

CITY OF SUGAR LAND
NEIGHBORHOOD TRAFFIC POLICY

JULY 2010

TABLE OF CONTENTS

Purpose.....1

Scope1

Procedures.....2

Specific Neighborhood Traffic Issues4

 No Parking Zone Implementation Requests4

 No Parking Zone Removal Requests5

 Resident Only Restricted Parking Zone Requests6

 Cut Through Traffic Requests7

 Pedestrian Facility Requests8

 School Zone Safety Requests9

 Speed Control Requests10

 Intersection Control Requests (Multi-Way Stops, Traffic Signals,
 and Roundabouts)11

 “Children at Play” and “Deaf Child Area” Sign Requests12

 Other Advisory or Advanced Warning Sign Requests12

 Other Public Safety and Traffic Issue Requests12

APPENDIX

Resident Only Restricted Parking Zones

Speed Feedback Sign

Neighborhood Speed Watch Program

Children at Play Signs

Commercial Truck Cut-Through Traffic and Parking in Residential Neighborhoods

Installation of Marked Crosswalks

Parking and Parking Zones

Pedestrian Safety

Pedestrian Signals

Roundabouts

School Traffic Safety

Speed Limits

Stop Signs

Traffic Around Schools

Traffic Signal Installation

PURPOSE

This policy establishes consistent procedures for addressing the traffic-related issues that may occasionally arise along roadways within or nearby residential areas in the city. Neighborhood traffic issues specifically addressed in this policy include the following:

- No Parking Zone Implementation Requests
- No Parking Zone Removal Requests
- Resident Only Restricted Parking Requests
- Cut Through Traffic Mitigation Requests
- Pedestrian Treatment Requests
- School Zone Safety Requests
- Speed Control Requests
- Intersection Control Requests (Multi-way Stops, Traffic Signals, and Roundabouts)
- “Children at Play” Sign Requests
- Other Advisory or Advanced Warning Sign Requests
- Other Public Safety and Traffic Issue Requests

Other neighborhood traffic issues not specifically addressed in this policy may be presented to staff for review by any citizen, business, or group. The Traffic Engineering and Operations staff will work with those parties to review their situation and formulate an appropriate response as necessary.

SCOPE

The City of Sugar Land is committed to improving the quality of life within its neighborhoods. When a request is made to review a neighborhood related traffic concern, the City’s direct efforts are to work and coordinate with the requesting party in understanding and addressing concerns in a defined area within the neighborhood. Traffic Engineering and Operations will inform the affected residents of any significant changes to their neighborhood. This policy is applicable only to non-state routes.

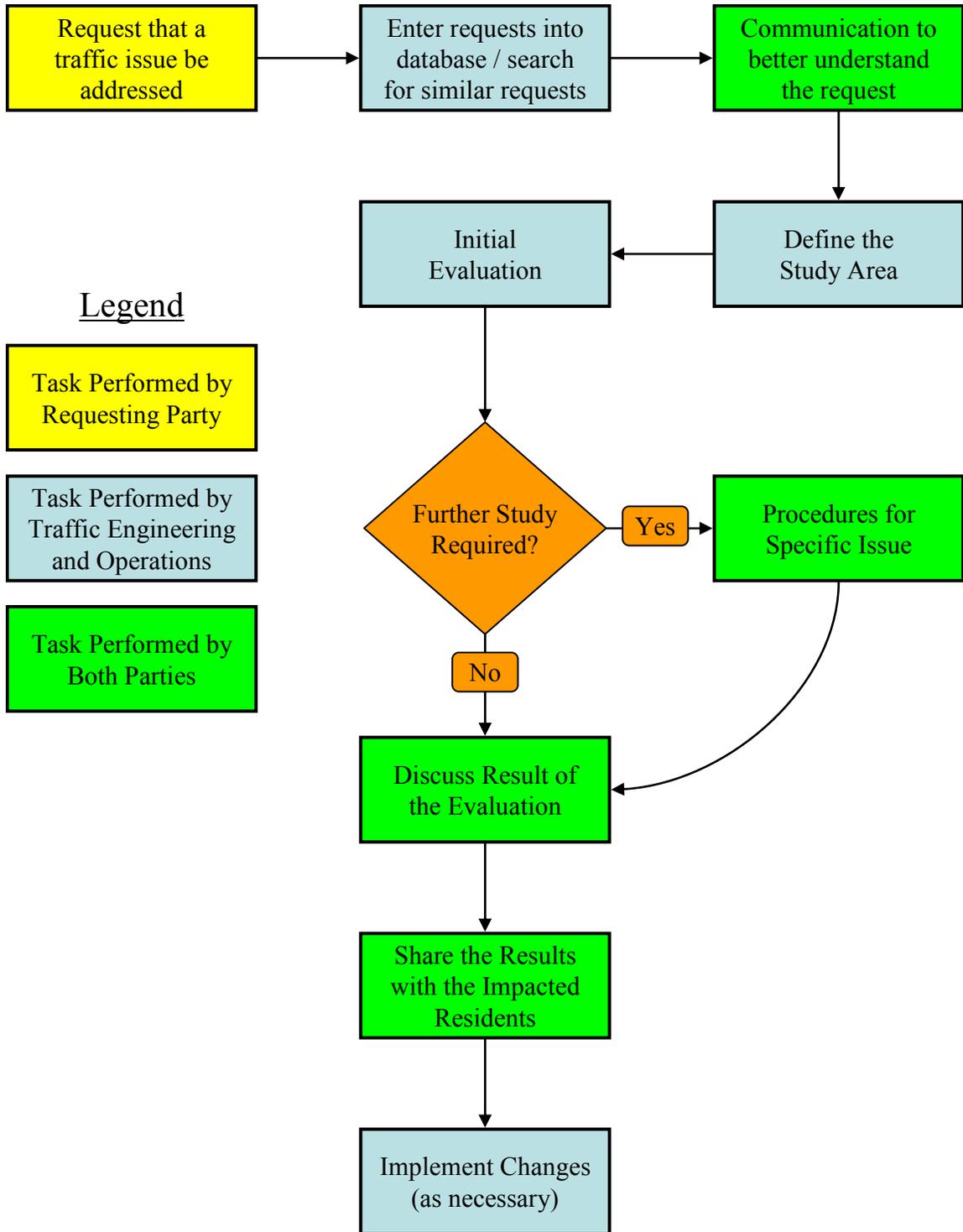
The adoption of this policy is not intended and should not be construed to affect or waive the City’s immunity from damages under the Texas Tort Claims Act (CCP Chapt. 101) or any other law or ordinance. This policy does not require the City to install, remove, or modify any traffic control device, sign, signal, or warning device if the City has, in the absence of this policy, the discretion under State law to install, remove, or modify the traffic control device, sign, signal, or warning device.

PROCEDURES

1. Residents, homeowners associations or similar type groups may make a written request to Traffic Engineering and Operations requesting that a traffic issue be addressed. Traffic issue request forms may be obtained from the City of Sugar Land Traffic Engineering and Operations or downloaded at www.sugarlandtx.gov.
2. The requesting party's issue will be entered in the Public Works Traffic database to search for similar requests in the subject area.
3. Staff will communicate with the requesting party to fully understand their request and thoroughly define the area of concern.
4. The Traffic Engineering and Operations group will identify the area of concern and define the area affected.
5. City staff will evaluate the request, collect data if necessary to confirm the magnitude of the problem and determine if further study is necessary.
6. If the City staff determines that further study is necessary, procedures to address the specific traffic issue will be implemented. These procedures are detailed in the following portion of this policy, "Specific Neighborhood Traffic Issues."
7. Should changes be warranted, Traffic Engineering and Operations will share the proposed changes with the impacted residents before any improvements are implemented.

A flow chart that graphically illustrates the above listed procedures is illustrated on the following page.

PROCEDURES UTILIZED FOR NEIGHBORHOOD TRAFFIC ISSUES.



SPECIFIC NEIGHBORHOOD TRAFFIC ISSUES

Specific types of neighborhood traffic requests in the City of Sugar Land are addressed in this section of the policy.

No Parking Zone Implementation Requests

As with all other requests to review traffic issues in the City of Sugar Land, requests for “No Parking” zone implementation will be addressed with the same measures outlined in the *Procedures* section of this policy.

- Traffic Engineering and Operations and the originator of the request will define a study area for property owners that may be impacted by a proposed “No Parking” zone.
- A traffic engineering study will determine if a “No Parking” zone is appropriate for the requested area for 24 hours per day or for specific days and/or time periods.
- In order to implement a “No Parking” zone, 100% of the property owners that are projected to lose parking spaces adjacent to their property must agree in writing to the “No Parking” zone implementation. The requestor will be required to obtain signatures from the owners.
- If deemed appropriate by the traffic engineering study and agreed to by the property owners that will lose parking spaces adjacent to their property, “No Parking” signs will be posted by the entire street, block or logical termination point as determined by Traffic Engineering and Operations. Other advisory or advanced warning signs will be placed as dictated by sound common engineering practice or the Texas Manual on Uniform Traffic Control devices, latest edition.
- All “No-Parking” zone applications shall be thoroughly reviewed by Traffic Engineering and Operations after a period of two full years from the date of implementation. The “No-Parking” zone shall remain in effect unless a compelling safety reason is discovered.

As with all other requests to review traffic issues in the City of Sugar Land, should the implementation of a “No Parking” zone in the study area be warranted, Traffic Engineering and Operations will share the proposed changes with the impacted residents before any modifications or improvements are implemented.

Additional information concerning no parking zones is included in the **Appendix** under the title *Parking and Parking Zones*.

No Parking Zone Removal Requests

As with all other requests to review traffic issues in the City of Sugar Land, requests for “No Parking” zone removal will be addressed with the same measures outlined in the *Procedures* section of this policy.

- A traffic engineering study will determine if the removal of a “No Parking” zone is appropriate for the requested area. If appropriate, “No Parking” signs will be removed by the entire street, block or logical termination point as determined by Traffic Engineering and Operations and the requesting party. Other advisory or advanced warning signs will be placed, or removed, as dictated by sound common engineering practice or the Texas Manual on Uniform Traffic Control devices, latest edition.

As with all other requests to review traffic issues in the City of Sugar Land, should the removal of a “No Parking” zone in the study area be warranted, Traffic Engineering and Operations will share the proposed changes with the impacted residents before any modifications or improvements are implemented.

Additional information concerning no parking zones is included in the **Appendix** under the title *Parking and Parking Zones*.

Resident Only Restricted Parking Zone Requests:

As with all other requests to review traffic issues in the City of Sugar Land, requests for resident only restricted parking will be addressed with the same measures outlined in the *Procedures* section of this policy.

- A “Resident Only Restricted Parking” zone is intended to enable residents in the zone to park on the street and keep other vehicles from parking on the street during specific hours of the day.
- A “Resident Only Restricted Parking” zone may be implemented on roadways impacted by school traffic or other roadways in which resident parking is limited by parking demand generated by neighboring development.
- Traffic Engineering and Operations and the originator of the request will define a study area for property owners that may be impacted by a proposed “Resident Only Restricted Parking” zone and will define the times of the restrictions.
- In order to implement a “Resident Only Restricted Parking” zone, 100% of the property owners that will have their parking spaces restricted must agree in writing to the “No Parking” zone implementation. The requestor will be required to obtain signatures from the owners.
- If a “Resident Only Restricted Parking” zone is implemented, all residents in the zone will be subject to the restrictions of the zone, including permit application fees, replacement fees, guest permit fees, and non-compliance fees.

As with all other requests to review traffic issues in the City of Sugar Land, should the implementation of a “Resident Only Restricted Parking” zone in the study area be warranted, Traffic Engineering and Operations will share the proposed changes with the impacted residents before any modifications or improvements are implemented.

Additional information concerning no parking zones is included in the **Appendix** under the title *Resident Only Restricted Parking*.

Cut Through Traffic Requests:

As with all other requests to review traffic issues in the City of Sugar Land, requests for cut through traffic control will be addressed with the same measures outlined in the *Procedures* section of this policy.

- A traffic engineering study will determine the measures that are appropriate to address the specific cut through traffic issues that may exist for the given the study area. In order to be considered a candidate for measures to reduce cut through traffic, a roadway must be a local roadway or a collector roadway with residential characteristics with a peak hour volume of over 375 vehicles in one direction with over 40% cut-through vehicles.
- To reverse any portion or all of a plan which limits cut through traffic, 100% of the affected property owners must sign a petition as implemented through these policy guidelines.

As with all other requests to review traffic issues in the City of Sugar Land, should changes to the study area to control cut-through traffic in the study area be warranted, Traffic Engineering and Operations will share the proposed changes with the impacted residents before any modifications or improvements are implemented.

Additional information concerning cut-through traffic is included in the **Appendix** under the title *Commercial Truck Cut-Through Traffic and Parking in Residential Neighborhoods*.

Pedestrian Facility Requests:

As with all other requests to review traffic issues in the City of Sugar Land, requests for pedestrian improvements will be addressed with the same measures outlined in the *Procedures* section of this policy.

- Traffic Engineering and Operations will study the requested location and perform a crosswalk analysis which includes volume of pedestrian traffic, proximity of the subject location to schools, parks, swimming pools, retail centers, hike and bike facilities, vehicular traffic volume, etc.
- The placement of a crosswalk at an uncontrolled intersection or in the middle of a block shall be considered only in rare cases. In general, the placement of a crosswalk at an uncontrolled intersection may create a false sense of security for pedestrians that could increase the likelihood of a vehicle-pedestrian incident.

As with all other requests to review traffic issues in the City of Sugar Land, should pedestrian improvements be warranted, Traffic Engineering and Operations will share the proposed changes with the impacted residents before any modifications or improvements are implemented.

Additional information concerning pedestrian facilities is included in the **Appendix** under the titles *Pedestrian Safety*, *Pedestrian Signals*, and *Installation of Marked Crosswalks*.

School Zone Safety Requests.

As with all other requests to review traffic issues in the City of Sugar Land, requests for school zone safety will be addressed with the same measures outlined in the *Procedures* section of this policy. School zone safety requests encompass a broad range of requests in the vicinity of a school. Common requests in the City of Sugar Land are addressed specifically below. Other requests will be addressed on a case per case basis.

- The neighborhood traffic policy is not intended to replace or alter the existing provisions and ordinances established by the City of Sugar Land.
- Reduced speed school zones are areas in which the speed limit is reduced for certain periods of the day that may be requested by individual citizens, communities, or schools. A traffic engineering study will determine if a reduced speed school zone is warranted based on the proximity of the roadway to the school, the type of school (elementary, junior high, senior high, etc.), vehicular volumes, pedestrian volumes, vehicular speeds, availability of sidewalks, alternative routes between the school residential areas served by the school, and other factors.
- Requests for a crosswalk in the vicinity of a school will be treated with the same procedures as outlined in the “Pedestrian Facility Requests” section of this policy. Proximity to schools and type of vehicular control are major factors in the consideration of crosswalks.
- Parking restrictions in the vicinity of a school will be treated with the same procedures as outlined in the “No Parking Zone Implementation” section of this policy. Proximity of schools is a major factor in the consideration of parking restrictions.
- No right-turn on red at signalized intersections in a school zone is a means to reduce the likelihood of conflicts between right-turn vehicles and school aged children in crosswalks. If appropriate, a traffic engineering study will determine the need for no right-turn on red restrictions based on vehicular volumes, pedestrian volumes, traffic signal timing, and other factors.
- The Texas Manual of Uniform Traffic Control Devices (latest edition) does not require the installation of flashing beacons to alert motorists to school zones. The City of Sugar Land will consider the installation of school flashing beacons on arterial and collector roadways, but not on local streets.

As with all other requests to review traffic issues in the City of Sugar Land, should changes to the conditions within a school zone be warranted, Traffic Engineering and Operations will share the proposed changes with the impacted residents before any modifications or improvements are implemented.

Additional information concerning school zone safety is included in the **Appendix** under the titles *School Zones* and *School Traffic Safety*

Speed Control Requests.

As with all other requests to review traffic issues in the City of Sugar Land, requests for speed control will be addressed with the same measures outlined in the *Procedures* section of this policy.

- Traffic Engineering and Operations will maintain a database of locations at which excessive vehicular speeds have been reported that will be shared with the Police Department for enforcement purposes.
- Under no circumstances shall any street within the incorporated City limits have a speed limit of less than 30 miles per hour per Texas State Law or City Ordinance.
- The Texas Manual of Uniform Traffic Control Devices (latest edition) requires that a speed limit be posted within 5 mph of the 85th percentile speed of the free-flowing traffic.
- The following alternatives are available to address speed control requests.
 - The Neighborhood Speed Watch Program is a public awareness program through which concerned citizens can take an active role in making neighborhood streets safer by observing and recording traffic speeds in their neighborhood. Additional information and application forms to participate in the Neighborhood Speed Watch Program may be obtained from Traffic Engineering and Operations, the Appendix of this policy, or downloaded at www.sugarlandtx.gov.
 - A speed feedback sign may be installed to alert motorists to their actual speed and the posted speed limit on a roadway. Additional information concerning the speed feedback sign is included in the Appendix of this policy.
 - A speed study may be conducted at the site. The speed study will determine the 85th percentile speed and consider other issues in the site vicinity including pedestrian traffic volume, roadway curvature, the frequency of traffic accidents, sight distance restrictions, and other issues specific to the study site. The speed study may determine that the posted speed limit at the study site is too low and may recommend that the posted speed be raised to the 85th percentile speed.

As with all other requests to review traffic issues in the City of Sugar Land, should changes to the speed control in the study area be warranted, Traffic Engineering and Operations will share the proposed changes with the impacted residents before any modifications or improvements are implemented.

Additional information concerning speed control is included in the **Appendix** under the title *Speed Limits*.

Intersection Control Requests (Multi-way Stops, Traffic Signals, and Roundabouts):

As with all other requests to review traffic issues in the City of Sugar Land, requests for intersection control will be addressed with the same measures outlined in the *Procedures* section of this policy.

- Multi-way stop signs or traffic signals shall not be installed within the corporate City limits of the City of Sugar Land unless approved by an authorized warrant analysis and by the City Traffic Engineer.
- Multi-way stops and traffic signals are warranted based on vehicular traffic volumes, pedestrian traffic volumes, vehicular speeds, traffic accident data, and other traffic data in accordance with guidelines defined in the Texas Manual of Uniform Traffic Control Devices (TMUTCD).
- According to the TMUTCD, “regulatory and warning signs should be used conservatively because these signs, if used to excess, tend to lose their effectiveness.” If confirmed by a traffic engineering study, existing multi-way stop locations that are not warranted will be removed by the City of Sugar Land.
- According to the TMUTCD, stop signs or traffic signals shall not be installed for the purpose of controlling the speed of a roadway as they have been shown to become a hazard at times when installed without warrant.
- Implementation of multi-way stop signs, traffic signal, and roundabouts will be in accordance with necessary budget considerations.

As with all other requests to review traffic issues in the City of Sugar Land, should changes to the intersection control in the study area be warranted, Traffic Engineering and Operations will share the proposed changes with the impacted residents before any modifications or improvements are implemented.

Additional information concerning intersection control is included in the **Appendix** under the titles *Stop Signs*, *Signal Installation*, and *Roundabouts*.

“Children at Play” and “Deaf Child Area” Sign Requests:

“Children at Play” and “Deaf Child Area” signs are not recognized by the State of Texas or by the Federal Highway Administration as official traffic control devices. These signs may create a false sense of security for parents of children and typically do not achieve the desired safety benefits.

The city does not erect “Children at Play” signs within its boundaries. Existing “Children at Play” signs will be removed by the city.

“Deaf Child Area” signs may only be installed in school zones if deaf children attend the school. If installed, these signs will be removed when the deaf child no longer attends the school.

Additional information concerning children at play signs and deaf child area signs is included in the **Appendix** under the title *Children at Play Signs*.

Other Advisory or Advanced Warning Sign Requests:

As with all other requests to review traffic issues in the City of Sugar Land, requests for advisory or advanced warning signs will be addressed with the same measures outlined in the *Procedures* section of this policy.

- Traffic Engineering and Operations will study the requested location and perform an advisory/advanced warning sign analysis which includes volume of pedestrian traffic, proximity of the subject location to schools, parks, swimming pools, retail centers, hike and bike facilities, vehicular traffic volume, etc.
- The requesting party will be informed that it is City policy to only install advisory or advanced warning signs that are in accordance with the Texas Manual on Uniform Traffic Control devices, latest edition.

Other Public Safety and Traffic Issue Requests:

Other requests to review traffic issues in the City of Sugar Land will be addressed with the same measures outlined in the *Procedures* section of this policy.

Traffic Engineering and Operations will share the proposed changes with the impacted residents before any modifications or improvements are implemented.

APPENDIX

RESIDENT ONLY RESTRICTED PARKING ZONES

Resident Only Restricted Parking Zones limit on-street parking to residents with a parking permit during specific periods of the day.

PERMIT APPLICATION

- Permit applications are available in the permitting office at City Hall, located at 2700 Town Center Boulevard North.
- A permit application must be completed and submitted to the City for approval.
- Approval will constitute correct completion of the form.
- Upon approval of the application by the permit clerk, up to three hangtags will be issued per home.
- Each residential permit will cost \$10.
- Costs paid by residents to the City will be non-refundable.
- Each tag will have a printed serial number, not hand written.
- The address of the owner will be hand written in permanent marker on the tag by the permit clerk.
- Each tag number and the address of its owner will be listed in a database maintained in the City permitting office.

LOST PERMITS

- In the event a tag is lost, the resident is responsible for contacting the City and requesting another tag.
- The City will replace lost cards and consider them to be new issuances for which the resident will be charged \$10.
- The lost card will be indicated as such in the database prior to the issuance of a new card to the resident.

GUEST PERMITS

- Guest permits may be purchased for \$2.
- The applicant must complete the guest permit application form.
- Guest permits will be valid for a period of two weeks from the date of approval.
- Guest permits will be issued in the form of paper hangtag by the City's Permitting Department.

RESTRICTIONS

- Each home within the zone will be eligible to receive up to three parking permits for use in their vehicles.
- Vehicles with hangtags will be allowed to park only in front of the home to which they are permitted.
- If a resident has more than three vehicles, the other vehicles shall be parked in their driveway.
- It is the responsibility of the permit holder to ensure that the hangtag is visible from the rearview mirror at all times during the restricted hours.

PENALTIES

- Any vehicles without a hangtag may be ticketed regardless if a permit has been issued to the owner of the vehicle.

SPEED FEEDBACK SIGN

A speed feedback sign consists of a standard speed limit sign coupled with a changeable message sign that illustrates the radar recorded speed of an approaching vehicle. The speed feedback sign is intended to alert motorists to their actual speed and to become more aware of their surroundings. A photograph of a speed feedback sign is illustrated below.



Neighborhood Speed Watch Program

The Neighborhood Speed Watch Program is a public awareness program through which concerned citizens can take an active role in making neighborhood streets safer.

The City of Sugar Land will loan an OnSite 200 Dolly Radar Sign to citizens so they can monitor auto and truck speed on their streets. This unit displays the speed limit for the street and the travel speed of passing vehicles. By recording the speeds, the participant will gain a true picture of speeds on the street.

Often, drivers are unaware of their speed or the dangers of speeding in neighborhoods. This type of real time awareness will encourage speeding motorists to slow down—and give the message that residents will not tolerate speeding in their neighborhood.

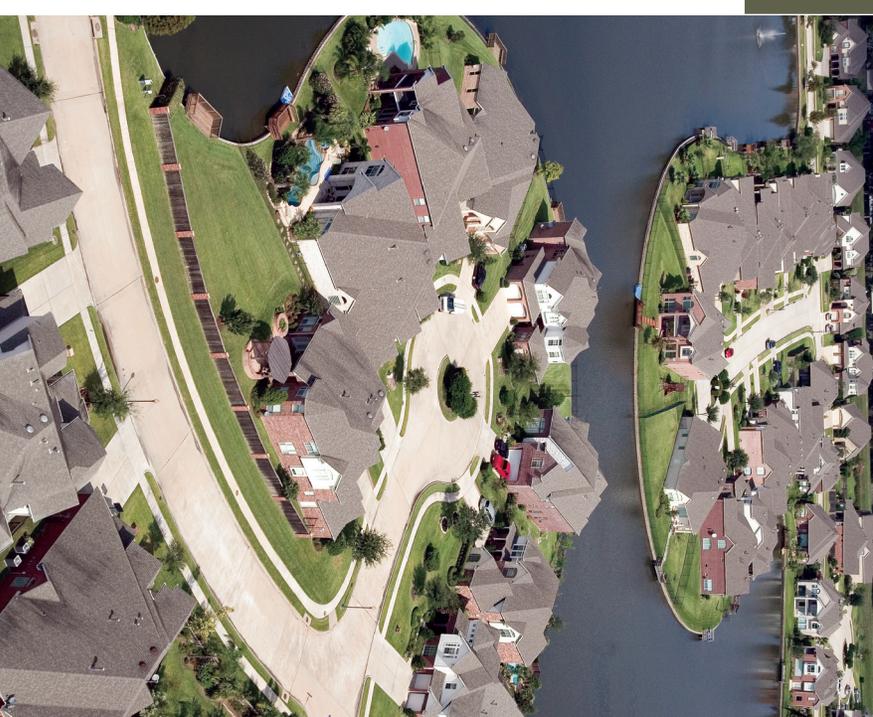


Why Should I Get Involved?

Reducing speed limits in residential and collector streets is one of the more common concerns received by the Public Works Department. Educating both drivers and residents is important. Residents are, after all, the primary travelers in their own neighborhoods.

Rules of Conduct

- **Stay out of the street**
Participants should conduct the study from behind the street curb. Participants should park their vehicles away from the study area – on side streets or in private driveways.
- **Obey all traffic and pedestrian laws. Be courteous and exercise reasonable care**
Do not argue with motorists who may stop or other pedestrians. Instead, hand them a Speed Watch brochure and ask them to call the telephone number on the brochure if they have questions or objections to the program. Do not make gestures or verbal comments toward passing vehicles. If confronted physically, retreat. Do not fight.
- **Use common sense**
Do not chase, attempt to stop, or apprehend drivers.
- **Do not encourage non-participants to be present**
Only those persons completing the participant commitment form and signing the application form may participate in the Speed Watch study. A crowd of people on the sidewalk will only draw the attention of drivers and be counter-productive to the project.
- **Accurately represent the Speed Watch Program**
The public may incorrectly assume that you are a representative of the City or a law enforcement officer, or that your actions will result in their receiving a traffic citation. You must make it clear that you are acting as a private citizen within the context of a City-authorized program.



APPLICATION FORM

I am interested in participating in the Neighborhood Speed Watch Program. I understand and will comply with the following guidelines.

- The Speed Watch Program can be conducted only on streets classified as "Residential or Collector" in the City of Sugar Land Major Roadway Plan.
- The Study can be conducted anytime during daylight hours and favorable weather conditions.
- The City of Sugar Land will train the participant(s) on the use of the On-site 200 Dolly Radar Sign and set up a time to deliver the equipment. The dolly radar sign is assigned to participants on a first-come, first-served basis and can be checked out for two weeks.
- When conducting the study, the group will follow the "Rules of Conduct" and obey all laws.
- The "Lead Participant" or other participants shall not leave the dolly radar unit unattended while it is being used. When not in use, the dolly radar unit must be stored in a dry location and secured.
- The dolly radar unit and the results of the study will be returned to the City of Sugar Land.
- The City of Sugar Land will share the data with the Sugar Land Police Department and provide feedback to the group. The data will also be kept on file for periodic review and for comparison with future data.

LEAD PARTICIPANT AND CONTACT PERSON

Name	_____
Address	_____ Zip _____
Business Phone	_____ Home Phone _____
Signature	_____ Date _____
NEIGHBORHOOD/STREET _____	
Date You Want to Begin Study: _____ / _____ / _____	

Return applications to:

City of Sugar Land
Traffic Operations Division
Attn: NEIGHBORHOOD SPEED WATCH REQUEST
P.O. Box 110, Sugar Land, Texas 77487-0110

We want to help.

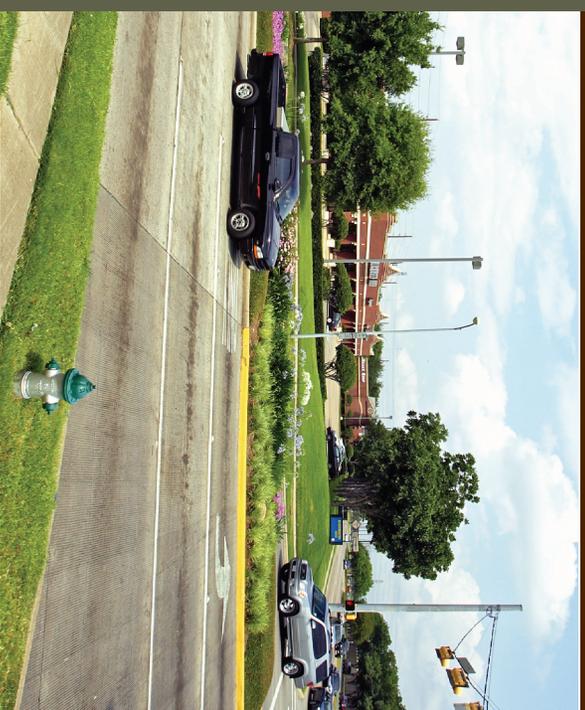
The City of Sugar Land's number one priority is keeping our streets and neighborhoods safe and accessible. The Neighborhood Speed watch program can help drivers throughout our community slow down. If you would like to participate in the Speed Watch Program, please call the Public Works department at 281-275-2450.



City of Sugar Land

Traffic Operations Division
P.O. Box 110
Sugar Land, Texas 77487-0110
www.sugarlandtx.gov

How you can make your neighborhood a safer place to live.



Sugar Land Neighborhood Speed Watch Program





City of Sugar Land

Traffic Operations / Engineering Division

Children At Play Signs

We have a lot of small children in our neighborhood...

Can we get a Children At Play sign?

The City of Sugar Land often receives requests to install signs warning drivers of the possible presence of "Children at Play." However, these signs may give a false sense of security and have been proven to be ineffective. In residential areas within the city drivers should expect that children may be present. Studies have shown that signs attempting to warn motorists of normal conditions do not achieve the desired safety benefits.

The City of Sugar Land does not want to endorse that children can or should be allowed to play safely on or near streets. If Children at Play signs currently exist on city roadways, they were likely placed years ago, or when a roadway was signed before the area was annexed by the city. Children at Play signs will be removed by the City of Sugar Land.

A False Sense of Security

"Children at Play" signs may create a false sense of security for parents and children who believe the signs provide protection when drivers, in reality, pay little attention to them.

The signs are a direct suggestion to small children that playing in or near the roadway is safe when it is unsafe to do so.



Signs like these can be misleading, misunderstood, and ignored by drivers

Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp

Children At Play Signs

Safety of Children is a Primary Concern.

Neighborhood traffic concerns often arise from drivers speeding or disregarding other safe-driving practices. The solution to these concerns often rests in the hands of neighborhood residents. Residents and frequent visitors in a neighborhood are often the source of most problem driving behavior. This is because local residents make up the vast majority of drivers on most local streets. Those local drivers are familiar with the streets and assume they know what conditions are present as they drive in the area. On the other hand, drivers unfamiliar with an area often drive more slowly so that they can read addresses and street name signs to reach their destination.

What Can Residents Do to Improve Traffic Safety?

- Pay attention, drive carefully, and obey traffic laws.
- Set a good example and remind your guests and neighbors to do the same.
- Remind residents at your Neighborhood Watch or Homeowners Association meetings to use caution when driving through the neighborhood.

Can we request lower speed limits?

Citizens frequently request less than 30 mph speed limit signs in residential streets where children are playing. The minimum legal speed limit on a residential street is 30 mph. The City cannot post less than 30 mph speed limit signs because the posting of such signs by a local government agency is considered a speed trap, making enforcement of such limits illegal.

Traffic Signs On Private Property

City of Sugar Land prohibits private citizens from posting, erecting, installing, or maintaining any sign or device that resembles, imitates, or purports a traffic control device on or for a public roadway without approval. The city may remove those devices without notice.

CITY POLICY ON "CHILDREN AT PLAY" SIGNS

"Children at Play" signs and signs with similar messages are not recognized by the State of Texas or by the Federal Highway Administration as official traffic control devices. The City of Sugar Land does not install such signs on public streets. Specific warnings for schools and crosswalks are available for use where they clearly serve a purpose.

Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp



City of Sugar Land

Traffic Operations / Engineering Division

Commercial Truck Cut-Through Traffic and Parking in Residential Neighborhoods

Truck cut-through traffic trying to avoid congestion on major streets is a growing concern to city residents. Local and residential streets were not typically designed to carry high volumes of through traffic, especially heavy truck traffic. This unnecessary through traffic generates noise, air pollution, and creates other issues for residents. Some trucks also try to park on narrow residential streets, which also causes concerns for residents and emergency vehicles.

Residents concerned with high volumes of truck traffic traveling through, or parking in, their neighborhood have several remedies available. We will evaluate the specific problems of your street and implement the most effective solution.

Definitions of “Commercial Vehicle” and “Commercial Truck”

A commercial vehicle can be defined as any vehicle that is used and maintained for commercial purposes. A commercial truck is a commercial vehicle having more than two axles.

Cut-Through Traffic

Cut-through traffic can be defined as vehicles passing through a neighborhood without at least one trip end (origin or destination) in the area. Cut-through traffic causes unwanted noise, dust, pollution, and safety issues for residents. Cut through traffic can be passenger vehicles, commercial vehicles and/or commercial trucks. A cut-through commercial truck is one that passes through a street/neighborhood without a scheduled stop in that neighborhood.

In addition to pollution and safety issues, cut-through commercial trucks cause pavement deterioration of the neighborhood roads since most neighborhood roads are not designed for heavy truck traffic.

Possible Solutions

If your neighborhood has high volume of cut-through traffic, you can request a traffic study by contacting our Traffic Operations/Engineering Division with the following information:

- Name of the street where study is requested
- Boundaries of the street segment (use major streets from/to where cut-through traffic enters/headed)
- Possible reason for cut-through traffic (e.g. to avoid a congested intersection, trucking facility/compound)
- Contact information of the Applicant

Whenever possible, requests for traffic study should be either routed through your homeowners association or be signed by residents directly impacted by the cut-through traffic i.e. individuals whose property abuts the street segment in question. Upon receiving a completed request, the city traffic engineer makes an initial determination of the need for the requested study. If required, we will conduct a traffic study to determine the magnitude and type of cut-through traffic. Based on the results of the study, appropriate measures are taken to address the issue. For example, if most of the cut-through traffic is commercial trucks, the corrective measures will be aimed at discouraging them from using the roadway in question.

Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

The language in this document may need to be modified to reflect policy finalized in the NTP.

www.sugarlandtx.gov/public_works/traffic_management/index.asp

Commercial Truck Cut-Through Traffic and Parking in Residential Neighborhoods

Possible counteractive measures to address the issue of through commercial trucks can be one or more of the following:

1. "No Through Trucks" sign: These signs are sometimes installed on through neighborhood streets to prohibit trucks from using the neighborhood streets.
 2. Enforcement: If signs are already present but are ineffective, enforcement can be employed.
 3. Modifying physical features of the roadway such that through traffic in general and trucks in particular are discouraged from using the roadway. These are called traffic calming measures.
- For more information on traffic calming measures, call us at 281-275-2450.



Parking in Residential Neighborhoods

Residential neighborhoods which are in close proximity to a busy commercial area with limited parking facilities or are near a truck facility/compound may find unwanted vehicles parked in the neighborhood. The parking code specifies following restrictions:

- Commercial vehicles can not be parked on a public street overnight.
- Trailer / Semi-trailer can not be parked on a public street for more than 2 hours.

Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp



City of Sugar Land

Traffic Operations / Engineering Division

Installation of Marked Crosswalks

Crosswalk

A crosswalk is typically defined as a designated portion of the roadway that pedestrians use to cross the street. A crosswalk may be marked or unmarked. There is no legal difference between marked and unmarked crosswalks at controlled intersections (those with stop signs or traffic signals). However marked crosswalks at mid-block locations provide a designated and legal crossing zone for pedestrians.

Benefits of Marked Crosswalks

Marked crosswalks guide pedestrians to a proper crossing location and alert motorists of a pedestrian crossing point. However at uncontrolled locations, marked crosswalks may create a false sense of security for pedestrians and may result in greater number of pedestrian crashes if additional safety treatments are not provided.

City Policy on Marked Crosswalks

The City's current policy is to install marked crosswalks at controlled intersections where there is a demonstrated need. Crosswalks are also marked at established school crossings. At other locations, an engineering study must be conducted to ensure that marked crosswalks are installed only where there is significant pedestrian activity and/or where additional measures to protect pedestrians can be installed. The need for, and potential use of, a proposed crossing varies with each location; each should be considered individually, and with an effort to maintain consistency in the decision-making process.

Categories of Marked Crosswalks

Marked crosswalk locations fit into one of three categories:

1. Marked Crosswalks are **Standard** on signalized approaches at intersections and roundabout approaches.
2. Marked Crosswalks alone (without other enhancements or treatments) are **Permitted** on roadways with posted or 85th percentile speeds less than or equal to 35 mph, if recommended as part of an engineering study and approved by the City Engineer.
3. Marked Crosswalks with enhancements or active devices are installed on roadways with posted or 85th percentile speeds greater than 35 mph, if recommended as part of an engineering study and approved by the City Traffic Engineer. Such enhancements might include traffic calming features (median refuge islands, curb extensions, narrowed travel lanes, traffic circles/diverters, chicanes), illumination, or enhanced devices (i.e. advance signing), or active devices (i.e. pedestrian-activated signals).

How to Request Installation of a Marked Crosswalk?

The request for the installation of a marked crosswalk may come from a citizen, a private developer or City Staff. To request installation of marked crosswalk provide the following information:

1. Proposed location of the requested crosswalk
2. Need for a crosswalk (volume of pedestrians crossing at or in the vicinity of proposed location)
3. Reason for pedestrian activity (land use around the area: park, commercial center, etc.)
4. Name and contact information of the person making the request.

Procedure and Criteria for Installation of a Marked Crosswalk

This procedure applies to crosswalks proposed on all City streets, whether initiated as part of a Capital Improvement project, private development project, or citizen request.

1. Based on categories of marked crosswalks, determine whether proposed crosswalk is standard, traffic study dependent, or not an option.

Traffic Operations / Engineering Division

111 Gillingham Lane

Sugar Land, Texas 77478

281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp

Installation of Marked Crosswalks

2. If crosswalk is not standard, perform an engineering study to determine if the following minimum criteria¹ are satisfied:
 - Pedestrian Volumes \geq 20 per peak hour, based on field counts or the crosswalk is on a direct route from a pedestrian traffic generator such as a library, park, church, etc.
 - Distance of proposed location \geq 300 feet from nearest intersection or other marked crosswalk
 - Available sight distance is more than ten times the posted speed limit or 85th percentile speed whichever is higher.

If the above mentioned minimum criteria for a crosswalk are not satisfied, installation of the crosswalk is not recommended. Skip to step 4 of the procedure and the process is complete. Otherwise perform further study to determine if crosswalk alone is permitted or additional measures are needed for pedestrian safety. Table 1 provides guidance on whether crosswalk may be installed without special treatments or not.

3. Forward completed engineering study to City Traffic Engineer for review and decision. [Note: Approval of marked crosswalks on state highways within City limits, or on City streets at intersections with state highways, shall be coordinated with TxDOT.]
4. Document decision and deliver, in writing, to originating party or project manager. Add copy of memo or letter and engineering study to project file or in Citizen Request files, as appropriate.
5. Incorporate crosswalk markings and/or related improvements into project plans per City Traffic Engineer approval and in conformance with City standards and specifications. Mid-block crosswalks shall be marked with high visibility markings.
6. Coordinate with Traffic Engineering and Operations to ensure proper implementation of markings and associated improvements. Document date of installation and add to file.

Table 1. Recommendations for Marking Crosswalks at Uncontrolled Locations².

Roadway Type (Number of Travel Lanes and Median Type)	ADT < 9,000			ADT > 9000 to 12,000			ADT < 12,000 - 15,000			ADT > 15000		
	Speed Limit (mph)											
	< 30	35	40	< 30	35	40	< 30	35	40	< 30	35	40
2-Lanes	Green	Green	Yellow	Green	Green	Yellow	Green	Green	Grey	Green	Yellow	Grey
3-Lanes	Green	Green	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Grey	Yellow	Grey	Grey
Multi-Lane (4 or More Lanes) With Raised Median†	Green	Green	Yellow	Green	Yellow	Grey	Yellow	Yellow	Grey	Grey	Grey	Grey
Multi-Lane (4 or More Lanes) Without Raised Median	Green	Yellow	Grey	Yellow	Yellow	Grey	Grey	Grey	Grey	Grey	Grey	Grey



- Indicates possible sites for marked crosswalks if engineering study supports installation of a crosswalk.
- Indicates probable site for marked crosswalk with additional enhancements to increase pedestrian safety.
- Marked crosswalks alone are insufficient and pedestrian crashes may increase if special treatments are not implemented.

References

1. City of Stockton Public Works Department. *Pedestrian Safety and Crosswalk Installation Guidelines*. Stockton, California, 2003.
2. Zegeer, C.V., Stewart, R.J., Huang, H.H., and Lagerwey, P.A. *Safety Effects of Marked Vs. Unmarked Crosswalks at Uncontrolled Locations: Executive Summary and Recommended Guidelines*. Report FHWA-RD-01-075. Federal Highway Administration, Washington, D.C., 2002.

Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp



City of Sugar Land

Traffic Operations / Engineering Division

Parking and Parking Zones

Parking zones

White Zones are designated for loading and unloading passengers for up to three minutes. They are usually used in places such as airports, hospitals, and bus and train stations.

Yellow Zones are designated for commercial vehicles to load and unload merchandise for up to 20 minutes. Yellow zones are usually found in commercial areas for the use of adjacent commercial establishments.

Green Zones are used for limited term parking, usually 20 minutes as indicated on a sign. In any limited parking zone, you can receive a citation if you exceed the maximum limit by one minute or more. To avoid a citation, you must vacate the parking space within the time limit specified and let other members of the public use these high demand spaces.

Red Zones indicate no parking at any time and are reserved for fire and emergency vehicles only. Any other vehicle parked or encroaching on the red zone is considered in violation of the parking restriction and may receive a ticket.

Blue Zones reserve parking spaces for vehicles used by disabled persons and displaying the appropriate disabled parking placard or license plate.

Typical Parking Zone Signs



Where is it illegal to park?

- No Parking Zones marked by *No Parking* or *No Standing* signs.
- In front of a private or public driveway.
- In front of or within 15 feet of a fire hydrant.
- Within marked or unmarked crosswalks. An unmarked crosswalk is considered to be an extension of sidewalk boundary lines across a street.
- Within 50' of the nearest rail of a railroad crossing.
- In public right-of way for the purpose of advertising or selling without proper authorization.
- In handicapped parking spaces without displaying a legally obtained handicap placard or license plate.
- Where a vehicle will obstruct or block a handicapped parking space.
- Within 30' on the approach to a flashing signal, stop sign, yield sign or traffic control signal located at the side of a roadway.
- Within three feet of a handicapped access ramp.
- In the striped loading zone next to handicapped parking spaces.
- Straddling the markings or lines designating a parking stall.
- Along the curb return or within 10' of an intersection.
- Within 15 feet of the entrance to a fire or ambulance station.
- Within 500 feet of fire trucks or equipment when these are stopped answering a fire alarm or emergency call.

For a complete description of areas where Texas State Transportation Code restricts parking even if no signs are posted, see code section 545.302.

Traffic Operations / Engineering Division

111 Gillingham Lane

Sugar Land, Texas 77478

281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp

Parking and Parking Zones

Parking areas for persons with disabilities

Parking areas for persons with disabilities, also known as handicapped parking spaces, are established for the exclusive use of vehicles transporting persons with disabilities. Any vehicle parked in a marked handicapped or tow-away zone parking space that does not display a placard or license plate with the international symbol of access can be given a ticket, towed, and impounded. Handicapped parking spaces can be established on public or private property if the owner of the property and the City Traffic Engineer determine a need for such space/spaces.

A citizen with a valid handicap placard is allowed to park in a regular metered space without paying provided there are no other restrictions by signage. For example: *No Parking 7 - 9 AM or 4 - 6 PM*. However no one can park at meters in commercial loading/unloading zones unless they possess and have visibly displayed in the vehicle a commercial loading/unloading parking permit.

How close to the curb must I park?

All vehicles parking parallel to the curb must park within 18 inches. All vehicles parking at an angle must have one front tire within 6 inches of the curb.

What is the maximum length of time I can park my vehicle on the street without moving it?

- Passenger vehicles can not be parked on public streets for more than 48 hours as specified by city ordinance.
- Trailer / Semi-trailer can not be parked on a public street for more than 2 hours per city ordinance.

When are vehicles towed or booted?

- A vehicle with three or more parking citations (delinquent vehicle) may be booted or towed.
- An officer may issue parking citation to or tow any vehicle found in violation of any City ordinance or State penal law relating to parking of vehicles.

Does the City have a residential permit parking program?

In some residential areas a permit is required to park your vehicle (called *residential permit parking areas*). The city issues permits for the spaces. To obtain a residential parking permit, please submit the proper fee and completed application form to the permitting office at City Hall, located at 2700 Town Center Boulevard North. Residential permits are issued to eligible vehicles for a period of one year. Visitor, service provider, and one day visitor parking permits are also issued to residents of such areas upon request. Each residential unit is issued a total of 6 one year permits (4 for self or visitor vehicles and two for service provider vehicles), and 5 packs of one day visitor permits.

Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp



City of Sugar Land

Traffic Operations / Engineering Division

Pedestrian Safety

The Need for Pedestrian Safety

Whether for school, work or recreation, most of us walk everyday. However, some people have to walk as their primary means of transportation or choose to walk to improve their health. Whatever our reasons may be for walking, pedestrians have a legitimate right to walk without feeling unsafe and uncomfortable. Since most of our roads were designed for vehicular traffic, we need to improve the walkability in our communities and make them safer for walking.

Typical Issues with Pedestrian Safety

The first step in improving pedestrian safety involves identifying the problem. As a resident, you can help identify the pedestrian safety issues in your neighborhood. The following sections list some of the typical problems associated with pedestrian safety and can be used as a guide in identifying the problems in your area.

Poor or Inadequate Walking Facilities

- Existing sidewalks and trails are insufficient and do not connect to schools, transit stations, parks, churches, etc. Dirt paths or desire lines show that more sidewalks or paths are needed.
- Existing sidewalks are not wide enough for people to walk comfortably or pass each other.
- Sidewalk surfaces are uneven, broken, or covered with debris.
- Sidewalks and paths are blocked by barriers such as vehicles, trash cans, vegetation, utility poles, mail boxes, benches, or other obstructions.
- There is not enough space between the sidewalk and the roadway, or this space lacks trees or landscaping to make pedestrians feel comfortable.
- The intersections are wide and crossing distances are long. Turning radii at the intersections allow cars to turn at higher speeds.
- There are intersections with no pedestrian signals, curb ramps, or median crossing islands.
- There are many dead-end streets, few available roadway crossings, and indirect pedestrian paths.
- There are not enough streetlights to help pedestrians and drivers see each other at night.
- There are not enough signs to help pedestrians find important destinations or know where to walk or cross safely in construction areas.
- Bicyclists riding on the sidewalk (possibly because they do not feel safe in the street) cause conflicts with people walking.

Traffic Operations / Engineering Division

111 Gillingham Lane

Sugar Land, Texas 77478

281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp

Pedestrian Safety

Unsafe driver behaviors or traffic characteristics

- Drivers do not stop or yield to pedestrians crossing the roadway.
- Drivers drive too fast through neighborhoods, around schools, or near other places where people are walking.
- Drivers take short cuts through neighborhoods to avoid traffic on major streets.
- Red light or stop sign runners endanger pedestrians and bicyclists.
- Drivers pass other vehicles stopped at crosswalks for pedestrians or pass stopped school buses.
- Drivers are more distracted than ever by cell phones, passengers, and other activities.

Unsafe pedestrian behaviors

- Pedestrians do not look in all directions before crossing the street.
- Pedestrians attempt to cross the street when traffic is approaching.
- Pedestrians try to cross between cars at traffic lights and between intersections with traffic signals.
- Pedestrians cross against pedestrian signals.
- As with drivers, pedestrians can be distracted by cell phones, personal music players, etc.

Typical Solutions

Once the problem or problems have been identified, the next step is developing appropriate solution. Pedestrian transportation improvements or potential solutions for pedestrian safety are often described in terms of the “Four E’s”:

1. **Engineering** — Physical changes to infrastructure (i.e., sidewalks, traffic signals, signs, etc.) that affect the operation and movement of traffic and pedestrians.
2. **Education** — Includes strategies that aim to educate pedestrians, drivers, or other groups in order to motivate a change in behavior.
3. **Enforcement** — Community-based or law-agency-based measures to enforce laws and regulations related to pedestrians.
4. **Encouragement** — Efforts to promote walking and increase the level of walking in a community.



City of Sugar Land

Traffic Operations / Engineering Division

Pedestrian Signals

Why do some traffic signals have push buttons and signal indications for pedestrian crossings and others do not? Pedestrian signals are primarily installed for two reasons: 1) a high volume of pedestrian traffic present or 2) the green time given for vehicles in a particular direction is not sufficient for pedestrians to cross the road in that direction. When signal indications for vehicles are easy to see and provide plenty of green time for pedestrians to cross safely, push buttons and pedestrian signal indications are often not needed. Push buttons are sometimes provided at intersections where the signal timing is typically controlled by the volume of vehicle traffic. If traffic volumes are low at these intersections, pedestrians will not have enough time to cross the street without push buttons. If pedestrian crossing times were factored into every signal cycle, many intersections would become inefficient and delay vehicles more than necessary. The use of a pedestrian push button allows extra time to be provided only when a pedestrian is present.

What do the pedestrian signals mean, and why isn't there enough time to cross the street during the walk indication on a pedestrian signal? The city is now using pedestrian signals that indicate illuminated symbols of a walking person and an upraised hand, along with a countdown timer of how many seconds of time until the pedestrian signal indicates don't walk or cross.

- The steadily illuminated, orange, upraised hand indication means that a person should not enter the roadway in the direction of the signal.
- The walk symbol (the white colored outline of a walking person) means that a pedestrian may start crossing the road toward the signal.
- The flashing, orange, upraised hand indication means you can continue to cross, but there is not adequate time to begin crossing. The purpose of the flashing indication is to keep pedestrians from entering an intersection too late and to let pedestrians already in an intersection know that their time to finish crossing is becoming shorter, which is now indicated by the countdown timer.

Will pushing the pedestrian walk button several times make the signal change faster? No. The walk button will send a message to the controller requesting a walk indication be granted to the requested direction in the next available signal cycle.

Can signals be installed for pedestrian crossings at mid blocks? Signals may be installed for mid-block pedestrian crossings if an engineering study indicates the need for a signal. The recommendation is usually based on a number of factors such as pedestrian volumes, traffic volumes, presence of a school in the vicinity, lack of a signalized pedestrian crossing within 600 feet of the location, and other safety considerations.

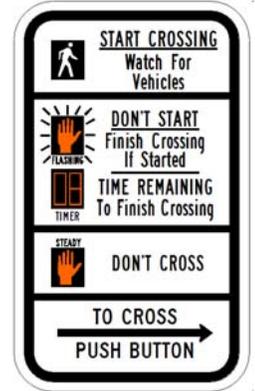
Why do vehicles keep turning even when the pedestrian signal indicates pedestrians have the right to cross? Pedestrian signals assign the right-of-way for pedestrians to cross the street. However, since right turns on red are allowed, some careless drivers make right turns without yielding to pedestrians. This is why, it is important to be cautious when crossing busy intersections. The following suggestions are offered in the interest of safety:

- Always cross intersections defensively.
- When crossing the street, regardless of the availability of signals, cross as quickly as possible. Minimize your time in the roadway.
- Always watch for turning vehicles. You have the legal right to be there, but that doesn't protect you from the carelessness of some motorists.

References: 1. National Cooperative Highway Research Program RRD Report 278, July 2003



Countdown Pedestrian Signal



Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp



City of Sugar Land

Traffic Operations / Engineering Division

Roundabouts

Roundabouts

A roundabout is a circular intersection where vehicles travel counterclockwise around a raised center island, with entering traffic yielding the right-of-way to circulating traffic. Roundabouts are designed for slow speeds of 20 to 25 mph. The geometry of a roundabout requires that entering vehicles negotiate a curve sharp enough to slow speeds to about 15-20 mph. The slow speeds within the roundabout are maintained by the deflection of traffic around the center island and the relatively tight radius of the roundabout and exit lanes. Slow speeds aid in the smooth movement of vehicles into, around, and out of a roundabout.

Roundabout or Traffic Circle? What's the Difference?

- Modern roundabouts are much smaller (diameter less than 300 feet) than older traffic circles and rotaries (which have diameters of 300+ feet).
- Roundabouts operate at slow speeds of about 15 to 20 mph. Older traffic circles or rotaries operated at speeds in excess of 30 mph.
- At roundabouts the entering traffic yields to the circulating traffic. In traffic circles and rotaries: circulating traffic yielded to entering traffic following the traditional rule of "yield to the traffic on right".

Benefits of Roundabouts

- Reduces injury accidents by 75 percent and all accidents by 40 percent.
- Increases efficient traffic flow up to 50 percent.
- Helps the environment by reducing carbon emissions by double digits.
- Decreases fuel consumption by as much as 30 percent.
- Operations cost less than traffic signals and does not require expensive equipment or maintenance.
- Effective traffic calming treatment since design of the roundabout forces vehicles to slow down.
- Roundabouts enhance aesthetics and provide opportunities for landscaping.



Pedestrians and Roundabouts

Studies in Europe indicate that roundabouts are generally safer for pedestrians than traditional intersections. On an average, converting traditional intersections to roundabouts can reduce vehicle-pedestrian crashes by about 75 percent. Pedestrians do not have a signal to help them cross. Drivers must pay attention and pedestrians should be extra careful while crossing the roundabout.

Instructions for Crossing a Roundabout

1. Proceed around the roundabout on the sidewalk and in the designated crosswalks. Never walk in the roundabout or to the central island.
2. When crossing an entry lane, watch traffic coming at you down the entry lane. You have the right of way when you're in the crosswalk, but be careful - make sure that drivers can see you and stop for you.
3. Cross one direction at a time to the splitter island. Stop and watch for cars leaving the roundabout before crossing the exit lane/lanes. Some vehicles will use their right-turn signal, but some won't. You have the right of way, but proceed carefully.

Traffic Operations / Engineering Division

111 Gillingham Lane

Sugar Land, Texas 77478

281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp

Roundabouts

Appropriate Locations for Roundabouts

- Intersections with relatively balanced traffic flows
- Intersections with elevated crash rates
- Intersections with large traffic delays,
- Intersections with complex geometry (e.g., more than four approach roads)
- Intersections with high left-turn traffic
- Interchanges at freeway exits and entrances.

Inappropriate Locations for Roundabouts

- Intersections with topographic or site constraints that limit the ability to provide appropriate geometry for roundabouts,
- Intersections with highly unbalanced traffic flows, or very high traffic volumes on the major street and very low volumes on the minor street, and
- Isolated intersections in a network of traffic signals.

Barriers to Building Roundabouts

- Negative public perception concerning safety due to high number of crashes in the older traffic circles.
- General perception that roundabouts require more space than traditional signalized intersections.

Signs Used with Roundabouts



Guide Signs

Warning Signs

How to Maneuver a Roundabout: Drivers & bicyclists

- On seeing the roundabout ahead sign, start slowing down.
- Next you will see a directional sign that shows where the exits are located on the roundabout. Now the roundabout will be clearly visible.
- Slow down to 10 to 15 MPH as you approach. Stay in your lane, to the right of the splitter island. Be sure to look for bicyclists merging into the travel lane, or pedestrians wanting to cross. Be considerate, and let the bicyclists merge.

NOTE TO BICYCLISTS:

- If you're riding a bicycle, ride as if you were driving a car. Roundabouts are designed so motorists will drive at about 15 to 25 MPH, close to your bicycling speed. Be assertive, so cars see you and respect your right to be on the road.
- If you are riding on the shoulder or bike lane, merge into the travel lane before the shoulder ends. Prepare for this move early, look over your shoulder, and signal your intent to move into traffic. Don't be intimidated; assert your position upon entering the roundabout.
- If you see a person in or about to enter the crosswalk, let them cross; **it's the LAW**.
- Then move slowly to the yield line, looking left. A YIELD sign will tell you to yield to traffic in the roundabout. You may have to stop to yield to cars on your left. If the road is clear, simply enter the roundabout, turning right. You don't have to stop, just enter.
- Proceed around the roundabout slowly. Don't pass bicyclists ahead of you within the roundabout, as your speeds should be nearly equal. Continue until you get to your exit. **Do not stop in the roundabout.**
- If you do not want to ride your bicycle in the roundabout, you may enter the sidewalk using the ramps, and proceed as a pedestrian.
- Once in the roundabout, **don't hug the curb**. Ride close to the middle of the lane to prevent cars from passing and cutting you off. Watch for cars waiting to enter the roundabout, as they may not see you.
- Directional signs will tell you where to exit. Exit carefully, **using your right turn signal**.
- Watch for pedestrians in or approaching the crosswalk and stop for them.



City of Sugar Land

Traffic Operations / Engineering Division

School Traffic Safety

School Traffic Safety Statistics

On average, each year 23 school-age children die in school transportation related traffic accidents in the US. Out of these 6 are occupants of school transportation vehicles and 17 are pedestrians. Based on these statistics, we would like to stress the importance of pedestrian safety around schools. However pedestrian safety is not only dependent on the pedestrians themselves but is also very much dependent upon the driving practices of motorists near schools.

Pedestrian Safety Tips for Children

Young children often cannot judge the speed, distance, and size of oncoming vehicles. Parents should walk the route to school (or other destinations) with children and point out safe practices. This includes locations where children may go to catch a bus.

- At a traffic signal, the green light or walk signal (the white outline of a walking person) means that children should stop at the curb or edge of the road, look both ways for oncoming traffic, and then - if it's safe - cross the street. Having the walk indication or green light does not guarantee that cars will stop. Pedestrians must always look for oncoming and turning traffic even when they have the right of way.
- Before crossing the street, children may want to wait for a "fresh green light." This means that they wait for the next new walk indication if the "don't walk" indication (upright orange hand) is flashing and the countdown timer is nearing zero. Doing this gives them the most time to cross.
- If children are in the middle of the street and the don't walk indication begins flashing comes on , they shouldn't stop or return to the curb or edge of the road. They should continue to walk at their maximum comfortable pace until they reach the other side. Teach them not to run; they might fall.
- And remember:
 - children crossing the street should be accompanied by an adult whenever possible.
 - avoid crossing streets at mid-block, especially when parked vehicles may obstruct vision. Use stop signs, traffic signals and crossing guards when available.
 - children should not follow others or run to others when they call until a safe crossing is available.

Vehicle Safety Around Schools

Parents and other adults can do much to improve traffic safety around schools by driving cautiously, teaching children safe practices, and limiting vehicle trips. Drivers should obey all traffic laws and apply the following practices:

- Carpooling can reduce the number of vehicles near the school, especially during poor weather.
- Avoid parking on the opposite side of the street from the school. When it is necessary, instruct children on how to safely reach the vehicle.
- Make sure children are careful in opening the vehicle doors and that they exit and enter on the curbside of the vehicle. Children should not be allowed to cross the street in the middle of the block to reach the vehicle.
- Drivers should not double park or block traffic. Waiting or parking in red zones is also not allowed.
- Do not block buses or use areas designated for buses only. If an emergency vehicle requires access, the area should be cleared.
- Never leave a vehicle unattended in a loading zone.
- Do not park within a crosswalk or pass a stopped vehicle which is allowing pedestrians to cross.
- Do not violate the law by using the excuse "I will just be here a minute" when picking up or dropping off children. Violations still present a danger and cause congestion during the time of day when it is most important to provide safety for children and avoid congestion.
- Learn the traffic patterns at the school and avoid being a disruption.
- Pay attention to children getting in and out of vehicles. Children sometimes forget to use the curb side door and exit suddenly.

Crossing Guards

If Crossing Guards are provided by the school, encourage children to follow their directions when crossing the street.



Traffic Operations / Engineering Division

111 Gillingham Lane

Sugar Land, Texas 77478

281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp

School Traffic Safety

School Bus Safety – Children

When waiting for, riding, and exiting the school bus, children should follow these rules:



Getting on the School Bus

- When waiting for the bus, stay away from traffic and avoid roughhousing or other behavior that can lead to carelessness. Do not stray onto streets, alleys or private property.
- Line up away from the street or road as the school bus approaches.
- Wait until the bus has stopped and the door opens before stepping onto the roadway.
- Use the hand rail when stepping onto the bus.

Behavior on the Bus

- When on the bus, find a seat and sit down. Loud talking or other noise can distract the bus driver and is not allowed.
- Never put head, arms or hands out of the window.
- Keep aisles clear -- books or bags are tripping hazards and can block the way in an emergency.
- Before you reach your stop, get ready to leave by getting your books and belongings together.
- At your stop, wait for the bus to stop completely before getting up from your seat. Then, walk to the front door and exit, using the hand rail.

Getting off the School Bus

- If you have to cross the street in front of the bus, walk at least ten feet ahead of the bus along the side of the road, until you can turn around and see the driver.
- Make sure that the driver can see you.
- Wait for a signal from the driver before beginning to cross.
- When the driver signals, walk across the road, keeping an eye out for sudden traffic changes.
- Do not cross the center line of the road until the driver has signaled that it is safe for you to begin walking.
- Stay away from the bus's rear wheels at all times.

School Bus Safety – Parents

- Teach children to follow common sense practices and **ALWAYS STAY OUT OF THE DANGER ZONE OF THE BUS** (See figure 1 on right)
- If possible, accompany children to school bus stop and help them get in or out.

School Bus Safety - Motorists

- When backing out of a driveway or leaving a garage, watch out for children walking or bicycling to school.
- When driving in neighborhoods with school zones, watch out for young people who may be thinking about getting to school, but may not be thinking of getting there safely.
- Slow down. Watch for children walking in the street, especially if there are no sidewalks in neighborhood.
- Slow down. Watch for children playing and congregating near bus stops.
- Be alert. Children arriving late for the bus may dart into the street without looking for traffic.
- Learn and obey the school bus laws. Learn the "flashing signal light system" that school bus drivers use to alert motorists of pending actions:

Yellow flashing lights indicate that the bus is preparing to stop to load or unload children. Motorists should slow down and prepare to stop their vehicles.

Red flashing lights and extended stop arms indicate that the bus has stopped, and that children are getting on or off. Motorists in both directions must stop their cars and wait until the red lights stop flashing, the extended stop sign is withdrawn, and the bus begins moving before they can start driving again.

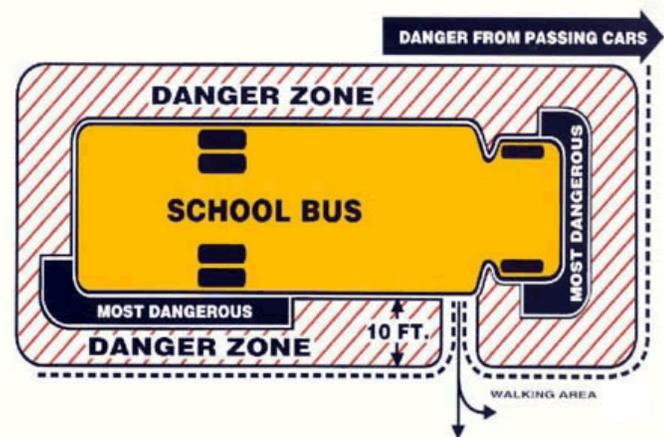


Figure 1. Bus Danger Zone¹

Reference 1. Highline Public Schools, School Bus Safety Webpage

Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp



City of Sugar Land

Traffic Operations / Engineering Division

Speed Limits

Authority

Speed limits are set by statute by the Texas Transportation Code § 545.352. The statute specifies following speed limits:

- Street in Urban District – 30 mph
- Alley in Urban District – 15 mph
- State or Federal numbered highway outside urban district – 70 mph day, 65 mph night
- Any other highway outside urban district: 60 mph day, 55 mph night

These are known as “prima facie” limits and do not require signs for enforcement. For example, in the absence of any other speed limit sign, the speed limit is 30 mph in a residential district within the city limits. The city council may alter the maximum or prima facie speed limits based on an engineering and traffic study on any street or portion thereof within the city. The altered speed limits are posted on regulatory speed limit signs (signs with black text on white background) and are considered prima facie (or legal) for enforcement.



What is the Law?

All drivers are required to obey posted speed limits. These limits are designed to provide for the orderly flow of traffic under normal driving conditions. During periods of heavy traffic, inclement weather, low visibility, or other poor driving conditions, speed must be adjusted so that accidents will be avoided. In the absence of posted limits, prima facie speed limits are in effect. Any speed in excess of the legal speed limit on that roadway will be considered prima facie (or “on the face of it” evidence that the speed is unreasonable, non prudent, and unlawful).

Speed Zoning

When an engineering study determines that statutory speed limits are not appropriate for the existing road and traffic conditions, altered speed limits are established using speed zoning. The types of speed zones are:

Regulatory speed zones impose a restriction on a particular roadway and are indicators of the speed limitations imposed by physical and traffic conditions of the roadway. Regulatory speed limits are posted using regulatory speed limit signs which has black lettering on white background as shown in the Texas Manual on Uniform Traffic Control Devices for Streets and Highways (TMUTCD).

Construction speed zones may be regulatory or advisory speed zones thru a construction project depending on the importance of speed control in the construction zone.

School speed zones are established in accordance with the city policy on School Zone Installation and Removal.

Advisory or warning speeds are the desirable speeds for curves, intersections, or other locations where design standards or physical conditions of the roadway restrict safe operating speeds to values less than the maximum legal speeds or posted regulatory speed limit. Advisory speed signs supplement other warning signs (such as for a curve) and have a black message on a yellow background.

Traffic Operations / Engineering Division

111 Gillingham Lane

Sugar Land, Texas 77478

281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp

Speed Limits

How are Speed Limits Established?

Regulatory speed zones are established in accordance with the procedures described in the TxDOT manual "Procedures for Establishing Speed Zones". Posted speed limits are set by the 85th percentile method, which represents the speed the majority of drivers will be traveling at or below. Speed checks are conducted to determine the 85th percentile speed. The observed free-flowing speed for vehicles is tallied and the 85th percentile speed is calculated using collected data. To ensure a true reflection of a normal traffic situation, speed checks are made on average weekdays during off-peak hours, under favorable weather conditions.

The speed limit is normally set at the nearest value to the 85th percentile speed ending in 5 or 0. The posted limit may be adjusted downwards of the 85th percentile speed based on following factors:

- Roadway pavement width of 20 feet or less
- Curves and hills
- Hidden driveways and other developments
- High number of driveways
- Crash history
- School crossings and characteristics of sites that generate traffic
- Lack of striped, improved shoulders

Once speed limit is determined, a City ordinance is written identifying the limits of the speed limit zone. The ordinance is then sent to City Council for approval. After the City Council approves the proposed speed limit zone, the Traffic Operations Department is instructed to install the necessary signs.

Speed Limit Misconceptions

Studies have shown that there is no significant change in speeds following the posting of a revised speed limit. This is true whether the speed limit is increased or decreased. Safety is also not improved by establishing unreasonably low speed limits. Some misconceptions about speed limits include:

- Reducing the speed limit will not slow the speed of traffic;
- Reducing speed limits will 100% decrease the number of crashes and increase safety;
- Raising the posted speed limit will not typically cause an increase in the speed of traffic;
- Having a posted speed limit is not necessarily safer than an unposted speed limit; and
- Drivers always go 5 or 10 mph over the speed limit.

Why Do We Need Speed Limits?

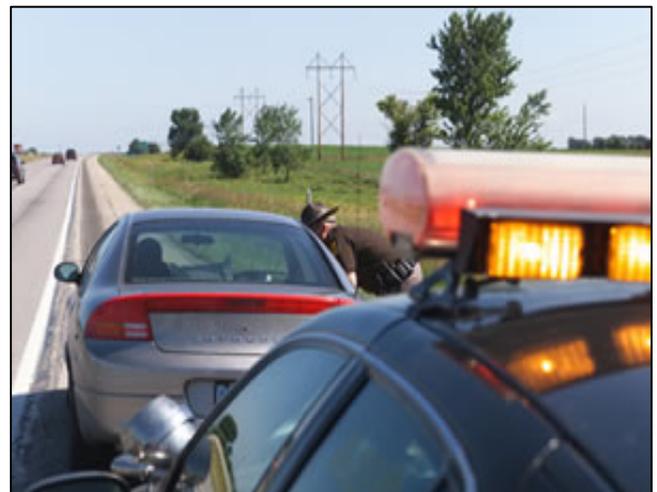
Speed limits which are realistic and reasonable:

- Encourage compliance from the majority of drivers;
- Give a clear reminder of reasonable and prudent speeds;
- Provide an effective enforcement tool to the police; and
- Encourage drivers to travel at the speed where the risk of crash involvement is the lowest.

Studies have shown crash rates are lowest at around the 85th percentile speed. Drivers traveling significantly faster OR slower than this speed are at a greater risk for being in a crash. It is not high speeds alone that relate to crash risk; it is the variation of speed within the traffic stream. In fact, on a per mile driven basis, high speed roadways, like interstates, have a lower speed-related fatality rate than low speed roadways because large variations in speed within the traffic stream create more conflicts and passing maneuvers (and opportunities for driver error and collisions).

However, unrealistic speed limits:

- Discourage voluntary compliance;
- Create the perception of "speed traps;"
- Cause public antagonism toward the police;
- Create a bad image for a community in the eyes of tourists; and
- May increase the potential for crashes.



Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp



City of Sugar Land

Traffic Operations / Engineering Division

Stop Signs

Stop Signs

A STOP sign is a sign used to direct motorists to stop at the spot where a STOP sign is located. STOP signs are used as method for controlling traffic at intersections where the normal application of the right-of-way rule is insufficient to ensure safety and provide reasonable compliance with the law. These signs are found on the right side of the roadway (and sometimes on medians to increase visibility). When more than two directions are controlled by STOP signs, then a supplemental plaque, such as a 4-WAY plaque or an ALL WAY plaque may be used to inform motorists of the type of traffic control that exists at that intersection. If a STOP sign is in its correct location and it cannot be seen very well because of hills or curves, a STOP AHEAD warning sign may be used in advance on the approach to the STOP sign.



Installation Policy

Stop Sign Installations will be addressed according the policies established in the City of Sugar Land Neighborhood Traffic Policy. STOP signs at an intersection are installed only upon the approval of the Traffic Operations/Engineering Division after a careful investigation has been made of the existing conditions. The investigation is conducted using the guidelines for installing STOP signs provided in the Texas Manual of Uniform Traffic Control Devices (TMUTCD).

The following are some of the steps taken to ensure STOP signs are installed correctly.

1. First a history of the intersection in question is reviewed. This includes reviewing prior investigations and accident data to determine if a STOP sign is justified.
2. A field investigation is also performed to check the visibility, street layout, and general surroundings of the site.
3. If necessary, a count of vehicles, pedestrians, and bicyclists is conducted for the intersection of concern on an average day. The results of the count are then reviewed and compared to the minimum requirements allowed by the TMUTCD for installation of STOP signs.
4. Once it has been determined that the installation of a STOP sign is justified and the City Traffic Engineer approves, the STOP sign is installed.

How to Request a Stop Sign in Your Area!

To request a stop sign in your area, call the Traffic Operations/Engineering Division at 281-275-2450. Be prepared to provide the following information:

- Names of the intersecting streets requested for investigation
- Name of requestor
- Daytime phone number of requestor
- Basis for requesting stop sign (such as "no controls exist," or "numerous accidents have occurred," etc.)

Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp

Stop Signs

Two-Way STOP Signs

If no STOP signs exist at an intersection, a STOP sign would be warranted on one of the crossing streets where one or more of the following conditions exist:

- On a minor road at its intersection with a main road where the accident history justifies the placement of STOP signs.
- On a street entering a through highway or street. A STOP sign would be placed on the road with the lower traffic volume and speed.
- On a minor street where the safe approach speed is less than 10 miles per hour.
- At an un-signalized intersection in a signalized area.
- At an intersection where a combination of high speed, restricted view, and accident records indicates a need for control by a STOP sign.

All-Way (3-Way, 4-Way) STOP Signs

All-Way STOP signs are used when traffic volumes on intersection streets are almost equal. According to the TMUTCD an all-way stop sign may be warranted when any of the following conditions exist:

- 1 Where traffic signals are warranted and urgently needed, the multi-way STOP signs may serve as an interim measure which can be installed quickly to control traffic while arrangements are being made for the signal installation,
- 2 Where there is a serious accident problem as indicated by five or more reported accidents per year of the type susceptible to correction by the all-way STOP sign,
- 3 Where the following minimum traffic volumes exist:
 - a The total major street vehicular volume entering the intersection from all approaches averages 300 vehicles per hour for any eight hours of an average day, and
 - b The combined vehicular and pedestrian volume from the minor street or highway averages at least 200 units per hour for the same eight hours, with an average delay to minor street motorists of at least 30 seconds per vehicle during the peak hour, but
 - c When the 85th percentile approach speed of the major street traffic exceeds 40 miles per hour, the minimum vehicular volume warrant is 70 percent of the above requirements.

Should STOP Signs Be Used to Control Speeding in My Neighborhood?

This is a question that is frequently asked by citizens who are concerned about speeding in their neighborhood. Although we share citizens' concern about speeding, the installation of STOP signs is not an appropriate way to solve the problem of speeding. STOP signs are a traffic control device intended for assigning the right of way, not controlling speed. Traffic Calming devices and police enforcement have been found much more effective in controlling speed.

STOP signs result in speed reduction only near the sign, and drivers tend to speed up between STOP sign controlled intersections to make up for lost time. According to National Transportation Engineering Study, when not required to stop by cross street traffic, only 5 to 20% of all drivers come to a complete stop, 40 to 60% will come to a rolling stop below 5 mph, and 20 to 40% will pass through at higher speeds.

Often, unjustified STOP signs are ignored by motorists, which can be more dangerous than speeding. Therefore, it is our policy not to install stop signs to control speeding.

Adverse Impacts of Unjustified STOP Signs

- Unjustified STOP signs cause motorists frustration when they are forced to stop for no apparent reason. Unwarranted STOP signs result in disrespect for all signs and reduce the effectiveness of stop signs at other intersections where they are essential for safety.
- Vehicle emissions account for much of pollution in the air. These emissions increase when vehicles are accelerated and decelerated. It is important to minimize unnecessary stops since steady speeds increase fuel economy and reduce vehicle emissions. Unwarranted STOP signs increase the number of unnecessary stops and reduce the efficiency of our transportation system which results in increased air pollution.

Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp



City of Sugar Land

Traffic Operations / Engineering Division

Traffic Around Schools

School Zone Signs and Operation Times

School Zones may be installed on streets that border the school property line and where students cross a roadway. The signs can be static or include flashers. The flashers are usually installed on roadways with more than 5,000 vehicles per day. The signs conform to the standards and specifications in the Texas Manual on Uniform Control Devices.

School zone times shall be established and installed according to the following general guidelines:

Morning Times – 45 minutes before start to 15 minutes after start of school.

Mid-day – beginning to end of the lunch period.

Afternoon Times – 15 minutes before dismissal to 30 minutes after dismissal of school.

These times may be adjusted at each school based on individual campus requirements. The diagram to the right provides a simple signage layout near a school with a crosswalk.

Parking Regulations

In order to promote safe and efficient traffic circulation around a school, it may be necessary to regulate, restrict or prohibit parking, stopping, or standing adjacent to the school grounds or at an established school crossing. The Department will determine if the street needs parking restrictions.

Crosswalk Location and Installation

Crosswalks are located to enhance the utilization of sidewalks, to serve school routes and to define the appropriate crossing area in the street at high pedestrian volume intersections. When reviewing an area for installation of a crosswalk, the proximity to a school is one factor involved. Other factors considered include volume of vehicular and pedestrian traffic, average vehicular speed, visibility available to motorist and pedestrians, type of traffic controls present, width of street to be crossed, and location of adjacent crosswalks.

How to Request a School Zone?

A request for a school zone may come from concerned citizens or the school's principal (or someone appointed by the principal). An application form can be obtained through the Traffic Operations/Engineering Division. The request must have the following information:

- ❖ School name
- ❖ School hours
- ❖ Principal's name and contact information
- ❖ Requested street name
- ❖ Boundary of the street segment

Requests are typically evaluated during the school's calendar year but can be evaluated at other times when necessary.

A traffic study will be conducted by the Department to determine eligibility based on 1) street borders the school's property line and 2) school is an elementary or middle/junior high school. Studies will be performed during school traffic hours to determine school pedestrian and vehicular traffic at peak times. The study also considers pedestrian volumes crossing at certain locations, as well as volume, direction and speed of vehicular traffic.

Other factors that are considered in the study include terrain, roadway geometry, age of children and availability of sidewalks.



Signs such as "Children at Play" or "Slow Children at Play" are not authorized by the Texas MUTCD and cannot be installed by the city



Traffic Operations / Engineering Division
111 Gillingham Lane
Sugar Land, Texas 77478
281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp



City of Sugar Land

Traffic Operations / Engineering Division

Traffic Signal Installation

Purpose

When warranted, properly designed, located, and operated, traffic control signals can provide orderly movement of vehicular and pedestrian traffic, can reduce the frequency and severity of certain types of crashes, and can increase the traffic handling capacity of the intersection. These benefits have perpetuated a common belief that traffic signals provide the solution to all traffic problems at intersections.

However, when unwarranted and improperly designed, traffic signals cause excessive delays, driver frustration, disobedience, overuse of less adequate routes, and an increase in collisions. This is why the City of Sugar Land looks at every intersection being considered for signalization very carefully to determine that a signal is indeed needed.

How Can We Get a Signal Installed in Our Area?

Signal Installations will be addressed according to the policies established in the City of Sugar Land Neighborhood Traffic Policy. A request for signal installation may be made by any citizen. To request a signal installation, you can call the City Traffic Engineer at 281-275-2450. You need the following information to make a request:

- Names of the intersecting streets requested for investigation
- Name, address, and daytime phone number of requestor
- Basis for requesting signal installation (such as "very difficult to pull out on major street" or "numerous accidents have occurred," etc.)

After review of the request, if the intersection is found to be city's responsibility, a traffic signal investigation is initiated. Traffic signal investigations can also be initiated when city engineers judge them necessary.

What is Involved in a Traffic Signal Investigation?

The investigation involves all or some of the following steps:

Screening Investigation

A screening investigation is performed using the most recent twelve month accident history and 24-hour traffic volume counts.

Warrant Justification

The detailed investigation of the need for a traffic control signal includes analysis for warrants as per the Texas Manual on Uniform Traffic Control Devices based on vehicle volumes, pedestrian volumes, school crossing, signal coordination, and/or crash experience. If the intersection data satisfies one or more of the warrants, the City staff uses engineering judgment to make a recommendation.

Engineering Judgment

The City staff makes a recommendation on the basis of following questions, among other considerations:

- Will the traffic signal improve intersection safety?
- Will the traffic signal improve efficiency of the intersection and the overall traffic system?
- If the signal is installed, will the desired results be achieved?
- Do the physical geometric characteristics of the intersection and the approaches allow the installation of a traffic signal? If not, what changes are necessary?

Recommendations

Based on the traffic signal investigation, the following recommendations are possible:

- If the location does not meet any of the TMUTCD warrants for a traffic signal installation, a signal is not warranted.
- Based on engineering judgment, it is found installation of signal is not needed, and other corrective measures should be used to improve the intersection operations.
- Installation of a traffic signal is recommended.

Construction, Operation, and Maintenance

Once the signal is approved for placement, plans are created for construction. Depending on the conditions at the intersection, it may require up to two years to recommend, design, and construct a traffic signal installation. Once constructed and in operation, the signal is maintained by a staff of signal technicians who provide on-call service, as required, 24-hours per day, 365-days per year.

The traffic signal dispatcher can be reached at 281-275-2450 to report any emergency traffic signal malfunction.

Traffic Operations / Engineering Division

111 Gillingham Lane

Sugar Land, Texas 77478

281-275-2450

www.sugarlandtx.gov/public_works/traffic_management/index.asp