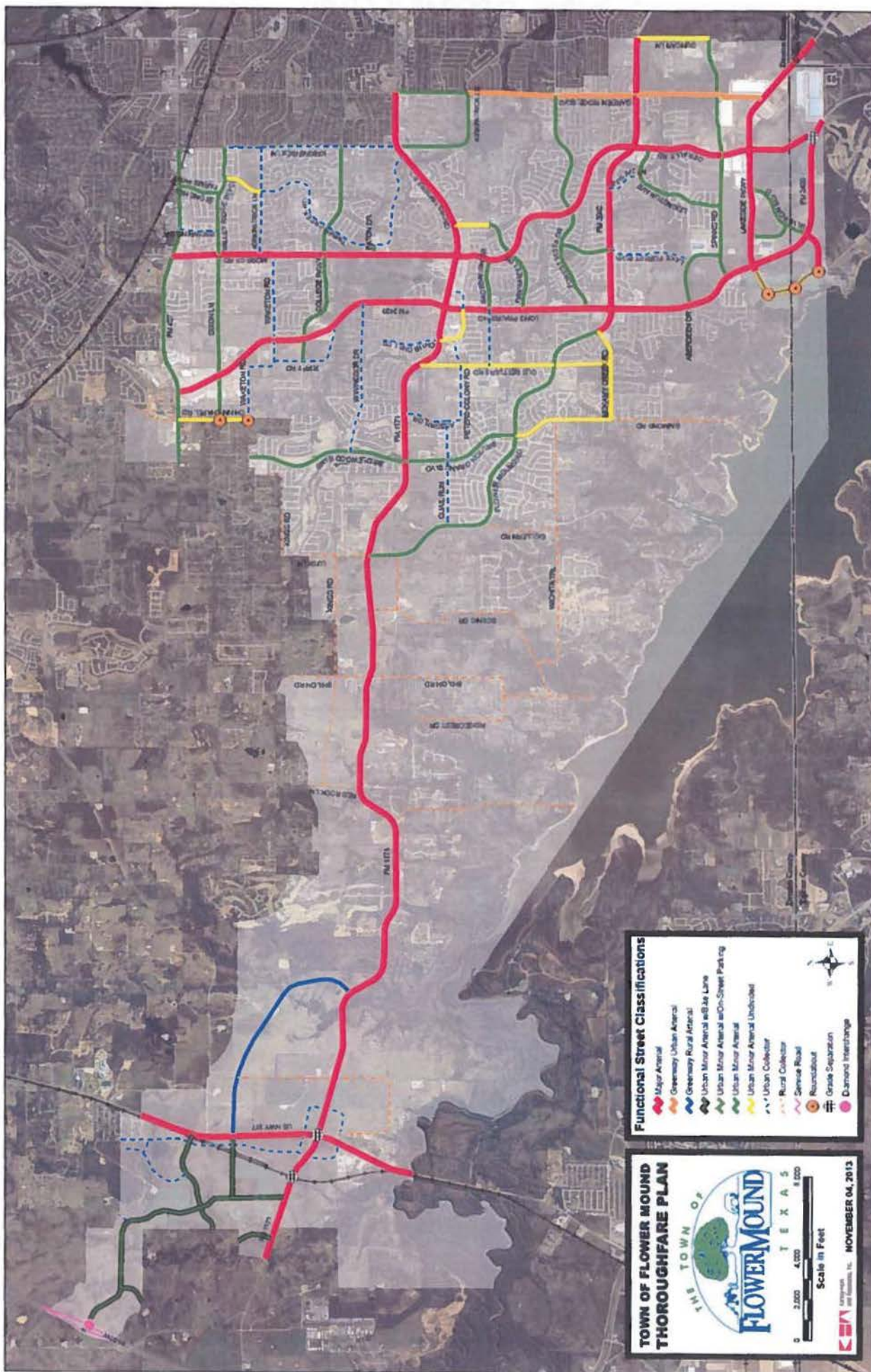


In both examples, the drive-around problem would not be completely fixed by placing a post at the edge of the traffic calming device. There would still be open space to drive through to get around the device.

In general, drive-around should not be a problem on streets with standard 6-inch curbs. However, in locations that have mountable curbs (curbs that can be driven on) or along streets and alleys that have no curbs at all, the potential for drive-around should be considered in any traffic calming design.

APPENDIX C

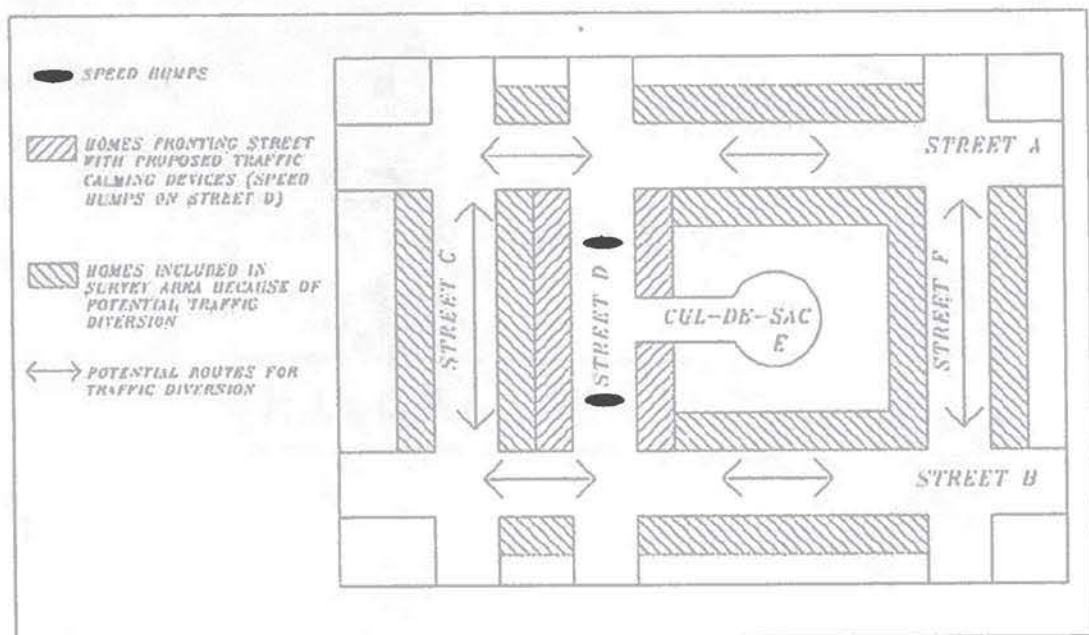
TOWN OF FLOWER MOUND THOROUGHFARE PLAN



APPENDIX D

SURVEY AREA EXAMPLE AND SURVEY EXAMPLE

A hypothetical example of how a survey area would be developed for a proposed traffic calming project has been provided in this section. The proposed project is the installation of two speed cushions on a section of Street D to lower traffic speeds. The following figure illustrates the situation:



Homes that lie along the section of Street D (where the speed cushions will be installed) and Cul-de-sac E will be included in the survey area because these residents will be directly affected by the installation (both positive aspects, such as lower speeds, and negative aspects, such as noise from braking then accelerating). Sections of Streets A, B, C, and F will also be included in the survey area because of the potential for traffic to be diverted from Street D onto those other streets if drivers attempt to avoid the speed cushions.

Proposal to Install Neighborhood Traffic Management Devices along Street D

In an attempt to address residential speeding issues, the neighborhood has requested the installation of speed cushions along Street D in ABC neighborhood.

The Town of Flower Mound would like to know your stance on this proposal since you may be affected by the installation. Your signature on this form will indicate that you have been informed of the proposal. Please indicate whether or not you support, or oppose or have no preference of the installation. The Town of Flower Mound will not install a neighborhood management device unless **80%** are in support of the proposal.

Owner(s)	Address	Signature	Contact Info	Place an X in the Appropriate Column		
				Support	Oppose	No Preference