



CITY OF BELTON
PUBLIC WORKS DEPARTMENT
TRAFFIC OPERATIONS POLICY
APRIL 2013

Overview

The primary goal of Traffic Operations Policy is to maintain the transportation network and provide the highest level of public safety possible. The City's transportation infrastructure is a vital resource that must be managed effectively and wisely to meet a variety of needs and demands. The City of Belton must address needs and demands in a fair and equitable manner to balance the needs of all modes of transportation; vehicles, pedestrians, bicycles and transit. Communication with the School District, Police Department, Fire Department, Emergency Management, Finance Department and Parks Department is vital to the planning, coordination, installation and maintenance of all traffic related activities.

Purpose

The purpose of this policy is to provide the best transportation system possible for motorists, pedestrians and bicyclists through the following measures:

- Establish and circulate policies and procedures designed to resolve traffic issues.
- Provide simple and user friendly processes that also result in best decisions based on warrant, safety and capacity analysis for traffic related complaints, concerns, or requests.
- Provide design strategies pursuant to traffic control standards that receive all necessary reviews and approvals in the effort toward mitigating traffic related issues brought to the departments' attention.
- Offer a system that provides methods of addressing:
 - Safety
 - Circulation
- Offer a system that provides methods designed to reduce:
 - Hazardous patterns and incidents of conflict between
 - Vehicles
 - Bicycles
 - Pedestrians
 - Negative effects of the following existing conditions
 - Congestion at local schools
 - Cut through traffic
 - Misdirected commercial truck traffic
 - Noise and air pollution

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Educating the Public

- Education of the objectives and procedures established within this policy is critical to its effectiveness. The following tools are utilized to educate the public and provide them the tools they need to address their needs and desires:
 - City of Belton Website
 - Citizen Request Tracker
 - Belton News and Event
 - Bid Opportunities
 - Social Media
 - Facebook
 - Twitter
 - Council Meetings
 - Public Hearings and Meetings
 - Phone
 - Newspaper
 - Newsletters
 - GIS
 - Water Billing

Traffic Related Complaints / Requests

The complaints, concerns or requests generated from traffic conditions, traffic control devices or signals shall be directed to the City Engineer or approved designee to be reviewed. Requests can be received via written correspondence, City of Belton website, phone or e-mail and shall be handled as follows:

- Written correspondence shall be submitted to the City Engineer

City of Belton
Public Works Department
520 Main Street
Belton, Missouri 64012
Attn: City Engineer

- Complaints via the City of Belton Website
 - Go to www.belton.org
 - Select “Report a Concern”
 - Select concern from list under Public Works
 - If an account has not been established, you must establish a login and password
 - Complete form
 - Form will then be directed to the appropriate staff member
 - Correspondence will be conducted through the request tracker
- Complaints via phone or email should be directed to the City Engineer or approved designee.

To initiate action, citizens should provide the following information. *Note: incomplete submittals could lengthen the time for response.*

- A. Full Name
- B. Address
- C. Phone Number
- D. Alternate Phone Number (if applicable)
- E. E-mail address (if applicable)
- F. Detailed description of complaint , concern or request

Traffic Control Devices

The City of Belton recognizes the Manual on Uniform Traffic Control Devices (MUTCD), the latest revised edition, as the standard for all traffic control devices on public roads.

Major types of Traffic Control Devices:

- Regulatory Signs: Signs used to regulate traffic, and by law, drivers are expected to obey. Examples: Stop, Yield, Speed Limit, No Parking,
- Warning Signs: Type of traffic sign used to indicate a hazard ahead. Examples: One-Way, Dead End, Stop Ahead, Curve Ahead
- Guide Signs: Used to guide motorists. Examples: route markers, distance and destination, street name signs
- Pavement Markings
- Signals
- Flashing School Lights

In January, 2012, the transportation division developed a FHWA Sign Retro Reflectivity Plan that details the maintenance requirements for traffic control signs within the City. This plan outlines retro reflectivity requirements, provides compliance schedule, resources needed, assessment and management and implementation. Future re-inspections of this plan will be conducted on a 4 year rotation once all information has been obtained.

- Year One – Ward One
- Year Two – Ward Two
- Year Three – Ward Three
- Year Four – Ward Four

Uncontrolled Intersections

Intersections may operate without traffic control devices in some cases based upon the pertinent standards, the judgment of the City Engineer, sight distance considerations and road geometry. If determined to be acceptable and best, these intersections permit drivers to yield in accordance with normal right of way rules. Consideration is given to:

- The speed limit of streets approaching the intersection, usually 25 mph or below.
- The total volume entering the intersection, usually 1000 vehicles per day or below.
- The number of crashes deemed correctable by intersection control, usually two or below in four years.

STOP or YIELD Control

Minor street (lower ADT) approaches may be considered for STOP or YIELD control by the City Engineer, or approved designee based, upon one or more of the following conditions:

1. The sight distance or road geometry is deemed insufficient to permit drivers to STOP or YIELD in compliance with the normal right-of-way rule.
2. The major street is listed in Appendix B, Table 2 as a Through Street.
3. The number of crashes deemed correctable by the installation of a STOP or YIELD sign, exceeds two in four years.
4. The total volume entering the intersection exceeds 1000 vehicles per day.
5. The posted speed limit on the major street exceeds 25 mph.
6. The STOP control guidance of MUTCD 2B.06 is applicable.
7. The YIELD control guidance of MUTCD 2B.09 is applicable.
8. The intersection is at or near a school and pedestrian/bicycle crossings are expected to exceed 25 per hour during any consecutive two hours of the day.

Multi-way STOP control

Multi-way STOP control may be considered by the City Engineer based upon one or more of the following conditions:

1. After stopping at the appropriate location, road users cannot see conflicting traffic and are not able to negotiate the intersection unless conflicting cross traffic is also required to stop.
2. The intersection is at or near a school and pedestrian/bicycle crossings are expected to exceed 50 per hour during any consecutive two hours of the day.
3. The intersection control guidance and options of MUTCD 2B.07 are applicable.

Installation of Traffic Control Devices

All requests for the installation for new traffic control devices shall be directed to the City Engineer or approved designee by the complaint / request process listed above. All requests will be reviewed for validity, feasibility and necessity in accordance with the MUTCD and other appropriate standards. Requests for the installation of regulatory signs must be approved by City Council.

Multiple processes may be followed to warrant the installation of any traffic control device and are detailed below.

- Review of MUTCD
- Accident History reports provided by the City of Belton Police Department
- Visual Inspection
- Public Hearing
- Warrant Analysis
- Safety Analysis
- Capacity Analysis

Jurisdiction of Traffic Control Devices

When at least one intersection approach is under the jurisdiction of the City of Belton and others are private, intersection traffic control signs are maintained by the City of Belton Public Works Department.

When intersection approaches are under multiple agency jurisdictions, staff coordinates with others to ensure proper signage and ownership of maintenance. For example:

- Missouri Department of Transportation Maintenance
 - 58 Highway from east city limits to west city limits
 - All signals along 58 highway
 - Y-highway from 58 to south city limits

Traffic Signs

The City of Belton Public Works Department has established minimum standards for traffic control devices, materials, sizes and hardware. The City of Belton recognizes the MUTCD as the standard for all traffic control devices placed in the City according to the following:

- At a minimum, signs shall utilize high intensity prismatic sheeting, Type III, meeting ASTM D4956-09
- At a minimum, all signs shall be made of .080 aluminum. Fiberglass and steel signs shall not be used within the City of Belton
- All signs 30" and larger shall be placed on minimum, 3# u-channel posts or telespar, 1 3/4" square tubing with pre-drilled 7/16" holes on 1" centers.
- All signs under 30" shall be placed on 2# u-channel posts
- Kleen break model 425 sign post coupler shall be used for flush and surface mounting in concrete for all telespar posts. The direct drive soil anchor system shall be used in green spaces.
- Any u-channel post placed in ROW or green space shall use a standard break away mount. The typical mount shall consist of a 3'-4' post (in-ground post) driven into the ground with approximately 6" exposed above ground. Bolts, with spacers between the in-ground post and mounting post, shall be used to secure the mounting post.
- All mounting brackets for signs and street signs shall be made of aluminum to protect from weather
- All mounting bolts shall be galvanized or an approved equal to protect from weather.

The above criteria are the minimum standards for most applications of traffic signs. Special posts, signs, brackets, etc. may be used in certain situations and must be approved prior to installation from the City Engineer or assigned designee.

Maintenance of Traffic Signs

Per City code, the Transportation Division of Public Works is responsible for the maintenance of all city owned traffic control devices. Complaints, concerns or questions related to the condition of these devices shall be directed to the Transportation Division.

The following priorities have been established to meet the expectations of Belton residents.

- Emergency (immediate)
 - Downed stop sign or yield sign. Will require a temporary sign to be placed.
 - Work ordered by engineering to reduce an immediate and high severity public safety concern
- ASAP / High Priority (1 week)
 - Reactive maintenance of regulatory and warning signs which are down, illegible or severely damaged
 - Changes due to an approved ordinance
- High / Intermediate priority (4 weeks)
 - Regular proactive maintenance
 - Unforeseen maintenance issue
- Low Priority (6 weeks)
 - Elective sign programs; i.e. adopt-a-street,

The Transportation division will be responsible for prioritization within each category to most efficiently complete the work on time. All pro-active maintenance and sign request work orders shall be reviewed by engineering.

The Transportation Division maintains a computerized inventory and condition assessment of all signs including type, size, heights, location, reflectivity, location and bar coded for inventory purposes.

Street Name Signs

Street name signs are installed for the purpose of identifying the name of each street at intersections to aid motorists reach their destination.

The following criteria shall be the specifications for street name signs installed, replaced and maintained by the City.

- Sign Blade Material - Sign Blades shall be single bladed, constructed of extruded aluminum, .080 - .125 of an inch in thickness and covered on each side with reflective sheeting of type III high-intensity prismatic or better and will contrast with the white lettering used to make up the road name and other information required on the sign.
- Sign lettering - The letters making up the road name and other information shall be white in color of such a material that will reflect off headlights of approaching vehicles
- Sign Blade Size - Sign blades for proposed public roads shall be eight (8) inches in width where these proposed roads intersect with existing City of Belton arterial streets and those streets with established speed limits of 40mph or greater; except at intersections that are internal to the proposed subdivision these signs may be six (6) inches in width. The length of the sign shall be determined by the length of the road name as described below.

- Sign Blade Appearance - Each side of a sign blade shall appear as follows: The letters shall be 4 inches in height and centered on the sign blade so as to allow at least six (6) inches and no more than ten (10) inches of space on each side of the street name. The upper right hand corner of the sign shall have the road type abbreviation.
- Sign Placement - All street name signs shall be placed at intersections in accordance with the MUTCD and when this is not possible the location of the sign must be approved in writing by the City of Belton Engineering Division.

All street name signs on public streets shall be placed atop 2# u-channel posts if they are the only signs being placed on pole. If street name signs are placed atop a pole with a stop or yield, 3# u-channel or 1 ¾” square tubing with pre-drilled 7/16” holes on 1” centers. The height shall be ten and one-half (10.5) feet.

All street name signs shall be mounted with vandal-proof brackets constructed of aluminum. Plastic, resin or like materials is not approved for installation.

Sign Visibility

The City of Belton has adopted ordinance #18-1347 of Article 1, Section 19-3, for the purpose of encroaching foliage upon right-of-way; city authorized to remedy. This provides the public works department the ability to trim tree branches and other vegetation that may impede the visibility of traffic control signs.

The City’s Traffic Technician shall be responsible for annually inspecting the visibility of all traffic signs. This shall be completed during the summer months of each calendar year by driving each street and checking each sign for any obstructions that may impede visibility. During this routine inspection, the traffic technician shall also check the sign for graffiti or other defects that may prevent the motorist from properly viewing any traffic sign. The traffic technician shall determine if a sign can be cleaned or should be replaced.

Sign Inventory

A street sign database (Cartegraph) is used to track all traffic related sign installation, replacement, inspection and maintenance activities within the City right-of-way and within City owned parking facilities. Each sign post type, style, size, and location is entered into the database.

The inventory is field inspected per the criteria established in the Sign Retroreflectivity Policy to ensure MUTCD compliance.

Statutory Speed Limits on Roadways

In accordance with ordinance #71-538 of Chapter 13 of Article VIII, Division 3, Section 288, the speed limit on all streets within the City of Belton is 25mph except as otherwise designated per the schedule of speed zones in appendix B. Placement of statutory signs are designated by the City Engineer, or approved designee and in compliance with the Code of Ordinances.

Advisory Speed Limit Signs

Advisory speed limit signs may be installed on streets under the jurisdiction of the City of Belton as directed by the City Engineer or approved designee and in accordance with the MUTCD.

School Pedestrian Crossings

The City of Belton has adopted ordinance #2007-3389 of Chapter 13, of Article VIII, Division 3, section 291 for the purpose of designating school zones between the hours of 7:00am and 4:00pm on school days. Special speed limits and streets listed in Table 7 of Appendix B are eligible for school pedestrian crossings. Placement of school pedestrian crossings are designated by the City Engineer and in compliance with the MUTCD Part 7. Consideration and communication with the Belton School District shall be provided during the planning and placement of school pedestrian crossings.

School Zone Speed Limit Signs

School speed limit signs may be installed on streets listed in Table 7 of Appendix B and as designated as school zones. Installation is directed by the City Engineer or approved designee and shall be in compliance with the MUTCD Part 7.

Special Signs

The City of Belton does not install, permit, or maintain signs which are not MUTCD compliant, with the exception of existing and approved manned crosswalk stop signs. Special signs proposed to be installed within the public right-of-way must be approved by the City Engineer or approved designee and in compliance with the MUTCD, as applicable. The City of Belton Council may review and approve any special circumstances. Requests shall be directed to the City Engineer and follow the processes described earlier in this policy.

Alley Stop Signs

The City of Belton does not install or maintain traffic control devices in alleys.

Railroad Crossing Signs and Markings

Railroad crossing signs and markings within the City of Belton are owned and maintained by Smokey Hill Railroad, Inc. Design standards shall meet the MUTCD part 8 and shall be approved by the City Engineer.

Pavement Markings

Pavement markings are installed under the direction of the City Engineer or approved in accordance with part 3 of the MUTCD. The City has a pavement marking program consisting of both construction and maintenance elements in order to provide acceptable levels of markings on streets within the network.

It is not feasible to maintain pavement marking minimum retroreflectivity levels for all markings at all times. Winter operations and maintenance activities can damage and even obliterate markings such that pavement markings in the winter and spring may have little or no measurable retroreflectivity. In addition, during wet conditions the performance of

conventional pavement markings is typically much less effective than during dry conditions. Also, pavement marking replacement periods are limited to seasonal cycles (dry pavements and pavement temperatures above 50 degrees Fahrenheit) making it impractical to perform pavement marking maintenance activities during winter months. To make best use of dollars, pavement markings shall not be replaced prior to any planned overlay, crack sealing or asphalt work.

Pavement Marking Maintenance - The maintenance element of the pavement marking program consists of an annual visual assessment of in-place markings to identify the segments of the City of Belton's transportation network that will be refurbished in any given year. The visual assessment will consist of transportation staff conducting a nighttime inspection of all marked city streets and recording their determinations relative to whether or not the markings meet the adopted performance measures. The annual program for refurbishing the pavement markings will then be developed based on addressing those facilities where the markings have been determined to no longer meet the adopted performance measures.

Edge and centerline markings will be refurbished utilizing latex paint. Latex paint is a water based paint that is typically most cost-effective. A 4" line has a life expectancy of 2 years on low volume streets (less than 1,500 vehicles per day) and 1 year on higher volume streets (greater than 1,500 vehicles per day).

New Construction and Development Projects Pavement Markings - The construction element of the City of Belton's pavement marking program consists of using an approved epoxy material for all center and edge lines on new surfaces that are associated with construction and maintenance projects supported by state and federal funds and development projects. The additional state and federal funds on these projects allows the City of Belton to deploy the more durable and longer lasting epoxy markings at a reduced first cost and will also result in a long-term reduction in annual maintenance costs (because of the documented longer service life).

Pavement Markings on Residential Streets - The City of Belton does not utilize pavement markings on residential streets. If markings are placed on residential street, they will be consistent with required passing/no passing markings and comply with part 3 of the MUTCD.

Pedestrian and School Crosswalk Pavement Markings

The City provides for safe pedestrian crossings of public streets by installing and maintaining marked crosswalks at all locations where there is substantial conflict between vehicle and pedestrian movements, significant pedestrian concentrations, where pedestrians would not otherwise recognize the proper place to cross, and where traffic movements are controlled.

A “marked crosswalk” is any crosswalk that is delineated by painted markings placed on the pavement for the purpose of directing pedestrians to use a particular location to cross the street. Crosswalks may be marked at intersections controlled by traffic signals or stop/yield signs (“controlled crossings”), or at locations where traffic is not controlled by signals or stop/yield signs (“uncontrolled crossings”).

Marked crosswalks are viewed widely as “safety devices,” and most municipalities give the pedestrian the right-of-way when within them. However, there is strong evidence that these facts prompt many pedestrians to feel overly secure when using a marked crosswalk. As a result, pedestrians will often place themselves in a hazardous position by believing that motorists can and will stop in all cases, even when it may be impossible to do so. It is not unusual for this type of aggressive pedestrian behavior to contribute to a higher incidence of pedestrian accidents and causes a greater number of rear-end collisions. In contrast, a pedestrian using an unmarked crosswalk generally feels less secure and less certain that the motorist will stop and thereby exercise more caution and waiting for safe gaps in the traffic stream before crossing. The end result is fewer accidents at unmarked crosswalks.

Despite the above safety issues, a marked crosswalk is a useful traffic engineering device for helping pedestrians across complex intersections, channelizing pedestrians to safe crossing locations, and minimizing their exposure to vehicular conflicts, as long as sound engineering judgment is exercised in their location and design. Crosswalk lines should not be used indiscriminately at mid-block locations away from traffic signals or stop signs. Crosswalks may be marked at mid-block locations, however, if an engineering study determines it is safe to do so, and their presence is necessary to concentrate pedestrian crossing activity at a specific location. A mid-block crosswalk is not likely to be effective if pedestrian crossings occur at random locations within a block and if vehicle volumes are low or moderate (adequate gaps are available).

Crosswalks should also not be marked on 2-lane roadways with ADT greater than 9,000 vehicles per day, or 4-lane roadways with ADT greater than 12,000 vehicles per day, unless other special treatments - such as raised median refuges, curb extensions, overhead lighting, pedestrian-activated signals or warning lights – are provided, and an engineering study concludes that pedestrian safety will be ensured by the special treatments.

Unsignalized Intersection Crosswalks: At unsignalized intersections, crosswalks normally remain unmarked, unless the City Engineer or approved designee determines that a marked crosswalk is needed, or to direct pedestrians as follows:

- At or near a school where it is determined that a crosswalk should be marked per MUTCD Part 7.
- At an intersection approach with STOP or YIELD control in place, where the pedestrian crossing path is unclear, or where a preferred pedestrian pathway exists based on intersection geometry, ADT, speed limit, and other safety considerations.
- At a roundabout intersection per MUTCD 3C.05.

Marked intersection crosswalks shall consist of solid white lines not less than six inches or greater than 24 inches in width. Installation should consider additional guidance in MUTCD 3B.18.

Marked Mid-Block Crosswalks: Before a marked crosswalk is designated at a location away from a roundabout, traffic control signal, or an intersection approach controlled by a STOP or YIELD sign, an engineering study should be performed. The study should consider pedestrian volume, parking, lighting, road geometry, ADT, and speed limits. When a mid-block crosswalk is marked, the crosswalk must comply with MUTCD 2B.11, 2B.12, 3B.16 and 3B.18. The crosswalk must contain yield lines with Yield Here to Pedestrian (R1-5) signs.

Stop Line and Yield Line Pavement Markings

Stop and Yield lines are not installed unless warranted based upon the judgment of the City Engineer. Stop lines are typically installed at STOP intersections with marked crosswalks and where it is necessary to define the point of stopping at an intersection or railroad grade crossing to ensure motorist and pedestrian safety. When used with a crosswalk, stop lines are placed a minimum of four feet in advance of the nearest crosswalk line. Stop lines must be 12 to 24 inches wide and follow standards and guidance per MUTCD 3B.16.

Installation of New Signals

Signals installed in the City of Belton follow a supplementary policy established by the Engineering Division titled *Traffic Signal and Roundabout Policy*. This policy shall be referenced for requests, development or the installation of a proposed signal or roundabout.

Traffic Signals within the City of Belton are maintained and operated by either the Missouri Department of Transportation or the City of Belton. The following list details the intersections and ownership.

MoDOT signal responsibilities:

MoDOT Sign and Signal Shop (816-622-0505)

MoDOT Customer Service (816-622-6500)

1. 58 and Clint Drive
2. 58 and Bel-Ray Blvd
3. All signals at 58 and I-49, including the outer roads (4)
4. 58 and Powell Parkway
5. 58 and Mullen
6. 58 and Town Center Drive
7. 58 and Y Highway / 163rd Street
8. 58 and North Scott
9. 58 and South Scott
10. 58 and Holmes Road / D Highway

11. 163rd and I-49 entrance and exit ramps (2)
12. 155th and I-49 entrance and exit ramps (2)

City of Belton:

1. 163rd and Kentucky View Drive
2. 163rd and Cornerstone Drive/Kay Drive
3. 163rd and Markey Parkway (not operational)
4. Markey Parkway Dead End (not operational)
5. 163rd and Givan Avenue

Calls or requests received regarding the operation of a particular traffic signal shall be directed to the appropriate jurisdiction. Requests received for the City of Belton shall follow the procedure listed earlier in this document.

Temporary Stop Signs

Circumstances may happen where a traffic signal becomes inoperable or a stop sign is knocked down. Transportation personnel shall deploy portable STOP signs to provide temporary traffic control for the malfunction or downed sign when notified. This process shall be considered an emergency response and appropriate action shall be immediate.

Traffic Signal Timings

Traffic signal phasing and timings within the City of Belton follow guidelines established by the Engineering Division, titled *Traffic Signal Phasing and Timing Policy*. This policy shall be referenced for requests, development or the installation of proposed traffic signals.

Truck Routes

Commercial vehicles are defined as a vehicle licensed by the state of Missouri in excess of 12,000 pounds. Commercial vehicle restrictions for the City of Belton are defined within the code of ordinances Part II, Chapter 13, Article IX, Division 3, section 14-434 through 14-438 and posted under the direction of the City Engineer or approved designee.

Established routes are described in Appendix B, Table 9.

Bike Paths

Current and future planned bike routes, bike lanes and bike paths are identified in the Belton Trails Master Plan, April 2009. The plan is available on the City website and incorporates the following design standards based on the type of bike route within the City of Belton:

- American Association of State Highway and Transportation Officials (AASHTO)
- Guide for Development of Bicycle Facilities (1999)
- Guide for the Planning, Design and Operation of Pedestrian Facilities (2004)

Chapter 36, Article III, Section 73c of the City of Belton, Unified Development Code reserves a public access easement for corridors identified in the Belton Trails Master Plan on new development.

Bus Stops

Bus transit is not available within the City of Belton. In the event transit becomes available, the City Engineer or approved designee shall work with the appropriate parties to plan, design and construct facilities in compliance with the American Public Transportation Association (APTA) standards and specifications.

Temporary Street Closings

Transportation division personnel are authorized to set up traffic control including temporary street closings in the event of road damage, blockage, flooding or other emergency situation necessitating such traffic control. The transportation division shall utilize the resources from engineering, emergency management, police and fire department to best plan and coordinate those efforts associated with a temporary street closing. To the extent reasonably possible, temporary traffic control devices on public roadways shall comply with the MUTCD except during unusual events where an adequate supply of MUTCD compliant devices is not available.

Street Festivals and special events (i.e. block parties) where participants are using a public roadway require approval from the City Clerk or designee. Events or festivals affecting businesses, traffic flow, safety etc. may require Council approval.

Communication is the key in planning a successful event. Processes for approval will include the Police Department, Fire Department, Public Works Department and Emergency Management. A minimum of two weeks prior to the event shall be expected to receive approval. Any denials to a request may be appealed to the City Council.

Requests for these events shall be directed to the City Clerk or designee, located at 506 Main Street and follow the procedures established. As part of their submittal for the event, an aerial map detailing the location and a traffic control plan may be required. The transportation division shall provide barricades, cones, channelizers, detour signs, etc. as approved by the City Engineer or approved designee and deliver to the event coordinator a minimum of one day prior and place the traffic control devices in the City ROW. It shall be the responsibility of the event coordinator to place and remove the traffic control devices at the times approved to begin and end. The transportation division shall pick up all devices the following work day.

Parades: Requests for parades shall be directed to the City Clerk and follow the procedures established within Part II, Chapter 13, article XII, division 2, sections 13-702 through 13-712 of the Code of Ordinances.

The Public Works Department shall be responsible for maintaining a minimum number of traffic control devices to be used for special events and work zones.

One-Way Streets

One-way streets are installed under the direction of the City Engineer or approved designee in accordance with part II, chapter 13, article VI, section 13-179 of the code of

ordinances and in compliance with the MUTCD. Appendix B, table 1 details those streets designated as one-way within the City of Belton.

Traffic Calming Program

The City of Belton's Traffic Calming Program is developed to guide Public Work's staff and to inform residents on the process for implementing traffic calming in residential areas, ONLY. Traffic calming will not be considered on those streets classified as a collector or arterial street. The policy is intended to address traffic issues not commonly addressed in the MUTCD, although the MUTCD will be used for traffic engineering reference.

Traffic calming means many things to different people. To some, traffic calming is defined by speed limit reductions, to some it is the installation of traffic control devices, and to others traffic calming is an attempt to reduce traffic volume and the negative effects that large volumes of traffic can have on residential neighborhoods. Each of the perspectives may correctly define traffic calming. In the most basic terms, traffic calming is a programmatic response to inappropriate speeds or volumes on residential streets.

In some cases the Public Works Committee (made up of four citizens) may be utilized to help evaluate, work with residents, provide sensible and programmatic responses to each request, and recommend certain actions to the City Council for consideration.

Streets that are maintained by the City of Belton and are considered to be local / residential will be addressed under this policy. They serve as local circulation for automobiles, bicycles, and pedestrians and do not carry significant volumes of through traffic. These streets also tend to be adjacent to residential areas. Streets identified as an arterial or collector and carrying more than 4,000 vehicles per day are not eligible for the Traffic Calming Program.

Evaluation Process - Citizen's or neighborhood associations' may contact the Public Works Engineering Division with a concern for traffic calming or speed limit reduction in their area. Requests shall be submitted as directed above in the *Traffic Related Complaints/Requests* section.

Determination of Existing Conditions - Before the initiation of a traffic calming study, the Engineering Division will conduct field observations/site visits, determine the established speed limit utilizing the City Ordinance, collect traffic volumes and speed data. Once the following information is collected, a recommendation may be determined by the Public Works Committee and made to the City Council as necessary:

- Traffic volume data and verification of street classification
- Speed data to determine speeding violations exists and determination of the 85th percentile speed through the Transportation Division
- Accident data through the City of Belton Police Department records

- Emergency Services service routes and response times
- Housing density and development in the area
- Pedestrian and bicycle activity
- Vehicle classification data will be collected if deemed necessary by the City Engineer
- Geometric features of the street (lane width, shoulder width, sight distance, alignment and sidewalks)

Guidelines and Recommendations - The City Engineer or approved designee, and as appropriate the Public Works Committee, will make programmatic responses and recommendations in cases where the 85th percentile speed is 5 MPH higher than the posted speed limit; where there is a geometric deficiency, and / or a history of accidents. Research will be conducted into state and national traffic calming examples/trends, as well as the Institute of Transportation Engineers (ITE) traffic calming recommendations and procedures. The ordered responses that will be evaluated and considered before in-street structural traffic calming measures are recommended to City Council are as follows:

- Step 1: Police enforcement and citizen education
- Step 2: Signage and warning devices
- Step 3: Low cost traffic improvements (striping, parking changes, etc.)
- Step 4: Traffic calming measures
- Step 5: In-street structural devices

Traffic Calming Studies

Qualifying Criteria

If a traffic calming response, outside of speed limit reduction and low cost traffic improvements, is determined to be appropriate by the City Engineer, a Traffic Calming Study Request Form and petition will be sent to the applicant. The submitted request should specifically explain and identify the need for a traffic calming measure or device. Upon submittal of the completed form to the City, engineering staff will proceed with the evaluation of a formal study using the eight qualifying criteria listed below:

- QC-1. The proposed street must be classified as a two-lane (one or two-way traffic) local, residential.
- QC-2. The street pavement must be less than 40 feet in width.
- QC-3. The average daily traffic should be at least 700 vehicles per day and not more than 4,000 vehicles per day.
- QC-4. The Traffic Calming Study area should include a minimum of 1,000 feet of street.
- QC-5. 15% of the traffic on the street exceeds the posted speed limit by 5 mph or more.
- QC-6. At least 75% of the residences of the street, or in the event of a rental the owner of the property on which the rental is located, shall sign a petition supporting the Traffic Calming Request and subsequent device or measure.
- QC-7. The street's speed limit must be posted at 25 mph.

- QC-8. The street should not be a primary emergency services route.

Upon receipt, engineering division staff will determine if the request conforms to the qualifying criteria noted above. Applicants that do NOT meet the criteria above will NOT be considered for a formal study or implementation of in-street structural traffic calming measures.

Prioritization Criteria

Upon qualification, engineering staff will conduct additional reviews to determine the priority of requested need. The priority review will be conducted by the Public Works Committee and will be based on the following prioritization criteria:

PRIORITIZATION CRITERIA			
Criteria	Points Allowed	Points Awarded	Notes
Traffic Volume	1		For each 200 vehicles per day over 1500
Speeding	2		For each mph the 85 th percentile speed is over the posted speed limit
Schools, Daycare, etc.	5		If within 1200' of facility
Sidewalks	9		No sidewalks on either side of street
Sidewalks	4		Sidewalk on one side of road
School Crossing	7		If there is an official school crossing on the street
Pedestrian generator	5		If there is an activity within 1200' that generates high numbers of pedestrians
Accidents	5		For each accident on the street over a three year period
Residential density	1		Times the R zoning district
Waiting list	1		For each month on the list
Total Points Awarded			

The highest ranked requests would be submitted for City Council for construction approval and funding authorization. (See Public Meetings below). City Council would approve the proposed construction list annually as part of the budget process. Those not funded would be rolled over to the following year. The Prioritization Criteria noted above provides a point for each month that a petition is on the waiting list.

Placement Guidelines

The Public Works Committee staff shall determine the type and location of all traffic calming measures and devices according to the placement criteria listed below. The Chief of Police also may deem certain traffic safety measures and devices necessary that will be implemented based on protection of the public. Placement of such will be based on engineering judgment and in a manner not to pose a problem to the street as follows:

- Positioned to meet recommended Federal or MoDOT guidelines or
- Positioned a minimum of 200 feet apart.
- Provide a stopping sight distance of 200 feet or more at 25 mph.
- Be located a minimum of 200 feet from an intersection.
- Primarily located at or near a property line
- At or near a street light (if applicable).
- Be located a minimum of 10 feet from a driveway
- Plantings must be issued an encroachment and maintained by property owner or homeowners association.

Notice Regarding Emergency Vehicles and Public Safety Response

Emergency Services and School Buses will be affected by the installation of in-street structural traffic calming measures. These vehicles must travel at lower speeds due to the type of equipment and service they provide. According to the recent data, fire trucks typically slow to 5-7 mph when encountering a positive measure traffic calming device. This will increase emergency vehicle response time by 5-9 seconds per device. As part of the petition process, neighborhoods should be clearly advised of the reduction in response time that is attributed to in-street traffic calming devices.

Liability Concerns

There is limited documentation that specifically indicates that traffic calming devices and measures create direct traffic hazards. However, the installation of in-street traffic calming devices and measures onto the City's streets may create additional liability and maintenance costs which should be balanced against the increased safety that results from lower speeds or limited access on City streets.

Technical Memorandums

A technical memorandum for the initial study will be prepared documenting the existing conditions, site evaluation, mitigation recommendations, and safety and emergency response issues. Maps, charts, and photos will be used in the technical memorandum to present the data in an easy to read format.

Public Meetings

Public Meeting(s) will be conducted once the technical memorandum and information has been finalized. Engineering staff will attempt to notify all affected property owners, civic associations, neighborhood associations, abutting residents, etc. to inform them of the meeting. These input sessions will be held and considered before any further action is brought to City Council by engineering staff.

Traffic Calming Implementation

Construction

The Public Works Department will be responsible for implementing recommendations made by City Council. If a particular project is approved by Council and funding is unavailable, neighborhoods can raise the funds to cover the full cost of the recommended traffic calming method and may choose to pay the City for implementation at that time. Council will consider whether to accept or reject an offer of private funding for the measure(s).

Construction will be performed by the Public Works Department or by parties contracted by the City. Contract construction by private associations or citizens is not allowed.

Re-evaluation and Monitoring

Engineering will review each improvement measure within 3-6 months after implementation and report to the Public Works Committee and City Council. Should changes be made, the affected property owners will be notified of the change.

Streetlights

Streetlights installed in the City of Belton follow guidelines established by the Engineering Division titled *Streetlight Policy*. This policy shall be referenced for requests, development or the installation of a proposed streetlight.

Roadside Memorials

The City of Belton recognizes that some members of the community may wish to mark the location of a significant event by the placement of a roadside memorial at or near the site.

Responsibilities

- The placement of and maintenance of roadside memorials is the responsibility of the approved party.
- It shall be the responsibility of the Transportation Division to remove memorials not in compliance with this policy as requested by the Mayor.

Procedure

General Information: The City of Belton will allow temporary roadside memorials within the City ROW according to the procedures described herein. Roadside memorials placed pursuant to this policy are to be temporary in nature, must be of reasonable scale, may not contain offensive objects, and are required to be removed within specified time frames. Since the placement of materials within the City ROW is generally prohibited, the placement of a roadside memorial is considered a temporary privilege, and not a right. Only one (1) roadside memorial shall be permitted per request. Alterations to a City street or ROW may not be made to accommodate a memorial unless expressly authorized by the City Council. Roadside memorials should be located at least 6 feet from the edge of the travel lane, and no closer than 50 feet from an intersection. This is to allow parties safe access to the memorial and to reduce the likelihood of the memorial representing a hazard to other road users. The positioning of the roadside memorial is to be such that it

does not impede normal road and ROW maintenance activities, restrict sight distance for the traveling public or create a dangerous situation for motorists.

Type and Size of Memorial: Memorials may include affixing of items such as crosses, flowers, toys or other memorabilia to existing infrastructure. Roadside memorials should not be more substantial than a small lightweight wooden cross, flowers, or other nominal memorabilia. It is important that the size does not distract road users or present a hazard within the clear zone of the road. Memorabilia that is offensive to a reasonable person, provides a visual distraction, or creates a safety hazard to drivers, may be removed from the ROW.

Other Memorials: Memorials placed in City Parks or other City owned places are not permitted. The Mayor may grant an exception on a case-by-case basis, provided the memorial would not interrupt the normal operations and maintenance of the City facility or space, would not be offensive to a reasonable person, or would not create a public safety hazard.

Notice to City: Requesting parties are encouraged to notify the Public Works Director or designee of any roadside memorials established, including contact information and approximate location of the memorial. If the parties are not familiar with this policy, the Public Works Director, or designee, shall provide a copy of the policy to the parties. While approval from the City is not required for the erection of a roadside memorial, it is a requirement that the provisions of this policy be adhered with to ensure the safety of road users and allow continued maintenance of the ROW.

Guidelines for Memorials: Memorials should meet the following guidelines. Memorials established that do not meet the following guidelines may be removed upon order of the Mayor, City Administrator, Public Works Director or Chief of Police:

- A memorial should be located in a position where it will not constitute a safety hazard, or otherwise unduly distract drivers' attention, or interfere with the role of any traffic control device.
- A memorial should not be located in a position where it will be hazardous to passing traffic (vehicles, bicycles and pedestrians) or prevent appropriate maintenance of the ROW.
- A memorial should not be constructed of materials that may cause hazard to vehicles, bicycles and pedestrians. (e.g. large metal or stone components markers). All objects should be secured to prevent dispersion by weather conditions.
- A memorial should not unreasonably restrict access for utility and emergency services, nor interrupt normal maintenance and operations activities.
- Persons placing memorial objects within the ROW do so at their own risk. Wherever possible the location of a memorial should be chosen to minimize risk.
- Location of a memorial should not unreasonably detract from the amenity of the local area or detract from the reasonable quality of life as expected by adjacent landowners or property occupiers and other members of the public.

Time allowed for Memorial: Erection of a memorial is to be temporary up to a maximum of six (6) weeks from the date of the accident, after which time the memorial shall be removed. Any appropriate remedial works to the site are required at the time of removal. Location of “anniversary memorials” is permitted upon the initial 12 month anniversary. Subsequent "anniversary memorials" are not permitted and may be removed by City staff. Anniversary memorials are required to be removed and any appropriate remedial works to the site are to be completed, within 14 days of placement. Roadside memorials which have been in place beyond the time allowed, or appear to have been neglected, may be removed by designated City staff. City staff will place removed items in a box and hold them for 14 calendar days. If no one claims the memorial items within the time period, they will be discarded.

Notice to Adjoining Property Owners: Prior to the establishment of roadside memorials, bereaved parties should consult with adjoining property owners. This is particularly important when the roadside memorial will be located on the boundary of the adjoining property and/or in close proximity to the entrance to an adjoining property. The potential impact that the roadside memorial may have on an adjoining property owner should be considered when determining the location of the memorial. City staff may relocate or otherwise remove memorials that have been placed in front of a person’s residence when the owner of that residence has specifically requested that the memorial not be placed in front of their property.

Roundabouts

Roundabouts installed in the City of Belton follow guidelines established by the Engineering Division titled *Traffic Signal and Roundabout Policy*. This policy shall be referenced for requests, development or the installation of a proposed signal or roundabout.