CHAPTER THREE – PROPOSED POLICIES AND PROGRAMS

The cities most successful at improving the pedestrian environment have done so with a comprehensive focus that includes municipal policies, statutes and ordinances, as well as substantial efforts regarding safety, education, enforcement, encouragement and promotion. The following sub-sections include recommendations for Fort Worth regarding these efforts. City staff reviewed City plans and ordinances for existing policies affecting the pedestrian environment.

The Vision of this plan: to promote and provide a safe, efficient, equitable, and accessible comprehensive pedestrian network to facilitate healthy behaviors and community building. The following policies and programs are proposed for consideration by the City of Fort Worth to achieve the vision and two goals of this plan:

- Goal One: Create a Safe and Accessible Pedestrian Network
- Goal Two: Improve the Walking Experience for a Healthier Community

PEDESTRIAN ACTIVITY IN DOWNTOWN FORT WORTH

The following are a listing of guidelines and requirements that guide design of roadways, trails, sidewalks and other pedestrian facilities. These manuals should be consulted to determine the best practices in creating a pedestrian friendly street design. While not an exhaustive list, this should be used as a starting point for best practices, design requirements, and guidelines.

Manual	Standard	Guidance
Title II of the Americans with Disabilities Act (ADA)	Required	Law establishing accessibility
Americans with Disabilities Act Accessibility Standards (ADAAG)	Required	Minimum standards for pedestrian facilities and plans
Manual for Uniform Traffic Control Devices (MUTCD)	Required	Roadway design, signs, signals, pavement markings, etc…
Texas Manual for Uniform Traffic Control Devices (Texas MUTCD)	Required	Roadway design, signs, signals, pavement markings, etc…
Fort Worth Master Thoroughfare Plan and Street Design Standards	Required	Roadway design
Public Rights-of-Way Accessibility Guidelines (PROWAG)	Recommended	Aspects of accessible pedestrian design
AASHTO Policy on Geometric Design of Highways and Streets (Green Book)	Recommended	Roadway design
FHWA Designing Sidewalks and Trails for Access	Recommended	Sidewalks and Trails
NCHRP Project 20-7 (232) ADA Transition Plans: Guide to Best Management Practices	Recommended	ADA Transition Plans
NCHRP Project 3-62, Guidelines for Accessible Pedestrian Signals	Recommended	Accessible pedestrian signals
Model Design Manual for Living Streets	Recommended	Design Guidance
Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities (ITE)	Recommended	Design Guidance
US Traffic Calming Manual	Recommended	Design Guidance
Pedestrian Safety Guide and Countermeasure Selection System	Recommended	Pedestrian Safety Guidance
Fort Worth Pedestrian Safety Action Plan	Recommended	Pedestrian Safety Guidance

CITY, STATE AND NATIONAL REQUIREMENTS AND GUIDELINES RELATED TO INSTALLATION OF PEDESTRIAN INFRASTRUCTURE

Goal One: Create a Safe and Accessible Pedestrian Network

The City of Fort Worth's population is expected to increase one million people by 2030. In order to address the transportation needs of our residents, the City will need to consider a multimodal transportation system including walking. The City of Fort Worth will identify projects, policies, and programs that will increase the use, safety, and convenience of walking as an integral component of the City's transportation system. The City of Fort Worth aims to increase pedestrian walking trips from 1.2 percent in 2012 to 3.2 percent by 2025 using the five-year estimates from the American Community Survey. (US Census)

Pedestrian crashes are preventable. Nationwide, pedestrians are over-represented in the crash data, accounting for more than 13 percent of fatalities but only 10.9 percent of trips. As with every mode of travel, there is clearly some risk associated with walking. However, walking remains a healthful, inherently safe activity for tens of millions of people every year. It is recommended the City of Fort Worth identify projects, policies and programs that will increase the safety of pedestrians by decreasing the pedestrian fatality rate by 15 percent by 2025 using TxDOT Crash Records Information System data. (TxDOT, 2012)

Goal Two: Improve the Walking Experience for a Healthier Community

Lack of physical activity hurts the population and the economy. Obesity related health care costs exceed $5.7 billion annually in Texas. The health benefits of regular physical activity are far-reaching: reduced risk of coronary heart disease, stroke, and other chronic diseases; lower health care costs; and improved wellness for people of all ages. Walkable cities promote healthy citizens. Physically active people live longer have a lower risk for heart disease, stroke, type 2 diabetes, depression, and some cancers. (Centers for Disease Control and Prevention)

As discussed in Chapter 2, approximately half of Tarrant County residents met the recommendations for physical activity (at least 30 minutes per day at least five days per week). In order to promote a healthier community, this plan recommends investing time and resources into providing opportunities and encouragement for residents who wish to be more physically active. This plan recommends working towards an increase of adults meeting the recommendations for physical activity from 47.4 percent to 60 percent and decrease obesity from 19 percent in 2009 to 9% in children ages 2-14 by 2025 using Tarrant County Public Health Behavioral Risk Factor Surveillance System data. (Tarrant County Public Health Department)

RECOMMENDED TRAVELED WAY DESIGN POLICIES

Streets and their geometric design have traditionally focused on the movement of motor vehicles, resulting in street environments that neglect other users. This emphasis can be seen in wide travel lanes, large corner radii, and turn lanes that severely impede the safety of pedestrians and the overall connectivity for non-automobile users. The following recommended are recommended traveled way design policies.

Increase the sidewalk width. Sidewalks, like roadways, must be designed to serve all users and move pedestrian traffic efficiently. Currently, the standard sidewalk width for all roadways in the City of Fort Worth is a 4 foot wide walkway, or 5 foot next to the curb. Such narrow sidewalks limit the number of pedestrians accommodated safely require pedestrians to travel in single file, and force pedestrians to walk uncomfortably close to automobile traffic and/or buildings. Both the Federal Highway Administration and the Institute of Transportation Engineers recommend a minimum 5 foot sidewalk, which allows two people to pass comfortably or to walk side-by-side.

NARROW SIDEWALK *PHOTO CREDIT: DAN BURDEN*

This plan recommends adjusting the sidewalk minimum based on the street type and the land use context. Wider sidewalks should installed along high speed arterials, near schools, transit stops, in downtown, mixed-use areas, and anywhere where a high concentration of pedestrians exists or is desirable. *Primary Department: Planning and Development and Transportation and Public Works.*

Proposed Minimum Standards	Sidewalk Width*	
	Minimum	Desirable
Local Residential Streets	5	6
Collector & Industrial Streets	6	6
Arterial Streets	6	10

*minimum unobstructed pedestrian pathway

Mixed-Use, Urban Villages & Transit Oriented Development	Sidewalk and Furniture Zone*	
	Minimum	Desirable
Local Streets	8	12
Collector Streets	12	16
Arterial Streets	16	20

*minimum 6 foot unobstructed pedestrian pathway

Design streets for safer speeds. The right design speed should respect the desired role and responsibility of the street, including the type and intensity of land use, urban form, the desired activities on the sidewalk, such as outdoor dining, and the overall safety and comfort of pedestrians and bicyclists. The speed of vehicles impacts all users of the street and the livability of the surrounding area. Lower speeds reduce crashes and injuries. Vehicle speed is a major factor in all types of crashes and has especially serious consequences for people on foot. Where the posted speed limit was recorded, 61.3 percent of pedestrian fatalities were on roads with a speed limit of 40 miles per hour or higher. This figure compares to just 9 percent of fatalities that occurred on roads with speed limits less than 30 mph. (Smart Growth America) The Federal Highway Administration confirms that lower speeds are safer and can reduce both crash frequency and severity. Simply lowering the posted speed limit is not an effective method to slowing vehicle traffic. Roads should be designed to accommodate their target speed; however, current policy states design speed should always be greater than the desired speed limit (City of Fort Worth, 1987). This existing policy should be updated to design streets for slower and safer speeds, especially in areas where pedestrians are common or pedestrian activity is desirable, including arterials in commercial areas. *Primary Department: Transportation and Public Works.*

Street Classification	Design Speed (mph)
Principal Arterial	
Divided	45
Undivided	40
Minor Arterial	
Divided	45
Undivided	40
Collector	35
Local B	35

CURRENT DESIGN SPEEDS FOR FORT WORTH STREETS

Design highway interchanges for pedestrian safety. Intersections and interchanges are major points of conflict for road users and are the frequent site of injuries and fatalities. Intersections also have a significant impact on the mobility of pedestrians. The speed and ease with which they can move through an intersection is affected by the signal timing, the number and configuration of lanes, width of the traveled way, presence of a median or refuge islands, traffic calming configurations, roadsides, landscaping features, traffic volumes, and other factors. Wherever possible, and especially in areas where pedestrians are common or pedestrian activity is desirable, street intersections and highway interchanges should be designed to safely and comfortably accommodate pedestrians through shortened crossing distances with pedestrian refuge islands and using 90-degree

angles that require motorists to make slower turns. *Primary Department: Texas Department of Transportation and Transportation and Public Works.*

Pursue best practices on improvements to standard intersection treatments. Roadway crossings can be barriers to pedestrian travel. The decision to travel as a pedestrian is in part dependent upon the actual and perceived ability cross roadways safely along the pedestrian's intended travel route. Many different crossing enhancements are being used in other communities in the United States and elsewhere. These best practices should be used wherever appropriate in the City of Fort Worth. Enhancements being used successfully elsewhere include curb extensions, flashing beacons, in-roadway signs, lane reductions, refuge islands, street lighting, raised crossings and pavement treatments. *Primary Department: Transportation and Public Works.*

RAISED RIGHT TURN PEDESTRIAN CROSSING. PHOTO CREDIT: DAN BURDEN

Develop best practices for providing barrier protected sidewalks on arterial bridges. A barrier between the sidewalk and the travel lane should be reviewed for installation on all bridges, roadways with volumes that exceed 20,000 vehicles per day and/or operating speeds that exceed 45 mph, or in locations with high volumes of heavy vehicles. (Maryland State Highway Administration). *Primary Department: Transportation and Public Works.*

BRIDGE OVER ELIZABETH CREEK IN FAR NORTH FORT WORTH

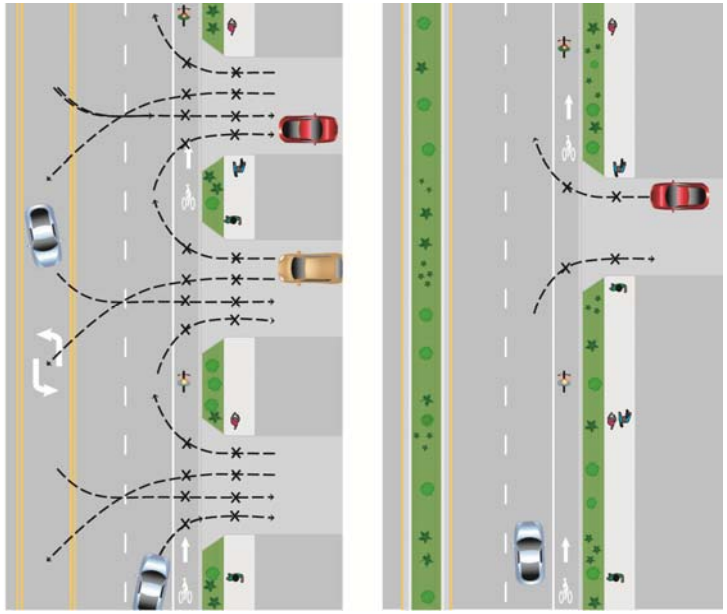
Implement best practices in pedestrian-scale lighting. Good pedestrian-scale outdoor lighting can be an effective means to create and encourage a pedestrian friendly environment, which is especially beneficial to neighborhood business districts. Pedestrian-scale lighting should be implemented in all mixed-use districts, Transit-Oriented Development areas near rails stations, and other walkable areas where pedestrians are common and nighttime pedestrian activity is desirable. Light poles should be coordinated with tree plantings so as not to impede the illumination. Pedestrian-scale lights improve walkway illumination for pedestrian traffic and enhance community safety and business exposure, thereby supporting economic development and business activity. Better street lighting can reduce nighttime pedestrian crashes and increase the vision and awareness that drivers have of pedestrians. Good lighting also increases actual and perceived pedestrian safety and comfort.

The City currently maintains illumination standards through the Design and Maintenance Guidelines and the American Association of State Highway and Transportation Officials (AASHTO) Illumination Guideline. Increased lighting should be provided at identified primary crossing points. Currently, illumination is required at primary crossing points in the city of Fort Worth, however, lighting is only required near traffic signals (which are often near primary crossing points in the city). To improve this, the city should assess the current policies for midblock crossing points where there are no traffic

signals and therefore, no illumination. Additionally, the City should broaden the lighting policies to include standardized decorative lighting and pedestrian scaled lighting. *Primary Department: Transportation and Public Works.*

PEDESTRIAN SCALE LIGHTING *(PHOTO CREDIT: RON BLOOMQUIST)*

Review access management standards to identify opportunities to reduce conflicts at driveways. Access Management is the planning, design and implementation of land use and transportation strategies in an effort to maintain a safe flow of traffic while accommodating the access needs of adjacent development. Every at-grade intersection, from a busy signalized intersection to a simple unpaved driveway, has the potential for conflicts between motorized vehicles, pedestrians, and bicycles. In general, the number and types of conflict points (i.e., the number of locations where the travel paths of two different users may cross) influence the safety performance of the intersection or driveway. Analysis of access-related crashes has revealed that driveways and minor uncontrolled intersections can be especially dangerous locations for pedestrians and bicyclists. The City of Fort Worth should create safety committee to review crash reports at driveways and determine if access management principles should be implemented such as driveway consolidation, relocation, or closure. *Primary Department: Transportation and Public Works.*



REDUCING THE NUMBER OF DRIVEWAYS IMPROVES PEDESTRIAN SAFETY
ILLUSTRATION CREDIT: MICHELE WEISBART

Separate bike and pedestrian paths in the highest bicycle and pedestrian conflict areas. For safety and traffic flow, pedestrians and bicyclists may need to be separated. It is necessary to maintain the same configuration for a continuous segment, because conflicts will occur at transition points. There are two approaches to separation: 1) Move slower users to a shoulder or slow-lane or 2) Provide separate paths for each user group. With higher volumes, increased separation using pavement markings or separate paths (two-way or one- way) is desirable. *Primary Department: Parks and Community Services and Tarrant Regional Water District.*

TRINITY TRAILS, USER SEPARATION NEAR ROCKWOOD PARK

Continue to use road diets and traffic calming projects as a way to reduce speeds on City streets. The Federal Highway Administration recommends road diets or reconfiguration of travel lanes to help reduce crashes and fatalities on roads around the country. Road diets can be low cost if planned in conjunction with reconstruction or simple overlay projects, since a road diet mostly consists of restriping. Roadways that carry 20,000 cars per day or less may be good candidates for a road diet and should be evaluated for feasibility. It has been shown that roads with 15,000 ADT or less had very good results in the areas of safety and operations. Driveway density, transit routes, the number, and design of intersections along the corridor, as well as operational characteristics are some considerations to be evaluated before deciding to implement a road diet. The benefits to pedestrians include reduced vehicle lane crossing distance and fewer midblock-crossing locations, which account for more than 70 percent of pedestrian fatalities. *Primary Department: Planning and Development and Transportation and Public Works.*

Update driveway standards for slower turning speeds. Sidewalks should continue through the driveway, the level of the sidewalk should be maintained, and the driveway should be sloped so that the driver goes up and over the sidewalk. Driveways should be constructed a safe distance away from intersections. The number and width of driveways should be minimized. Additionally, the City should have provisions for instances where a driveway is across from a signalized street as the driveway should be designed more as a street crossing with pedestrian traffic control signals. *Primary Department: Transportation and Public Works.*

DRIVEWAY DESIGNED TO SLOW TURNING TRAFFIC
AND INCREASE PEDESTRIAN SAFETY *(PHOTO CREDIT: DAN BURDEN)*

Install traffic calming devices at schools and other high pedestrian areas. Traffic calming devices are specifically designed to reduce vehicle speeds and improve safety. Ideally suited to use near schools and other high pedestrian locations, such as urban villages and Transit-Oriented Development areas around rail stations, these types of engineering measures can change driver behavior to increase safety of all road users. Some types of traffic calming devices have already been implemented in Fort Worth, such as bulb-outs, roundabouts, speed humps, and textured pavement. The City should explore using other approved engineering measures as warranted. *Primary Department: Transportation and Public Works.*

Adopt standard ADA infrastructure standards for all areas in the pedestrian realm. The *Walk Fort Worth Plan* recommends creating standard design details for siting pedestrian call buttons at traffic signals, street furniture and other objects within the parkway of a road. Using the pedestrian zone

system described in Policy 1.1.3 can help to determine the width of the sidewalk corridor and ensure that obstacles will not limit pedestrian access. By designing parkway areas using the zone system, the City creates a safer and more pleasant place to walk, and makes it easier to meet ADA requirements. *Primary Department: Transportation and Public Works and ADA Coordinator.*

Create best practices for installing crosswalks at mid-block locations. Midblock crossings are locations between intersections where a marked crosswalk has been provided. Midblock crossings are often installed in areas with heavy pedestrian traffic to provide more frequent crossing opportunities. They may also be added near major pedestrian destinations, such as schools, where people might otherwise cross at unmarked locations. In many situations, midblock crossings are easier for pedestrians to use because traffic is flowing in no more than two directions. However, midblock crossings present some design challenges because motorists often do not expect pedestrians to be crossing at a midblock location. *Primary Department: Transportation and Public Works.*

TWO STAGE MID-BLOCK TRAIL CROSSING IN NORTH RICHLAND HILLS

Adopt and incorporate guidelines from nationally recognized design manuals. The City of Fort Worth should review other nationally recognized design guidelines such as the Model Design Manual for Living Streets, Complete Streets Policies, and the US Traffic Calming Policy. *Primary Department: Transportation and Public Works.*

Review current policy on installing crosswalks across arterials. On multi-lane roadways, marked crosswalks alone are not recommended on roadways with average daily traffic greater than 12,000 without a median or greater than 15,000 with a median with traffic speeds greater than 40 miles per hour. Crosswalks on arterials are generally not effective in increasing the yield behavior of motorists. However, the effectiveness of crosswalks can be increased by installing crossings in proper locations, using high visibility markings, illuminating the crosswalk, and use of median islands, curb extensions, and signing. Raised medians, signals or other treatments should be considered where many young and/or elderly pedestrians are crossing the road. *Primary Department: Transportation and Public Works.*

CROSSWALK ON A HIGH-SPEED ARTERIAL

NEW POLICIES FOR CONSIDERATION

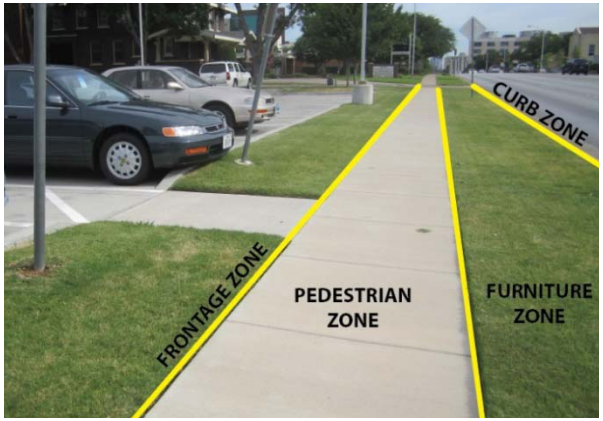
The following are recommended policies to explore based on best practices from other communities to create a safer and more orderly pedestrian environment.

Create pedestrian overlay districts around schools. To help ensure that Fort Worth children are given the opportunity to walk to school and are exposed to less motor vehicle exhaust from idling cars, the City should designate Student Walk Zones within a one-half mile radius of all schools. New single-family subdivisions and multifamily developments located within a Student Walk Zone should be designed with front doors facing the school wherever possible and short block lengths to provide the most direct walking route to school for all students. All blocks over 300 feet in length on any side not directly leading to the school site should include pedestrian and bicycle pathways of at least 12 feet in width that provide a safe path to school. *Primary Department: Planning and Development*

Adopt a Pedestrian Zone Policy to provide a more orderly and comfortable pedestrian environment. Planning developments and streets with physically separate pedestrian zones increases public safety by providing space and objects between pedestrians and vehicles, while also making a corridor a more attractive and comfortable pedestrian environment. For more information on these pedestrian friendly streetscape design elements, visit Chapter 14: Urban Design of the *Fort Worth Comprehensive Plan*. *Primary Department: Planning and Development.*

The four zones within the sidewalk corridor:

Curb zone- the first six inches of the sidewalk corridor immediately adjacent to the roadway. It is an integral part of the drainage system and prevents excess water from collecting in the sidewalk corridor. The curb zone discourages motor vehicles from driving onto the sidewalk and is a valuable cue used by people with vision impairments to identify the border between the sidewalk corridor and the roadway;



ZONE SYSTEM ON A SUBURBAN STYLE STREET

Buffer/furniture zone - lies between the curb and pedestrian zones and is intended to house utilities, such as parking meters, signs, traffic signals, and fire hydrants. Additionally, pedestrian amenities, such as trees, benches, trash cans and bus shelters. The purpose of this zone is to ensure that the pedestrian zone will be free of obstacles. Depending on the design of the sidewalk corridor, the planter/furniture zone may or may not be paved. This zone is also used to buffer pedestrians from high-speed traffic.

SIDEWALK ON NEWLY CONSTRUCTED ARTERIAL
IN FORT WORTH WITHOUT A BUFFER ZONE

Pedestrian zone - the area of the sidewalk corridor that is specifically reserved for pedestrian travel. It should be completely free of obstacles, protruding objects and vertical obstructions because they can be hazardous to pedestrians, particularly for individuals with vision impairments who may not be able to detect or avoid the hazard.

URBAN CONTEXT OF THE PEDESTRIAN ZONE

Frontage zone - the area between the pedestrian zone and the property line. Pedestrians tend to avoid walking close to barriers at the property line, such as buildings, storefronts, walls, or fences, in the same way that they tend to avoid walking close to the roadway. This is especially true in areas with many doorways that swing open into the sidewalk corridor. In most situations, the width of the frontage zone should be at least 12 inches. However, if the sidewalk corridor is adjacent to a wide-open or landscaped space, such as in residential areas, the frontage zone can be eliminated.

Discourage meandering sidewalks on arterial roadways. Meandering sidewalks are sidewalks with wide curves and have been used where for parkway and landscaping aesthetics. While meandering sidewalks combined with enhanced landscaping can create a visually appealing parkway, they unnecessarily lengthen walking distance and are not appropriate for sidewalks along an arterial roadway where utilitarian pedestrian transportation may be a higher priority. For pedestrians with disabilities and those with strollers, meandering sidewalks can create substantial issues with maneuvering. The Access Board, the Federal agency devoted to accessibility for people with disabilities, guidance states: "nor should meandering walkways that add significantly to the travel distance be permitted on a primary circulation route" 3.2.2 (PROWAG). See Chapter 5 of this plan for more information about ADA. Additionally, this causes increased costs in maintaining the right-of-way. Currently the City allows meandering sidewalks but no closer than four feet from the back of curb. *Primary Department: Transportation and Public Works.*

MEANDERING SIDEWALK ALONG A NEW FORT WORTH ARTERIAL

Create developer incentives for walkable development. Potential incentives for walkable development could include support of a Tax Increment Financing District, priority infrastructure and development review, or structure property taxes development fees and utility rates to reflect the lower public service costs of higher density, walkable development. Other incentives might include Partial Public Improvement District funding from estimated efficiency gains due to increased walking trips within the development and to nearby destinations. *Primary Department: Planning and Development.*

Pursue Reinstating the Neighborhood Traffic Management Program. Under this program, residents of a neighborhood form a traffic committee and work together to develop a traffic plan that will increase safety for the neighborhood, such as reducing speeding and cut-through traffic, to ensure safe access to parks, community centers, and neighborhood facilities. If

used appropriately and judiciously, the program can improve pedestrian safety by slowing traffic through neighborhoods. *Primary Department: Transportation and Public Works.*

EXAMPLE OF A TRAFFIC CALMING SIDEWALK EXTENSION

Identify and improve pedestrian crossings in areas of high pedestrian use. Mid-block locations account for more than 70 percent of pedestrian fatalities. This is where vehicle travel speeds are higher, contributing to the larger injury and fatality rate seen at these locations. More than 80 percent of pedestrians die when hit by vehicles traveling at 40 mph or faster while less than 10 percent die when hit at 20 mph or less. Installing raised channelization on approaches to multi-lane intersections has been shown to be especially effective. Mid-block pedestrian accessible crossing island and medians are a particularly important pedestrian safety countermeasure in areas where pedestrians access a transit stop or other clear origins/destinations across from each other. Providing raised medians or pedestrian refuge areas at marked crosswalks has demonstrated a 46 percent reduction in pedestrian crashes. At unmarked crosswalk locations, medians have demonstrated a 39 percent reduction in pedestrian crashes. *Primary Department: Transportation and Public Works.*

IMPROVEMENTS TO EXISTING POLICIES

Currently, Fort Worth has a number of adopted ordinances that are integral to the pedestrian friendliness. The following are recommendations to update or enforce provisions in certain City polices.

Update the City's Context Sensitive Street Design policy to include Complete Streets Policy or equivalent in every project. Instituting a Complete Streets policy ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind – including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities. Fort Worth adopted a Context Sensitive Street Design policy with the 2009 Street Development Standards with flexible design standards, but its application remains optional. By updating the current policy to require accommodation of all users, communities direct planners and engineers to design the right-of-way for safe access regardless of age, ability, or mode of transportation. This means every transportation project will make the street network better and safer for drivers, transit users, pedestrians, and bicyclists. *Primary Department: Planning and Development and Transportation and Public Works.*

COMPLETE STREET IN BOULDER COLORADO

Improve or establish pedestrian connectivity between existing developments. Pedestrians need a well-connected network of walkways to provide direct access to many origins and destinations and facilitate short walking trips. Often, residential subdivisions will be located close or adjacent to commercial establishments. However, with no direct connectivity between the land uses, walking can become unsafe or infeasible. Connectivity is defined as how often streets or roadways intersect, or how closely intersections are spaced. Grid-like street patterns usually have greater connectivity than those with curving streets and cul-de-sacs. Subdivisions should be designed and built with a highly connected street network, including multiple connections to nearby neighborhoods, schools, shopping, parks, and other destinations. *Primary Department: Planning and Development.*

Update the policy on Street Connectivity in the Subdivision Ordinance. Connectivity relates to the number and variety of connections serving origins such as residential neighborhoods and destinations like schools and shopping areas. Connectivity is often measured by the number of intersections or nodes along a segment of street and its connection to the larger transportation system. Local street connectivity provides for both intra- and inter-neighborhood connections, which creates more walkable neighborhoods rather than creating barriers to walking. The street configuration within each development or subdivision must contribute to the walkable street connectivity of a neighborhood, or it will effectively prevent the neighborhood from being safely and comfortably walkable for all its residents. Research has shown that connectivity in the built environment can provide more efficient emergency services, such as police, fire, and ambulance. Additionally, connectivity can reduce travel times for drivers, increase the availability of pedestrian and bicycle routes, and can reduce the congestion on primary arterials. *Primary Department: Planning and Development*

Typical street connectivity standards include some of the following criteria:

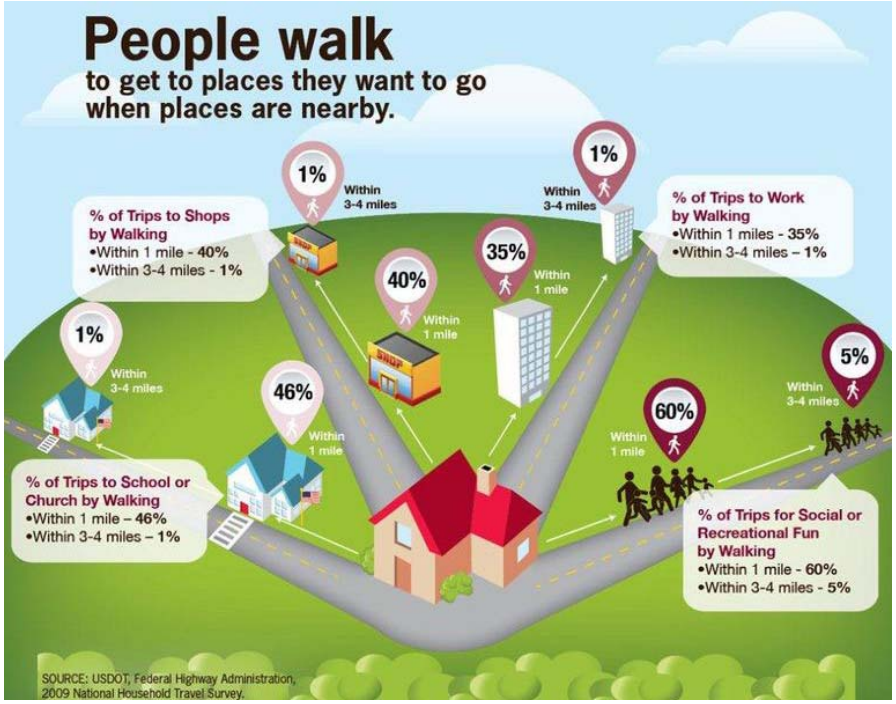
- Encourage average intersection spacing for local streets to be 300-400 feet.
- Limits maximum intersection spacing for local streets to about 600 feet.
- Limits maximum intersection spacing for arterial streets to about 1,000 feet.
- Limits maximum spacing between pedestrian/bicycle connections to about 350 feet.
- Limits maximum block size to 5-12 acres.
- Limits or discourages cul-de-sacs.
- Limits the maximum length of cul-de-sacs to 200 or 400 feet.
- Limits or discourages gated communities and other restricted access roads.
- Requires multiple access connections between a development and arterial streets.
- Requires a minimum connectivity index, or rewards developments that have a high connectivity index with various incentives.

- Creates a planning process to connect street "stubs," that is, streets that are initially cul-de-sacs but can be connected when adjacent parcels are developed in the future.
- Creates Pedways, which are walking networks within major commercial centers that connect buildings and transportation terminals.

Require public access easements be built to public street standards, including the provision of sidewalks. Sidewalks along a street will not necessarily provide access to a retail establishment, especially if the development has a substantial setback from the roadway and a large amount of parking. Currently there are no requirements for providing internal pedestrian circulation. Often, many large commercial developments have internal access easements to facilitate automobile circulation only. These access easements rarely have sidewalks to accommodate pedestrians walking to and through the site. Too often, patrons of large commercial developments are forced to drive between stores rather than walk due to lack of pedestrian access. The City's Subdivision Ordinance requires access easements to be built to city street standards, including the provision of sidewalks. *Primary Department: Planning and Development.*

COMMERCIAL DEVELOPMENT ACCESS EASEMENT WITH NO SIDEWALKS

Improve City ordinances to encourage walkable developments and neighborhoods. Mixing commercial, single-family housing and multi-family housing has for centuries enabled residents to walk to multiple near-home destinations. In the U.S., this long tradition was broken with the advent of Euclidian zoning, which encouraged cities to separate land uses. Separated land uses were originally intended to protect health by separating industrial land from residential areas. This separation is now implicated in modern health problems associated with less walking and more automobile pollution. Promoting mixed-use areas through Urban Villages, Transit-Oriented Development, Traditional Neighborhood Design, and infill development can increase opportunities for walking between home and a variety of nearby destinations. For more information on these walk-friendly neighborhood forms, visit Chapter 4: Land Use and Chapter 14: Urban Design of the *Fort Worth Comprehensive Plan*. *Primary Department: Planning and Development.*

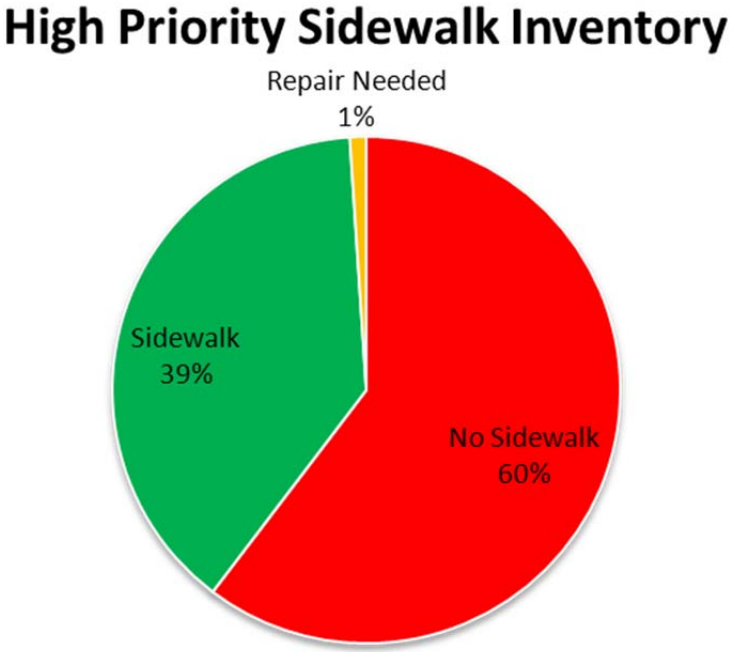


Review and update policies for obtaining a change of use permits as they relate to repairing or installing sidewalks. Existing deteriorated or non-accessible sidewalks (those not meeting the minimum requirements of current ADA standards) should be rehabilitated or replaced prior to receiving a change of use building permit. The current policy states sidewalks are required to be installed at building permit issuance for construction that equals or exceeds 50 percent of the assessed value of existing improvements. However, sidewalk maintenance and construction is not required for change of use building permits. This policy may need to be updated to require that sidewalks be constructed to City standards or repaired to an acceptable standard across the full frontage of the property receiving the change of use permit. *Primary Department: Planning and Development.*

Pursue best practices on arterial landscape policy. Street trees, bioswales, and other landscaping features within the parkways of arterial roads enhance the transportation system by providing shade and protection to pedestrians and can help increase property values. Landscaping also mitigates some of the negative environmental impacts of roadways such as air, noise, and stormwater pollution. Landscaping can have a calming effect on traffic by creating an impression of a narrower street, thereby encouraging drivers to drive more slowly. *Primary Department: Transportation and Public Works, Parks and Community Services and Planning and Development.*

LANCASTER AVENUE IN THE CULTURAL DISTRICT

Prioritize filling gaps and repairing sidewalks along arterial roadways and priority streets. Many areas exist throughout Fort Worth that are lacking sidewalk infrastructure entirely, or are missing sections of contiguous sidewalk. Approximately 60 percent of high priority roadways in Fort Worth do not have a sidewalk on one or both sides. High priority sidewalks include all arterial and collector roads, and residential roads near schools and transit corridors. Installation of sidewalks citywide is necessary to serve pedestrian needs. Recognizing that full build-out will take time to complete, Walk Fort Worth recommends installation take place first where the greatest need exists, while also taking best advantage of opportunities to complete the sidewalk network offered by new development and redevelopment projects. *Primary Department: Transportation and Public Works.*



HIGH PRIORITY SIDEWALK NEED IN FORT WORTH

Enforce requirement that traffic studies include non-motorized traffic control plan and route study. The City's Street Design Standards require new projects to submit a traffic study based on the estimated traffic expected per day. Within these existing standards, there are required items

that must be addressed in each study, such as land use and trip distribution. Pedestrian and bicycle connectivity must be analyzed and potential mitigation items are to be addressed. However, this is currently a little-enforced requirement. The City should begin enforcing these requirements in all traffic studies. *Primary Department: Transportation and Public Works*.

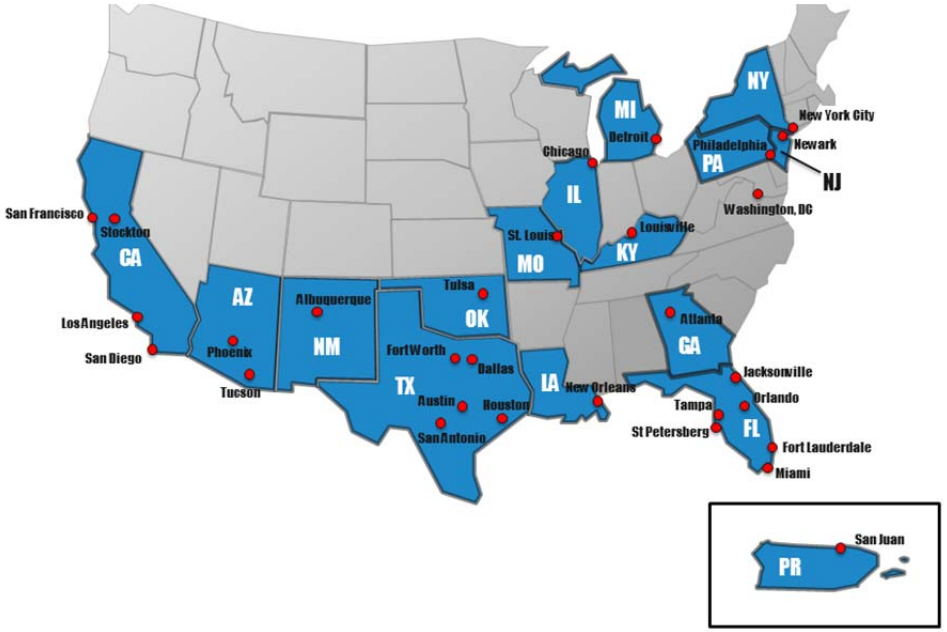
Track the number of new arterial sidewalks and curb ramps installed and repaired each year. Completing comprehensive sidewalk inventories can be expensive. When resources are scare, an alternative approach is to inventory smaller areas focused around schools, neighborhood commercial areas, neighborhood centers, and facilities that serve people with special needs. Currently, the city has a partial inventory of existing sidewalks. However, the City does not have comprehensive information on the condition of sidewalks and curb ramps, and data is mostly supplied by citizen complaints of poor sidewalk condition. The City's ability to implement sidewalk improvements could be improved by tracking and mapping new sidewalk installations, repairs, neighborhood street reconstructions, and arterial roadway construction. *Primary Department: Transportation and Public Works.*

STAKEHOLDER COORDINATION

Coordination with stakeholders, transportation agencies, and others for resources and funding is essential to creating a pedestrian friendly environment. The following are recommended coordination efforts.

Implement the recommendations in the Pedestrian Safety Action Plan in coordination with stakeholder organizations. Since 2004, Federal Highway Administration's (FHWA) Office of Safety has been working to reduce pedestrian deaths by focusing extra resources on the cities and states with the highest pedestrian fatalities and/or fatality rates. Pedestrian focus cities were selected based on the number of pedestrian fatalities or the pedestrian fatality rate per population. Cities were identified as pedestrian focus cities if they had more than 20 average annual pedestrian fatalities or a pedestrian fatality rate greater than 2.33 per 100,000 population (the annual national average number of pedestrian fatalities is 20 and the average national rate of pedestrian fatalities is 2.33 per 100,000 population).

Fort Worth is a pedestrian focus city due to the high number of pedestrian fatalities. In 2012, the City of Fort Worth completed a Pedestrian Safety Action Plan in coordination with the Federal Highway Administration. The document was completed with cooperation of various agencies and departments. Applicable recommendations of the Pedestrian Safety Action Plan should be implemented by the City of Fort Worth. The City should review the document annually and update based on progress. See Appendix C for the document. *Primary Department: Transportation and Public Works.*



FHWA PEDESTRIAN SAFETY FOCUS STATES AND CITIES

Coordinate with school districts to create and implement Safe Routes to Schools (SRTS) Plans. In 1969, about half of all students walked or bicycled to school. Today, fewer than 15 percent of all school trips are made by walking or bicycling, one-quarter are made on a school bus, and over half of all children arrive at school in private automobiles. This decline in walking and bicycling has had an adverse effect on traffic congestion and air quality around schools, as well as pedestrian and bicycle safety. Safety issues are a

big concern for parents, who consistently cite traffic danger as a reason why their children are unable to bicycle or walk to school. The SRTS Program empowers communities to make walking and bicycling to school a safe and routine activity. The program makes funding available for a wide variety of programs and projects, from building safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school. For more information on Safe Routes to School, visit Chapter 11: Transportation of the *Fort Worth Comprehensive Plan*. *Primary Department: Planning and Development.*

Coordinate Walk Fort Worth Plan implementation with the Fort Worth Blue Zones Project. The Blue Zones Project aims to improve the health and wellbeing of Fort Worth residents through a series of voluntary, community-based efforts that include enhancing and fully utilizing pedestrian facilities to improve the walking experience and promote physical activity. Where appropriate, coordinate complimentary activities that promote appropriate infrastructure and encouragement of walking with the Blue Zones Project. *Primary Department: Planning and Development*

WALKING AUDIT WITH THE FORT WORTH BLUE ZONES PROJECT TEAM

Work with school districts and PTAs to encourage children to walk or bike to school. Recent studies have found that walking to school is associated with higher overall physical activity throughout the day. Fort Worth Independent School District and several other independent school facilities participate in a Walk or Wheel program that promotes physical activity and safety. These programs can include walking or biking school buses. Often, rewards are available to students based on level of participation. Programs such as these not only begin to train students to be more physically active but also promote safe behavior. *Primary Department: Planning and Development.*

Coordinate with railroads to build sidewalks over railroad tracks. Out of the 167 open and functioning at-grade railroad crossings, only six crossing have sidewalk infrastructure that extend over the tracks. Crossings without adequate sidewalk infrastructure can create tripping hazards and do not allow for wheelchair crossing. These issues can lead to dangerous situations if a pedestrian is caught on the tracks when a train is approaching the intersection. Individuals who are not able to navigate these sidewalk gaps, such as persons in wheelchairs and scooters, often must use the street, where motor vehicle drivers do not expect them. Funding sidewalks at these railroad-crossing locations should be prioritized higher in areas where pedestrians are common or pedestrian activity is desirable. *Primary Department: Transportation and Public Works.*

RAILROAD CROSSING ON WEST 7th

Coordinate with the Fort Worth Transportation Authority to improve pedestrian access to transit. Pedestrians using transit must be able to access the transit stops safely and conveniently. Crossing the street to access stops can be challenging, especially if there is high speed turning traffic, ramps are non-existent or in poor repair, distances are long between crosswalk locations, and crosswalk markings are difficult to see. Access to transit stops can also be difficult if sidewalks are missing, substandard, or in poor repair. Streets with heavier traffic become barriers to safe pedestrian crossings and the pedestrian's perception of danger from adjacent traffic increases.

Transit service can be more efficient, effective, convenient, and safe when land development is designed with transit in mind. The City should collaborate with the Fort Worth Transportation Authority to develop guidelines for effectively connecting transit to nearby land uses. For bus transit users, better service means locating bus stops more conveniently with respect to riders' destinations, providing safer and more comfortable waiting facilities, and routing transit vehicles more directly to reduce travel times. For station areas served by existing or planned rail transit, Transit-Oriented Development (TOD) design standards should be adopted that promote compact, mixed-use development within a quarter to a half mile of the stations. For more information on TOD, visit Chapter 11: Transportation and Chapter 14: Urban Design of the *Fort Worth Comprehensive Plan*. *Primary Department: Planning and Development.*

Encourage expansion of multi-modal transportation education into Texas Drivers Manual. The Texas Drivers Manual includes information related to motorist and pedestrian safety education. However, expanding safety information and traffic law in driver education classes and adding questions to the exams can make a difference. Nationally, other states are making incremental changes to driver education curriculum, including mandating the inclusion of pedestrian and bicycle safety education. *Primary Department: City Manager's Office.*

Support changes to the Texas Transportation Code to strengthen pedestrian right-of-way in crosswalks. Support changes to state statutes to strengthen pedestrian right-of-way in crosswalks. Section 552.003 of the Texas Transportation Code states that an operator of a vehicle shall yield the right-of-way to a pedestrian crossing a roadway in a crosswalk. Recently, states such as Illinois and Florida have changed their laws to increase motorist responsibilities at crosswalks to require vehicles to stop for pedestrians. *Primary Department: City Manager's Office.*

Coordinate with local and state agencies to investigate the cause of pedestrian-related crashes at high crash locations and develop solutions. The City should collaborate with jurisdictional partners to investigate the root causes of pedestrian-related crashes at locations with high numbers of crashes and use the proven pedestrian countermeasures identified by the Federal Highway Administration to correct engineering deficiencies, if necessary. *Primary Department: Transportation and Public Works and Police Department.*

Create a Bicycle and Pedestrian Advisory Committee (BPAC). A BPAC is a committee oversees and directs the implementation of bicycle and pedestrian master plans and works with governmental agencies as issues arise. These committees review bicycle and pedestrian elements in projects and give recommendations to the Fort Worth City Council, City departments and other local agencies. By involving representatives of the public, the department helps ensure effective communication and coordination with stakeholders. BPACs also work directly with the governmental and leadership entities in the cities, work directly with the public to educate, and advocate for bicycling and walking. *Primary Department: Planning and Development Department.*

Create a *Healthy Community Development Guide*. Prepare a document that educates property owners and developers about best practices in healthy project and community design, and encourages them to ensure that their development projects contribute to the health and wellbeing of the workers and residents of Fort Worth. The guide should identify the ways that the built environment impacts community health and wellbeing, and then offer guidance on how these impacts can be mitigated through alternative design concepts for different types of development projects. *Primary Department: Planning and Development*

Prepare and maintain an updated ADA Transition Plan. The City of Fort Worth is committed to providing barrier-free mobility options for all pedestrians. The current ADA Transition Plan was adopted in 1992. This policy and plan assesses the implementation of ADA requirements into all projects and programs and includes policies that spell out when maintenance activities trigger ADA requirements. An update to the ADA Transition plan should include an inventory and prioritized list of accessibility barriers at intersections, sidewalk corridors and pedestrian bridges. Additionally, this document should include proactive strategies to make sure all sidewalks and public facilities are ADA compliant over a given timeframe. Chapter 4 of this plan contains additional information on ADA recommendations. Appendix A-1 contains the 1992 ADA Transition Plan for the City of Fort Worth. *Primary Department: Transportation and Public Works and ADA Coordinator.*

OPERATIONS AND MAINTENANCE RECOMMENDATIONS

The following recommended policies generally fall under operations and maintenance budgets for the City of Fort Worth. These funds are allocated from the City's general budget. Improvements and upgrades to the current operations and maintenance budgets would require an additional allocation of funds from the City budget, or identification of alternate sources of revenue. See Chapter 5 for more information on potential funding sources.

Inventory and prioritize corrections to accessibility barriers at traffic signals. Accessible pedestrian signals are devices that communicate information about the "Walk" and "Don't Walk" intervals at signalized intersections in non-visual formats to pedestrians who are blind or who have low vision. In coordination with an ADA Transition Plan, the City should complete and implement an Accessible Pedestrian Signals Transition Plan which outlines the methodology for evaluating and prioritizing installations at all signalized intersections. *Primary Department: Transportation and Public Works.*

Pursue best practices for installing pedestrian countdown signals citywide. Countdown timers show the number of seconds remaining in the signal for pedestrians to cross the street and help pedestrians decide if they have enough time. The City should develop a plan and priorities for installing pedestrian countdown signals citywide using crash data and school locations as priorities. *Primary Department: Transportation and Public Works.*

Inventory and prioritize corrections to accessibility barriers at signal push buttons. In coordination with the creation of an ADA Transition Plan, the City should inventory the condition and placement of push buttons at actuated traffic signals citywide, and prioritize improvements to ensure that all pedestrians may conveniently and accessibly use the push buttons. *Primary Department: Transportation and Public Works.*

INACCESSIBLE PEDESTRIAN PUSH BUTTON ON 8TH AVENUE

Review new technologies for pedestrian signal actuation and push buttons. The City should explore new technologies for detecting pedestrians at signals, such as automatic pedestrian detection, and for making pedestrian signal push buttons more convenient, such as "hot response" buttons that give a visual indication that the signal system has received the pedestrian's call. *Primary Department: Transportation and Public Works.*

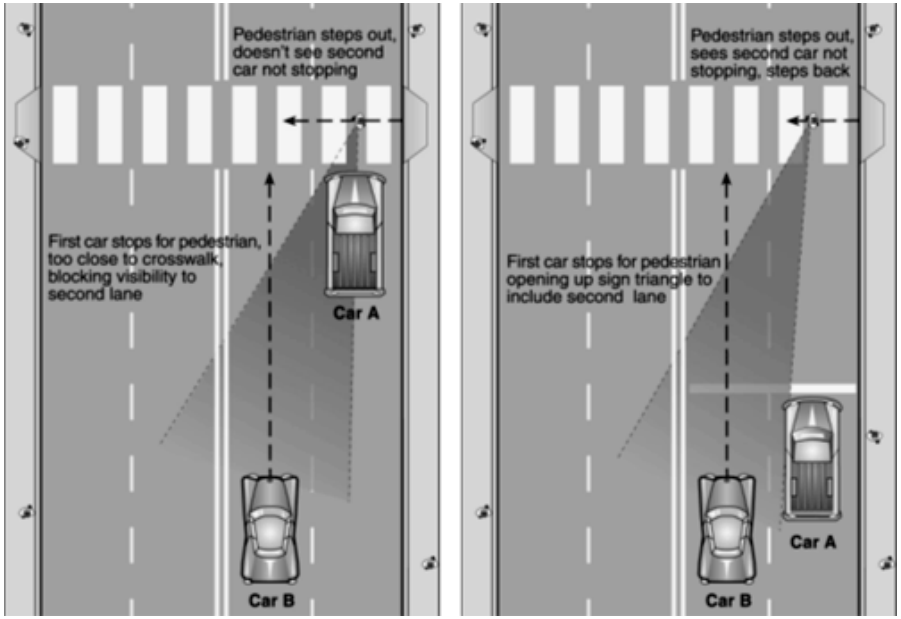
Evaluate signal timing for pedestrians in all signal-retiming efforts. Traffic signals at intersections may be the only way to create a gap for pedestrians to cross roadways with significant motor vehicle volumes. A "Walk" signal long enough to get pedestrians started and a clearance interval long enough to ensure a pedestrian can fully cross the roadway is required. Pedestrians with slower speeds such as children, the elderly, and persons with disabilities need longer crossing times. In future signal retiming activities, the City should evaluate signal timing for pedestrians and provide recommended pedestrian crossing times and other signal timing improvements in locations where there are vulnerable populations. *Primary Department: Transportation and Public Works.*

Pursue best practices in the visibility of crosswalk pavement markings. The City should evaluate strategies to improve the visibility and retro reflectivity of existing crosswalk markings, including increased use of durable pavement marking materials and strategies for reducing maintenance costs. *Primary Department: Transportation and Public Works.*

Investigate potential improvements to the current crosswalk marking practice. The City should evaluate its current practice for the placement and design of crosswalk pavement markings at intersections and mid-block locations. In particular, evaluate the appropriate use of standard (transverse) crosswalk markings and high-visibility (longitudinal) crosswalk markings, as well as potential use of other appropriate crosswalk marking designs, considering best practices for pedestrian safety, and the costs of installing and maintaining crosswalk markings. *Primary Department: Transportation and Public Works.*

Identify and improve pedestrian crossings in areas of high pedestrian use. Mid-block locations account for more than 70 percent of pedestrian fatalities. This is where vehicle travel speeds are higher, contributing to the larger injury and fatality rate seen at these locations. More than 80 percent of pedestrians die when hit by vehicles traveling at 40 mph or faster while less than 10 percent die when hit at 20 mph or less. Installing raised channelization on approaches to multi-lane intersections has been shown to be especially effective. Mid-block pedestrian accessible crossing island and medians are a particularly important pedestrian safety countermeasure in areas where pedestrians access a transit stop or other clear origins/destinations across from each other. Providing raised medians or pedestrian refuge areas at marked crosswalks has demonstrated a 46 percent reduction in pedestrian crashes. At unmarked crosswalk locations, medians have demonstrated a 39 percent reduction in pedestrian crashes. *Primary Department: Transportation and Public Works.*

Install high visibility crosswalk markings with advance stop markings or yield lines where necessary. High visibility crosswalk markings with advance stop bar (or yield line) and signs at uncontrolled intersections help prevent "multiple-threat" crashes on multi-lane roadways. The City should adopt policy direction on establishing advanced stop markings with high visibility crosswalks. *Primary Department: Transportation and Public Works.*



EXAMPLE OF A MULTIPLE THREAT CRASH AND RECOMMENDED TREATMENT

Install traffic calming devices at schools and other high pedestrian areas. Traffic calming devices are specifically designed to reduce vehicle speeds and improve safety. Ideally suited to use near schools and other high pedestrian locations, such as urban villages and Transit-Oriented Development areas around rail stations, these types of engineering

measures can change driver behavior to increase safety of all road users. Some types of traffic calming devices have already been implemented in Fort Worth, such as bulb-outs, roundabouts, speed humps, and textured pavement. The City should explore using other approved engineering measures as warranted. *Primary Department: Transportation and Public Works.*

Replace worn striping and crosswalk markings more frequently. There are currently insufficient funds to replace all existing crosswalks and pavement markings on a regular basis. The City should consider increasing the annual pavement markings budget to ensure pavement markings remain visible for the safety of all road users. *Primary Department: Transportation and Public Works.*

WORN CROSSWALK IN DOWNTOWN FORT WORTH

Pursue best practices for maintenance of trees in the right-of-way. The City currently has guidelines for planting trees in the right-of-way that provides information on species selection and spacing of trees. During residential and commercial development, trees may be planted along the right-of-way that are subsequently not well maintained. Improperly selected or maintained trees can cause costly sidewalk damage. During sidewalk rehabilitation, potentially valuable trees may then have to be removed if they are in the way. The best practices should cover recommended watering, pruning, fertilizing and disease and pest control by species. This document should also address maintenance of trees within streetscape and mixed-use projects within the furniture zone. *Primary Department: Parks and Community Services.*

COMMUNITY AND STAKEHOLDER EDUCATION

Walking is among the earliest skills people are taught. As people age the skills and knowledge needed to walk and bicycle safely can change. An education campaign can help inform and reinforce the skills needed to be safe pedestrians. It is also necessary to provide education for those designing, maintaining, or interacting with the pedestrian environment such as drivers, cyclists, engineers, maintenance workers, and property owners. The following educational components are recommendations on creating and improving community and stakeholder engagement to ensure the pedestrian environment is safe and inviting.

Educate property owners on vegetation maintenance to eliminate overgrown vegetation near sidewalks. Overgrown vegetation adjacent to a sidewalk may be unsightly, but it can also be dangerous to children, the elderly, and pedestrians with disabilities. Overgrown vegetation can create serious safety problems, as it may force children and other pedestrians to walk in the roadway. Overgrown vegetation can make it harder for drivers to see pedestrians, especially at intersections. If the vegetation blocks a traffic sign, that is obviously a problem. Tree branches can be obstructions if they extend horizontally into the sidewalk corridor. Pedestrians with vision impairments may not be able to detect tree branches that protrude into the travel route. Some people with mobility impairments who have difficulty bending may also have problems with low tree branches. In addition, taller pedestrians are inconvenienced by poorly maintained trees. Tree branches hanging lower than 80 inches should be trimmed. When educating property owners on maintenance issues, the City should refer to the FHWA's recent guidance, "A Guide for Maintaining Pedestrian Facilities for Enhanced Safety". *Primary Department: Code Compliance and CMO Communications, and Neighborhood Office.*

Educate property owners on the contents of the sidewalk maintenance ordinance. Section 30-1 of the City of Fort Worth Code of Ordinances states that maintenance of sidewalks is the responsibility of the owner, agent in charge, or tenant of the abutting property. Failure to maintain the sidewalk could lead to fines. Many cities across the country require the adjacent property owner to maintain the sidewalk; however, many property owners are not aware of this requirement. The City should dedicate more effort to informing the public on this important maintenance requirement. *Primary Department: Transportation and Public Works and Code Compliance, CMO Communications, and Neighborhood Office.*

ADJACENT PROPERTY OWNERS ARE RESPONSIBLE FOR MAINTENANCE

Manage encroachments on sidewalks. Many things that are placed in the sidewalk corridor can clutter the sidewalk, create accessibility barriers, and contribute to a poorly maintained pedestrian system. Portable sandwich boards, newspaper racks, garbage containers, and signs are temporary encroachments that interfere with pedestrian movements. These streetscape features are important contributions to making walking enjoyable, but they should be located in the appropriate place on the sidewalk so as not to create barriers to pedestrian movement. *Primary Department: Code Compliance*

ILLEGAL ENCROACHMENT INTO THE PUBLIC RIGHT OF WAY

Educate drivers on the dangers of distracted driving. Distracted driving is any activity that could divert a person's attention away from the primary task of driving. Distractions including phone use, eating, reading, and other activities that take focus away from driving. These actions can endanger the safety of all road users. To reduce the frequency of distracted driving in Fort Worth, the City should begin an education campaign to reduce the frequency of distracted driving. *Primary Department: Communications Office and Police Department.*

Continue to train about critical violations of pedestrian rights by motorists and educate all road users on their rights and responsibilities. Education can be a powerful tool for changing behavior and improving safety skills. Pedestrians, bicyclists, and motorists alike can benefit from educational tools and messages that teach them the rules, rights, and responsibilities of various modes of travel. The most effective education programs target a specific community problem, such as drivers not yielding in crosswalks, speeding or pedestrians crossing roads dangerously. The goals of an education program should be specific, measurable, and related to the problems identified. Potential efforts include press releases, information on the City's website, school traffic safety education programs, driver education programs, and public media campaigns. Additionally, the City should collaborate with local and regional partners to help with education

campaigns. *Primary Department: Communications Office and Police Department.*

NUMEROUS MID-BLOCK CROSSINGS IN DOWNTOWN FORT WORTH

Expand the Share the Trail Campaign on shared use trails including courtesy speed limits in heavily travelled locations. Share the Trails is a public awareness campaign designed to help all trail users learn the rules of the trail and safely enjoy the Trinity Trail system. The campaign is a partnership between the city of Fort Worth Parks and Community Services, Streams & Valleys, Tarrant Regional Water District and Trinity River Vision Authority. Fort Worth's multi-use trails such as the Trinity Trails are shared and enjoyed by bicyclists, pedestrians, runners, persons in wheelchairs, skaters, dog walkers, baby strollers, Segways and others. Differences in speeds between users can create tension and conflict. Increasing awareness and courtesy speed limits on the trails encourages safe use of the trail system. *Primary Department: Parks and Community Services and Tarrant Regional Water District.*

Incorporate bicycle and pedestrian safety programs in community centers and school curriculum. Children have been walking or bicycling to school since school was invented. The built environment has changed over the years and the need for safety education in schools has increased accordingly. The City should work with school districts to develop and distribute pedestrian safety information and programs to students. Information can be taught in the classroom or sent home with students to practice skills with their families. *Primary Department: Parks and Community Services and Tarrant Regional Water District CMO Communications and Neighborhood Office.*

FORT WORTH ISD PHYSICAL EDUCATION TEACHERS LEARNING ABOUT BIKE SAFETY

Create material for a community-wide educational crash prevention campaign. Education can be a powerful tool for changing behavior and improving safety skills. Pedestrians, bicyclists, and motorists alike can benefit from educational tools and messages that teach them the rules, rights, and responsibilities of various modes of travel. The most effective education programs target a specific community problem, such as drivers not yielding in crosswalks, speeding or pedestrians crossing roads dangerously. The goals of an education program should be specific, measurable, and related to the problems identified. *Primary Department: Communications Office and Police Department.*

NEW YORK CITY EDUCATIONAL CRASH PREVENTION CAMPAIGN

Establish regular staff and contractor training on practices for safety and accessibility in work zones. For those who plan, design, and construct temporary traffic control zones, the Manual on Uniform Traffic Control Devices (MUTCD) provides guidance considerations regarding pedestrians, accessibility and worker safety. A Temporary Traffic Control checklist provides an overview of pedestrian-related considerations during planning, design, and construction phases for a project and is designed to enhance pedestrian safety and accessibility, maintain Americans with Disabilities Act of 1990 (ADA) compliance, and provide positive guidance to avoid pedestrian confusion throughout each phase. Regular trainings should be held with engineers, planners, and inspectors on the proper implementation of safe accessible work zones. *Primary Department: Transportation and Public Works.*

Incorporate pedestrian education in AARP and senior/retirement centers. Older pedestrians are generally in good physical condition and have many years of healthy life ahead. Senior pedestrians walk for errands, leisure or health, but do so at a slower pace than when they were younger. Being struck by a car is often fatal, and if they survive, they may be disabled or confined to a nursing home. Older adults are often struck while crossing streets in crosswalks or by drivers making turning movements through crosswalks. Education materials could be provided for Fort Worth's active seniors through AARP, Fort Worth's community centers and active living retirement communities. *Primary Department: Tarrant County Public Health and Communications Office.*

Establish regular staff training programs and materials on accessible design. The City should provide staff with the necessary training and information to implement accessible pedestrian facilities. Engineers, planners, and other officials should regularly receive training on the best practices in implementing ADA accessible infrastructure. As standards are modified to meet the needs of the public, those implementing the infrastructure should be trained to avoid potential conflicts with the new standards. *Primary Department: Transportation and Public Works and ADA Coordinator.*

ENCOURAGEMENT PROGRAMS

Encouragement programs are activities that support and promote walking for health and transportation. The following is a listing of existing encouragement activities recommended for expansion and new activities for promoting walking.

Investigate innovative and practical ways to create vibrant public spaces for pedestrians. Many cities across the nation have been experimenting with crosswalk designs that draw attention to the crossing area for both drivers and pedestrians. Such projects have often been completed in business districts to improve the pedestrian experience, build community, and stimulate economic development. New York City has been a leader in creating vibrant public spaces for pedestrians. The City works with not-for-profit organizations to create neighborhood plazas throughout the City to transform underused streets into vibrant, social public spaces. These

projects typically result in short and more direct crosswalks, more usable public space, and a safe comfortable travel path for pedestrians, cyclists, and motorists. New York City often uses paint and other temporary items to simulate curbs, bollards and seating at little cost. Most notably the city completed pedestrian plazas on busy Madison Square and Broadway streets. *Primary Department: Planning and Development and Transportation and Public Works.*

MADISON SQUARE PLAZA IN NEW YORK CITY *(PHOTO SOURCE:STREETSBLOG)*

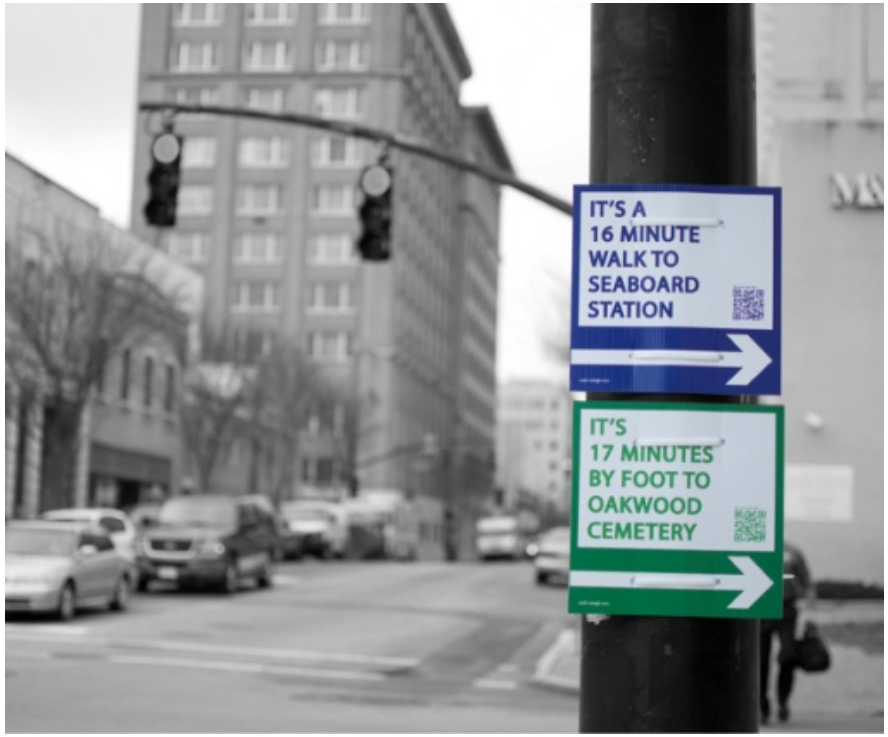
Support and expand neighborhood car-free events. *Open Streets* events began in the Near Southside of Fort Worth in 2011 and has been held annually in the spring. The Sunday event closes several streets to motor vehicle traffic and opens up the street space for people to walk, run, bicycle, and recreate. *Open Streets* are increasingly common cities seeking innovative ways to achieve better community health, as well as environmental, social, and economic goals. Other areas that are good candidates for car-free events include the West 7th, downtown, and near the Texas Christian University campus. *Primary Department: Planning and Development.*

These initiatives can:

- Encourage physical activity and allow participants to reimagine their communities as places to walk and bike for transportation
- Improve the air quality of cities by removing cars from the road
- Provide a public space that helps people meet and make social connections, thereby allowing individuals, community organizations, and political leaders to build relationships
- Bring thousands of people to frequent businesses and fuel local economies

FORT WORTH SOUTH OPEN STREETS EVENT

Work with neighborhoods to install pedestrian wayfinding signage. Walk [Your City] represents one of the fastest spreading do-it-yourself civic engagement projects in the country. Recently highlighted in the national media as "guerrilla wayfinding", this program started as a simple, unauthorized installation consisting of plastic signs in downtown Raleigh. The signs depicted how many minutes by foot to walk to a destination in Raleigh. A program such as this in Fort Worth deployed in neighborhoods and entertainment districts could show residents and visitors of Fort Worth how a quick walk to popular destinations can encourage physical activity and reduce the expense and aggravation of short motor vehicle trips that would otherwise be necessary. *Primary Department: Planning and Development.*



SOURCE: WALK (YOUR CITY)

Develop neighborhood walking maps or walking map mobile applications. Neighborhood walking maps are a way to highlight trails, safe sidewalk routes, and interesting destinations. Walking map apps can provide information about neighborhood assets that residents and visitors may not already know of, such as locations of vital community services, parks, bus stops, public art, and community gardens. Communities can become safer by increased "eyes on the street," reduce the chances for crimes of opportunity. Neighborhood residents help keep an eye out for each other, and walking increases community safety. *Primary Department: Planning and Development.*

NEIGHBORHOOD WALKING MAP IN COLUMBUS OHIO