REGIONAL ACTIVE TRANSPORTATION MASTER PLAN

TEXARKANA METROPOLITAN PLANNING ORGANIZATION

This Plan was prepared for the Texarkana Metropolitan Planning Organization

Texarkana MPO

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TEXARKANA METROPOLITAN PLANNING ORGANIZATION
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1 Introduction and Plan Purpose

Origin of the Plan

This Texarkana Regional Active Transportation Master Plan (TRATMP) is meant to provide a comprehensive vision for active transportation facilities. Those facilities generally include sidewalks, bike lanes, bike signage, off-road trails, and share use paths. Having an active transportation plan is a first step towards coordination among the various agencies responsible for active transportation facilities, as well as other interested parties. In addition to providing a regional vision for collaboration between the MPO and cities within the MPO Study Area, planning for bicyclists and pedestrians can have multiple benefits beyond mobility, such as improved public health, a decrease in environmental pollution, encouraging dense development rather than sprawl, and increased equity for low income or mobility impaired individuals. By having an active transportation plan completed, the MPO, municipalities and counties can more competitively apply for potential state and federal funding opportunities, as well as funding opportunities with national bicycle and pedestrian organizations, or other cost sharing programs.

Federal and National Guidance

The initial Master Bicycle and Pedestrian Plan for the Texarkana area was produced in 2009 by the Texarkana Metropolitan Planning Organization (TMPO). This plan is meant to build off of those efforts and provide more robust project recommendations that can be rolled into the upcoming Metropolitan Transportation Planning process, where the MPO will define targets for the active transportation performance measures noted in Chapter 6 of this plan.

The role of the MPO has continuously changed from planning highways and interstates to one that includes bicycling, walking, freight, transit, and rail. As of March 11, 2010, the Department of Transportation issued the USDOT Policy Statement of Bicycle and Pedestrian Accommodation Regulations and Recommendations, which states that:

"The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes."

Both MPOs and municipalities play a key role in the implementation of the above policy by "Improving conditions and safety for bicycling and walking", and creating "an integrated, intermodal transportation system that provides travelers with a real choice of transportation modes."

The Fixing America's Surface Transportation Act (FAST Act), a continuation of Moving Ahead for Progress (MAP-21), provides funding for bicycle and

pedestrian facilities through its various funding programs.

Benefits of Having a Plan

Having an active transportation master plan provides many benefits to the community. It provides a comprehensive overview of all the elements that comprise the active transportation system. A plan encourages municipalities and regions to take stock of their active transportation systems, identify gaps, and prioritize improvements. It also encourages decision makers from various governmental jurisdictions and the public to work together towards common visions and goals for their bicycle and pedestrian network.

In addition to improving regional mobility and accessibility for users of all ages and abilities, current Federal Highway Administration guidelines require that "Bicyclists and pedestrians shall be given due consideration in the comprehensive transportation plans developed by each metropolitan planning organization and State." By developing this Active Transportation Master Plan, TMPO can remain compliant with Federal Highway Administration (FHWA) guidelines and remain competitive for funding opportunities. This plan includes projects that can be incorporated into the overall Metropolitan Transportation Planning (MTP) process that the MPO is required to complete. In addition, the goals and objectives identified in the plan, can help inform the MTP process related to active transportation.

As mentioned above, having a plan for biking and walking activity positions MPOs and municipalities for funding opportunities from state and federal agencies, as well as private sources. By having a clear, concise, and well-developed vision, an MPO or municipality can have a competitive edge when applying for funding opportunities. Projects in this plan can be integrated into projects through the MTP process, ensuring that MTP projects have adequate multi-modal considerations, making them more competitive.

Finally, an active transportation master plan shows commitment by the region and the individual communities to the quality of life for residents. For companies that may be looking to relocate to the Texarkana region, having an adequate active transportation network could be a deciding factor in their decision, as employees are more commonly looking to live in walkable or bikeable communities.

Planning Process

The Texarkana MPO undertook a 7-month planning process to complete the Texarkana Regional Active Transportation Master Plan. The planning process included the following key components:

Existing Plan Review

The project team reviewed the 2009 Texarkana Bicycle and Pedestrian Master Plan, TxDOT Bicycle and Pedestrian Planning Documents, and the Arkansas Bicycle and Pedestrian Transportation Plan completed in early 2017. The ongoing Texarkana, TX Comprehensive Plan Update was also consulted to understand

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local plans for trails and roadway improvements.

Data Collection and Analysis

Phase I of this project included an inventory and assessment of sidewalks throughout the study area that provided the basis for several analyses and identified projects.

Data analysis tasks consisted of reviewing existing facilities, sidewalk and bike facility connections to schools and transit, a barriers analysis, crash analysis, and an assessment of Bicycle Level of Stress (BLOS) on roadways.

Public Outreach

An exhaustive public outreach campaign was undertaken to ensure that the plan outcomes were community and stakeholder driven. Engagement efforts included an online and hard-copy survey, a visioning and network identification open house, a stakeholder project prioritization workshop, and a public project review and prioritization workshop.

Design Guidelines

As part of this project, the Texarkana MPO developed design guidelines to aid in the implementation of projects, programs, and policies. These guidelines provide the MPO and other communities with facility design standards to consider when planning and implementing bicycle and pedestrian facilities.

Project Identification and Prioritization

This plan includes a series of projects/networks and their prioritization. Projects and networks were developed and prioritized through the data analysis and public/stakeholder outreach components of the planning process.

Implementation Program

As part of this plan, the Texarkana MPO developed goals and key objectives to foster improved bicycle and pedestrian implementation. Goals and objectives for this project can be found in Chapter 6: Implementation and Funding.

Project Purpose

The main goal of this plan is to provide a unified vision for bicycle and pedestrian investments in the Texarkana MPO Study Area (shown in Figure 1.1). Those bicycle and pedestrian investments are meant to improve both access and mobility throughout the region for all ages and abilities for each bicyclist and pedestrian. This plan focuses on providing connected and accessible regional facilities. Active transportation use is generally associated with bicycling and walking groups, who access trails, rural roadways, and bike lanes to travel for recreational purposes, however, a major purpose of this plan is to provide equitable access to potential users of all ages and abilities, particularly those without access to vehicles, young and aging population who cannot drive, and for individuals and families with limited access to vehicles.

Texarkana Demographics

Active transportation serves as a critical element for an area's mobility

and accessibility standing; not only does it provide sustainable and healthy alternatives to automobile travel, but may also create equitable transportation for both rural and urban regions. Accordingly, understanding an area's demographic and socioeconomic context is key to creating an active transportation system which maximizes the societal benefits it intrinsically provides.

The Texarkana MPO Study Area, per the 2015 American Community Survey (ACS), contains a population of 107,287. This population is split amongst roughly 40,000 total households. Additional demographic information is outlined in Table 1.1. From these totals, analysis shows that nearly one-third of Texarkana's total population falls under the title of Transit Dependent Population (TDP) (Table 1.1); those that are too young or elderly to drive on their own, and those that are disabled or impaired enough to prohibit any personal automobile use.

Figure 1.2 displays the Texarkana region TDP to be highly concentrated in perimeter areas, namely along the MPO region's western and southeastern border lines. These rural areas typically see less transportation connectivity/accessibility. Further broken down, the TDP displays 25% of the total population allocated to citizens 18 years or younger, and 15% of the Texarkana region populated by those who are 65-years or older (two ACS metrics utilized to generate TDP statistics). Figures 1.3 and 1.4 display each population's spatial distribution, respectively. Both tend to concentrate in rural/perimeter areas, and sections near the interstate/highway facilities that surround the municipality.

Table 1.1: Texarkana Demographic Summary

CATEGORY	COUNT/PCT
Total Population	107,287
Total Households	40,172
% Households no Vehicle	8%
% Households 1 Vehicle	34%
% Transit Dependent Population	29%
% 65 Years or Older	15%
%18 Years or Younger	25%

Table 1.1 also displays the percentage of households in Texarkana without a vehicle (8%), and one vehicle (34%). Accordingly, no vehicle households (Figure 1.5) are located closer to the city while households with one vehicle (Figure 1.6) are more dispersed throughout the region.
This analysis highlights two distinct characteristics of the region. First, that there is significant demand in the urban areas for increased availability of active transportation facilities to improve mobility for those without access to a vehicle. Second, that the surrounding rural areas consist of a large contingent of young and aging populations. These populations may have access to a vehicle (i.e. children travel with a parent or aging populations still utilize a vehicle/transit services to remain mobile).

Figures 1.2 - 1.6 illustrate demographic data at the block group level. Data is shown as totals by block group to better identify major pockets of key demographics.

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Figure 1.1: Texarkana MPO Study Area

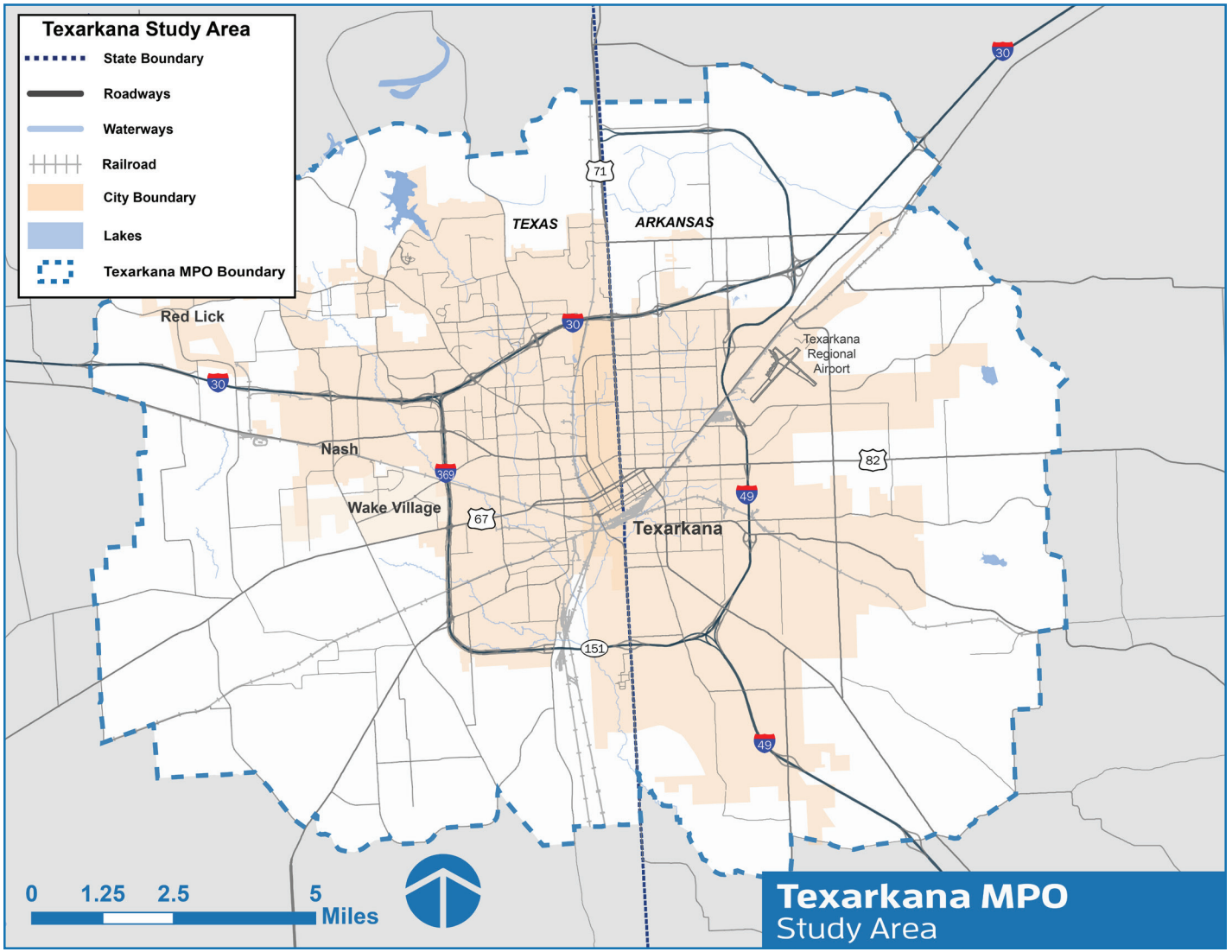

Figure 1.2: Texarkana MPO Region Transit Dependent Population

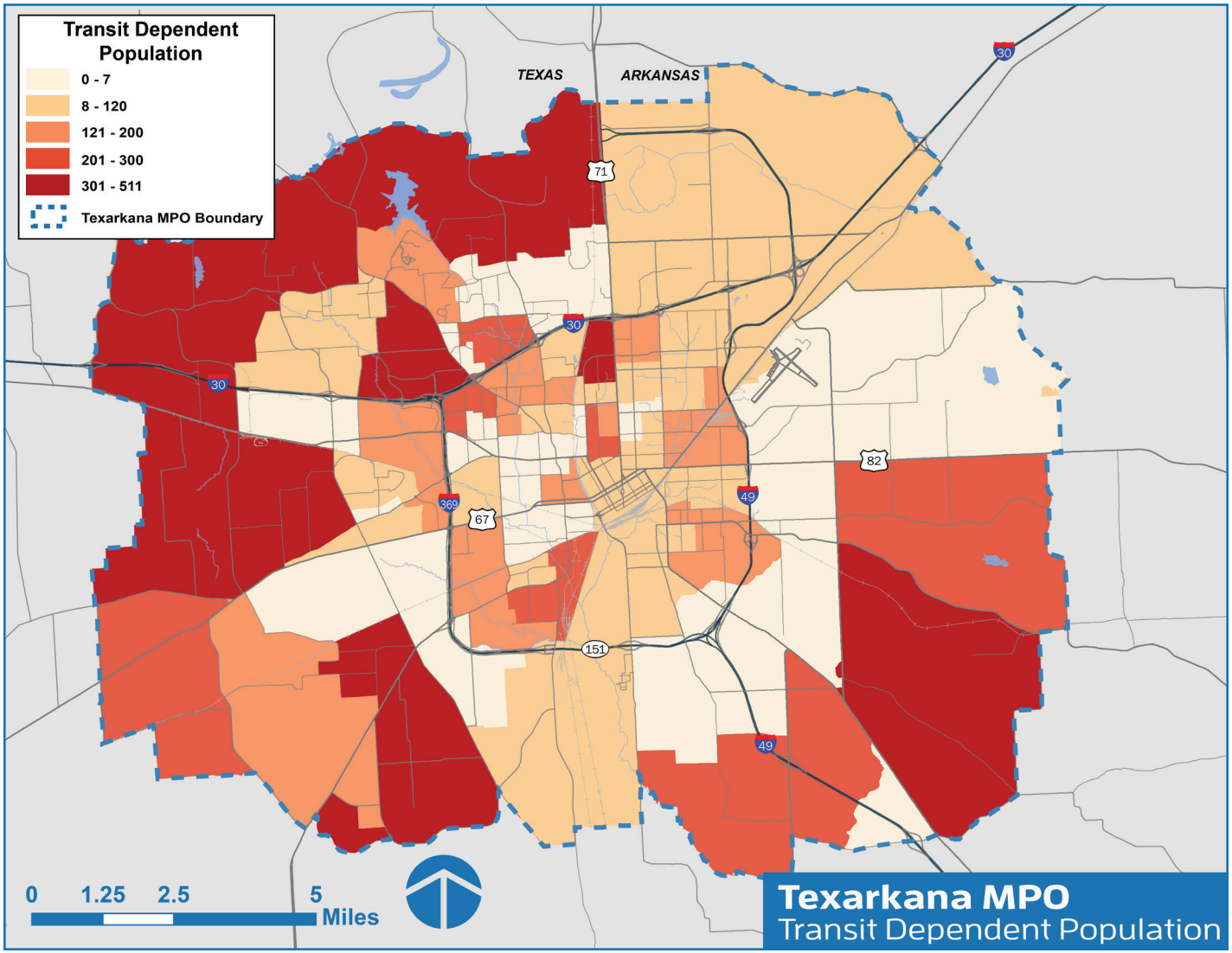

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Figure 1.3: Texarkana MPO Region Population 18 Years and Younger

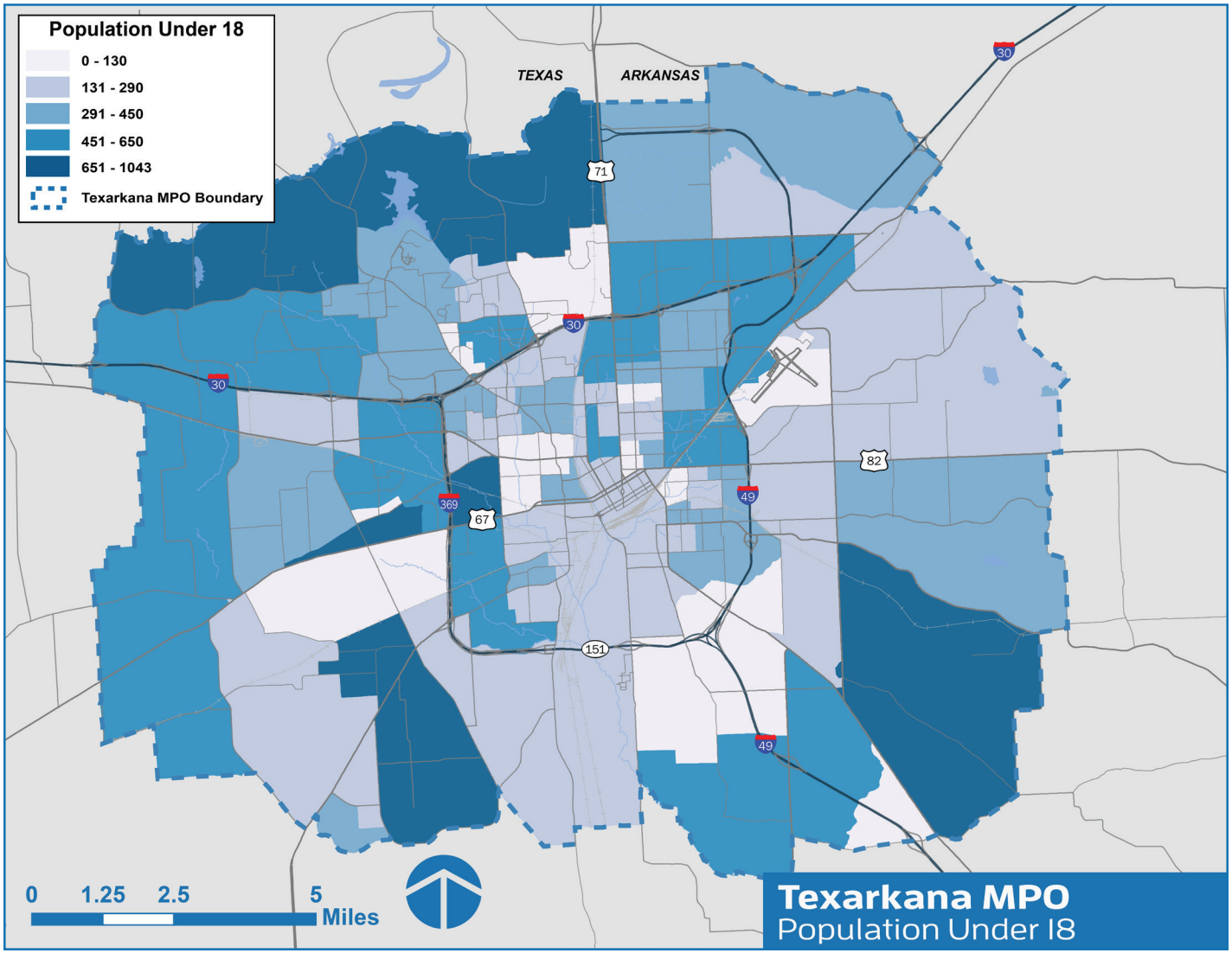

Figure 1.4: Texarkana MPO Region Population 65 Years and Older

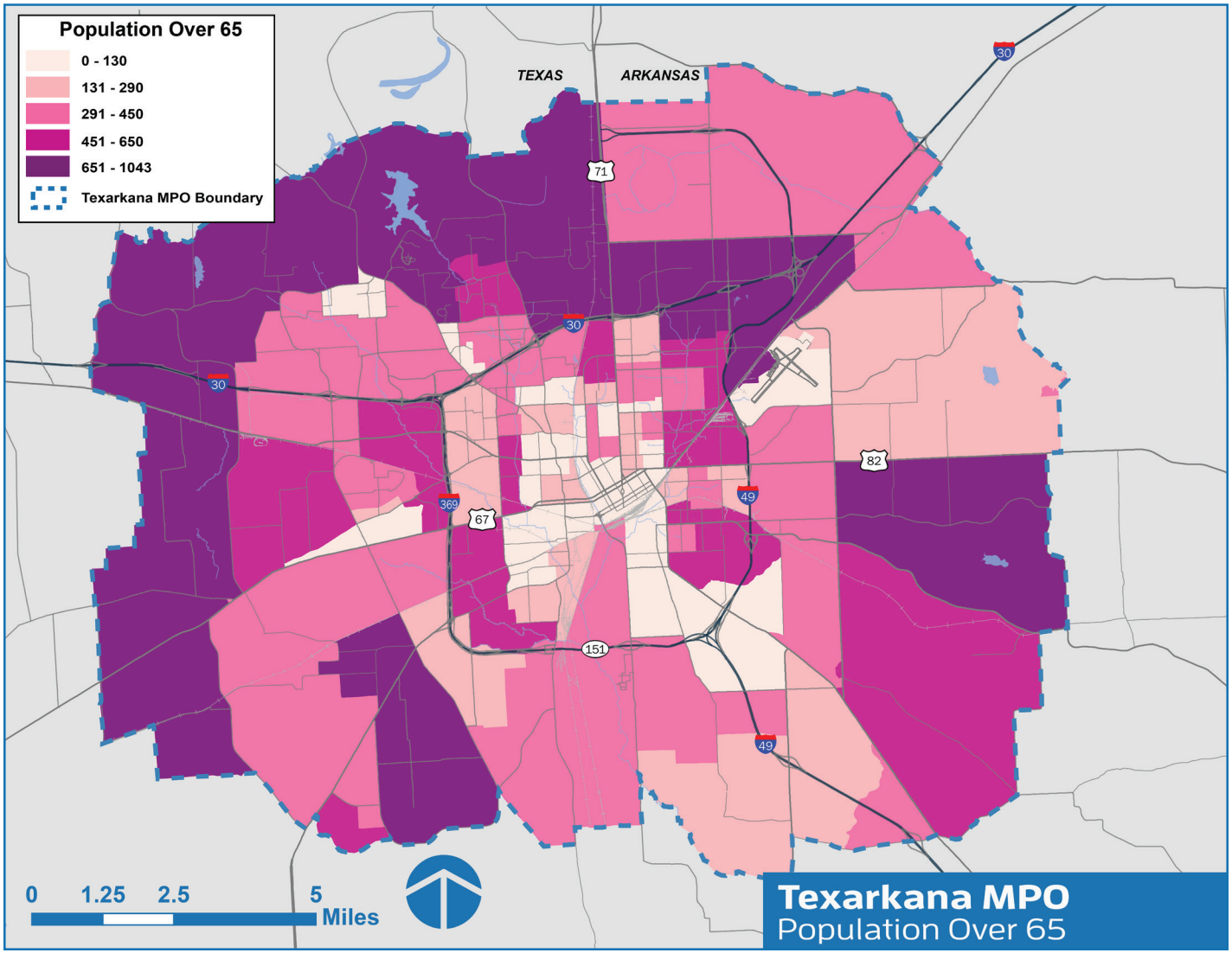

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Figure 1.5: Texarkana MPO Region Households with No Vehicle

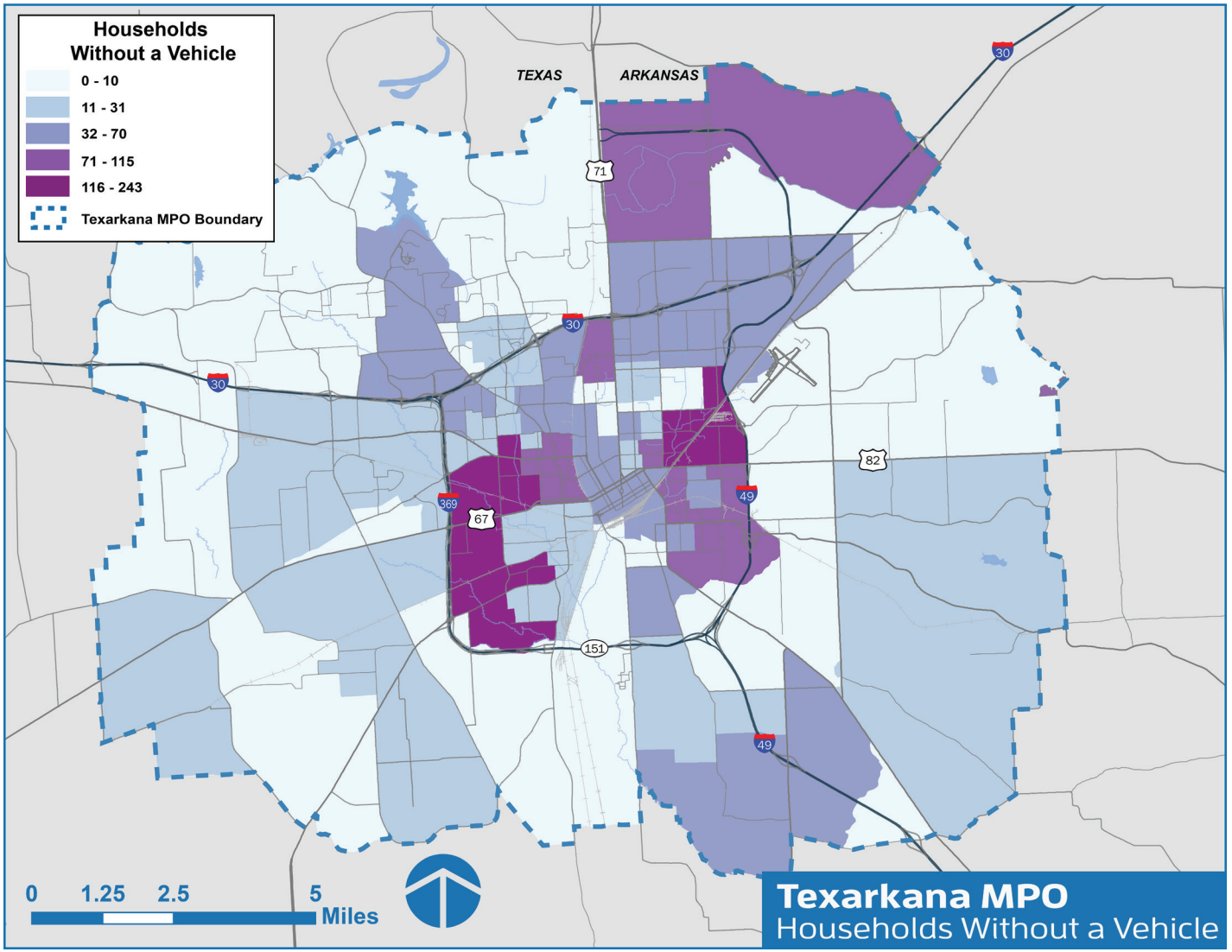
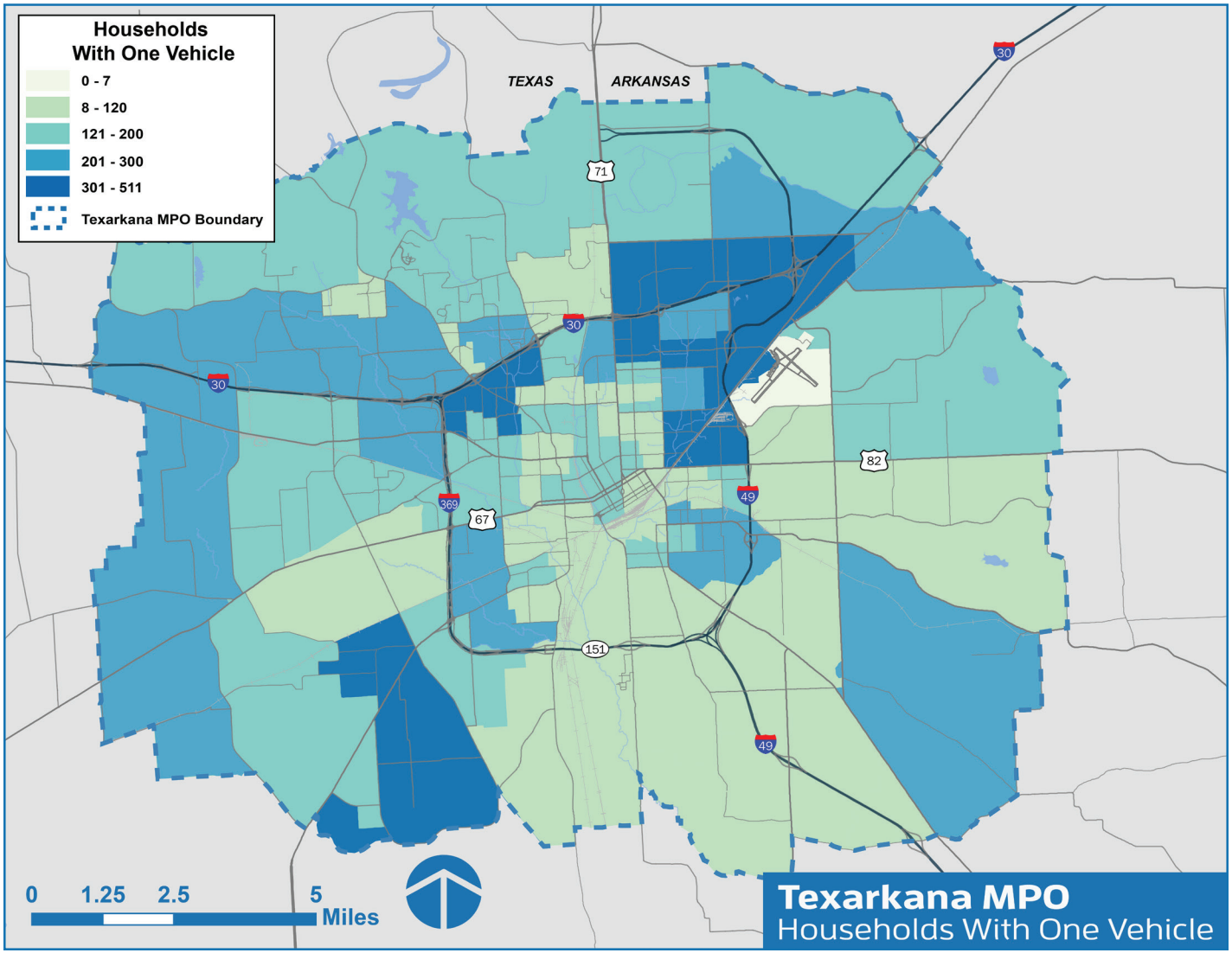
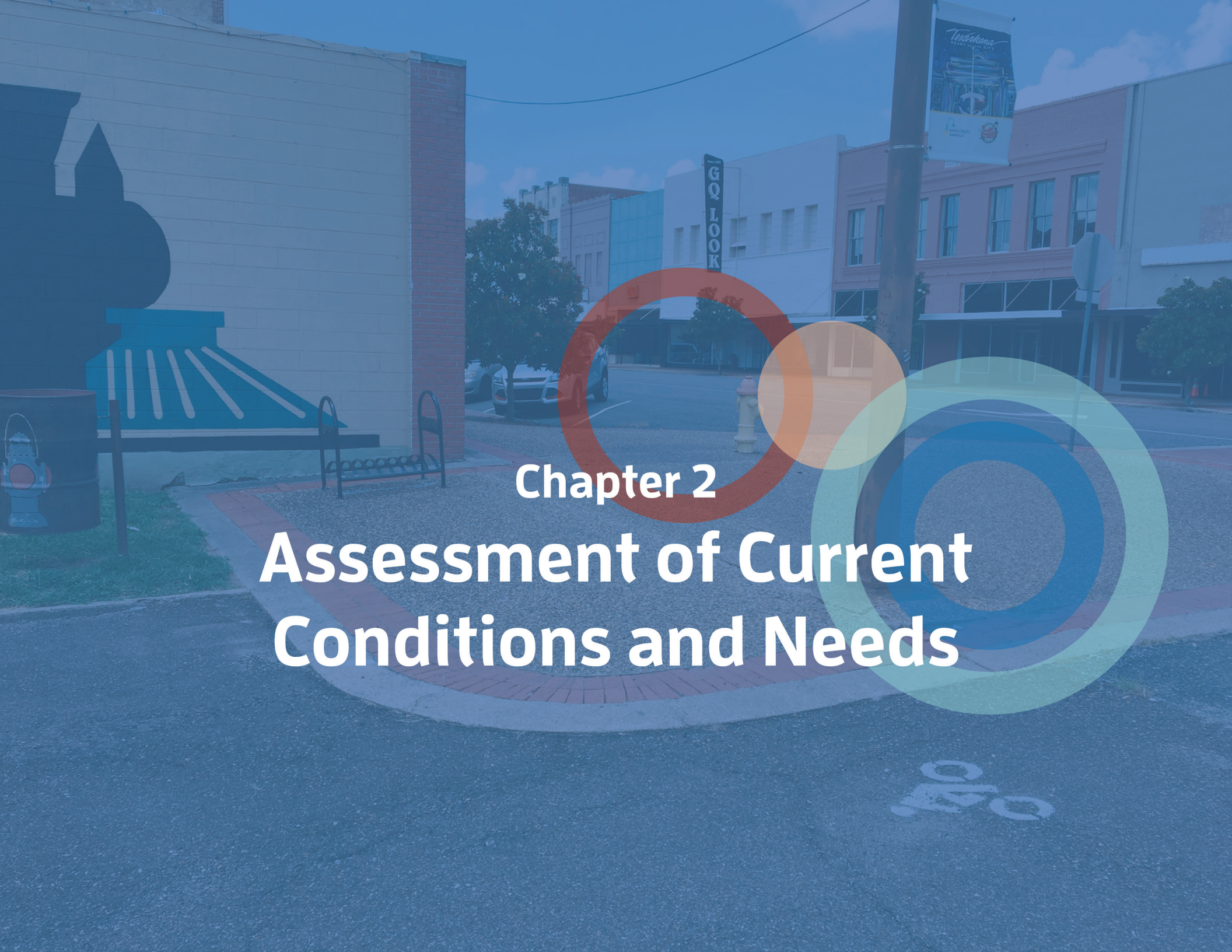


Figure 1.6: Texarkana MPO Region Households with One Vehicle




Texarkana



Chapter 2
Assessment of Current Conditions and Needs

2 Assessment of Current Conditions and Needs

Introduction

The Texarkana MPO's existing conditions and needs assessment was completed through a combination of analysis and public involvement efforts that aimed to identify gaps in the current system and establish areas for improvement. Creating a comprehensive understanding of current active transportation conditions is crucial to ensure appropriate investments and equitable project prioritization.

Current conditions of bicycle and pedestrian infrastructure in the Texarkana MPO Region provide several clusters of active transportation connectivity via sidewalks, off-road trails, and roadway shoulders. However, the current infrastructure also highlights several areas where improved connectivity is needed.

Data analyzed to generate a better understanding of current facilities includes crash data, a facilities inventory and gap analysis, a bicycle and pedestrian attractors analysis, and a transit and bicycle interaction analysis. The project team worked closely with local bicycle and pedestrian advocacy groups, community stakeholders and the public to gather results and constant feedback throughout the process.

Existing Conditions

To better identify the region's existing infrastructure conditions, the data analyzed has been separated into three sections, pedestrian infrastructure, bicycle infrastructure, and active transportation barriers. The following explains the region's current active transportation infrastructure inventory and barriers.

Pedestrian Infrastructure

Phase I Sidewalk Inventory

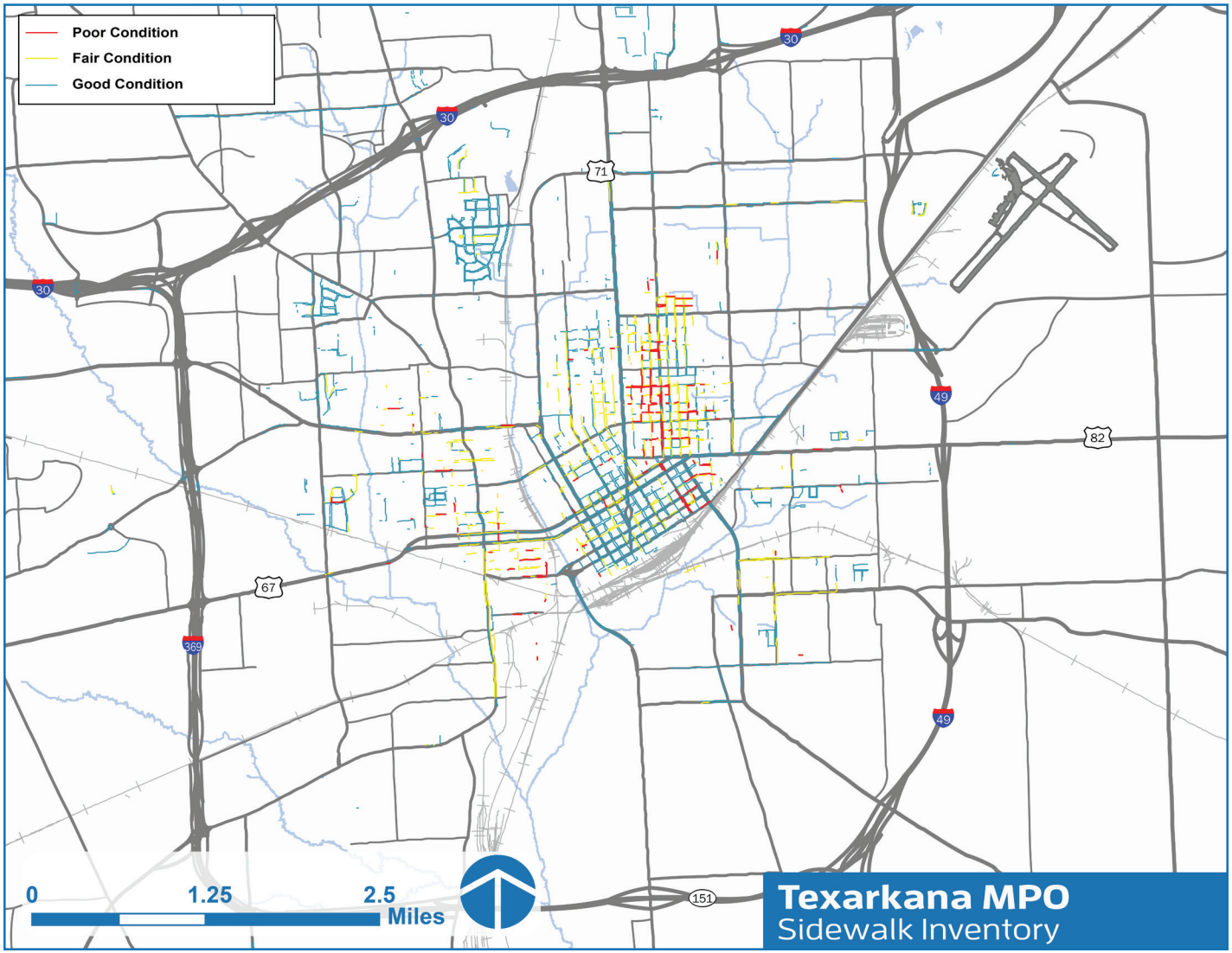
Existing sidewalk infrastructure was collected as part of Phase I of the Texarkana Regional Active Transportation Master Plan. This "sidewalk inventory and analysis" was completed for all roads within the Texarkana MPO study area, providing a detailed report on the current state of the sidewalk network.

All data was obtained through Mobile Asset Collection (MAC) devices which generated an archive of street level imagery. After establishing the region's sidewalk inventory, the imaging/data was then used to distinguish the following sidewalk conditions to create a better understanding of the state of current regional pedestrian infrastructure:

- Good: sidewalk is level with no uprooting or cracking.
- Fair: sidewalk has minimal uprooting or cracking.
- Poor: sidewalk has major uprooting or cracking and poses a hazard to pedestrians.

The final product displays a sidewalk inventory with the most contiguous segments found within the urban core of the study area. Further, a majority of sidewalk infrastructure in "good" condition is located within the urban core as well. Sidewalks do exist outside of the central portion of the region; however, they are typically near new development and lack substantial connectivity to other facilities. Figure 2.1 illustrates sidewalks in the region.

Figure 2.1: Texarkana MPO Region Sidewalk Inventory



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Bicycle Infrastructure

Facility Types

Current bicycle infrastructure can be separated into two categories: Off-road paths/trails and TxDOT/ArDOT-identified roadway shoulders (Figure 2.2). Off-road paths/trails include recreational multi-use pathways completely separated from roadway infrastructure, offering the safest facility type for bicyclists. Bringle Lake Trail in the northwest portion of the study area and the Nix Creek Trail running north to south in the central Arkansas portion of the study area provide the most contiguous off-road trail infrastructure in the study area.

For the needs assessment study, identified roadway shoulders have been distinguished by those meeting "high-quality" standards, and those referred to as adequate for use by TxDOT and ArDOT, or "regular". "High-quality" shoulders refer to those that are 4-feet or more in width, providing users an ideal amount of separation from automobile right-of-way. "Regular" shoulders are those that are less than 4-feet in width.

Bicycle Level of Stress

Bicycle Level of Stress (BLOS) is a method used to measure the relative comfort of a roadway for bicyclists. BLOS is a tool implemented to better understand bicyclists' perceptions of current roadways/infrastructure conditions and to evaluate how compatible roadway environments are for automobile and bicyclist interaction. Analyzing level of stress for bicyclists is crucial for creating viable multimodal districts and designing transportation systems. Accordingly, the previously mentioned factors normally translate to rating bicycle facilities, specifically comfort, convenience, and ability to maneuver freely; these terms typically translate to how many cars are traveling on a roadway and the speed at which they are traveling.

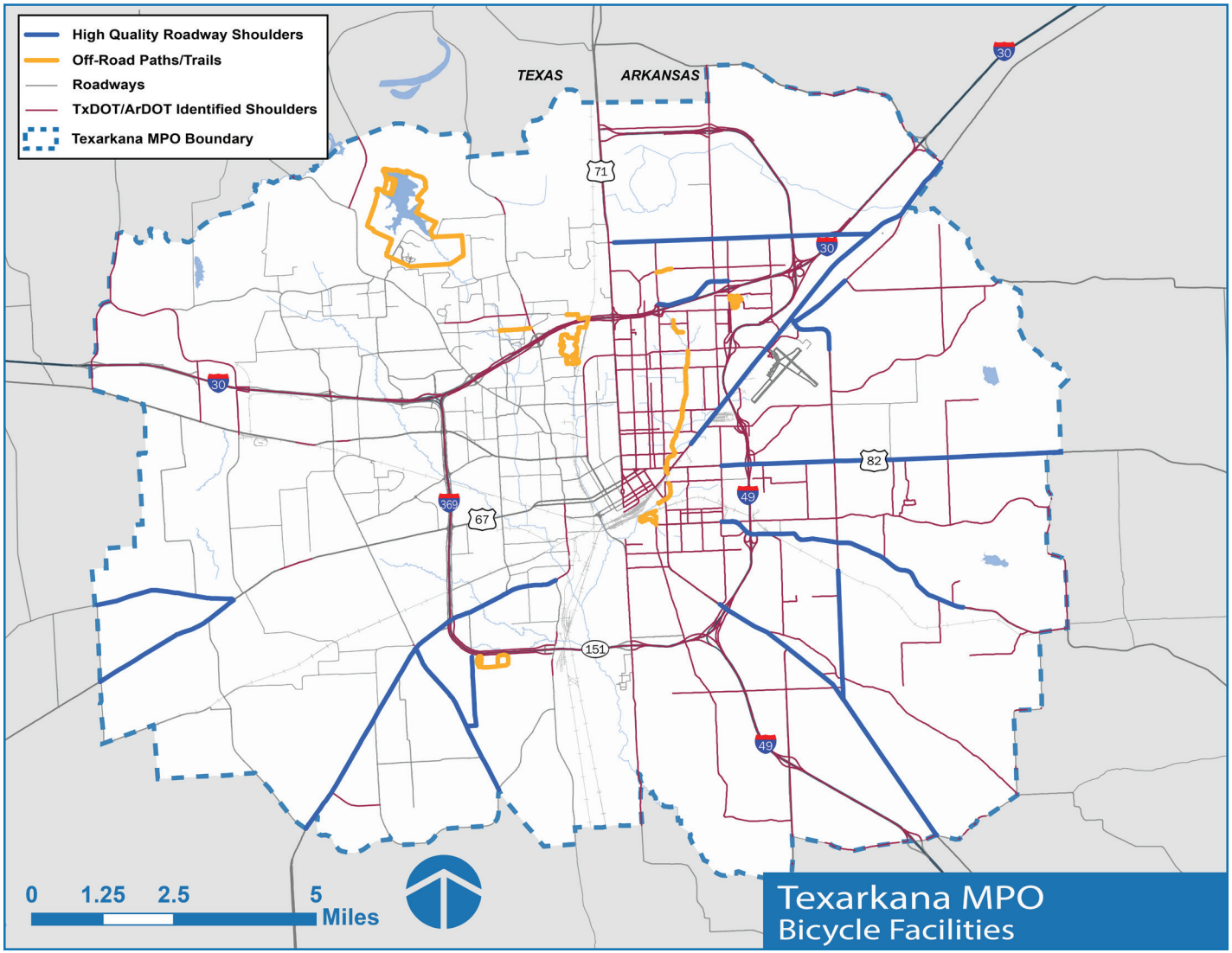
The BLOS analysis was conducted for several reasons, including but not limited to; identify gaps/deficiencies in the region's bicycle network, provide bicyclists a vision for a safe and efficient regional bicycle network, produce updated BLOS data inventories for the region, and providing an inventory to guide the region's future discussions on active transportation facility upgrade alternatives. The following section discusses the methods and results from the BLOS analysis performed.

Methods

For the initial BLOS analysis, staff used average daily vehicular travel volumes and facility posted travel speeds to produce a high level bicycle level of stress inventory. Both measures were attributed to appropriate roadway segments found within the Texarkana MPO Study Area. Accordingly, a network was produced, flagging high stress roadways (those with high traffic volume and high speeds) and low stress roadways (those with lower traffic volumes and low speeds). A BLOS index incorporating these measures was then produced and separated into the following rankings;

1. No Stress/Trails: Separate from roadway. Acceptable for all cyclists, even children. Trails and side paths provide the highest level of comfort for

Figure 2.2: Texarkana MPO Region Existing Bicycle Facilities



cyclists/pedestrians (Refer to Chapter 3 minimum trail dimensions). Some low stress may occur where trails cross roadways.

2. Low Stress/High Comfort: Low-traffic residential street or rural road. Acceptable for the majority of cyclists. This could also include a separated bike lane with physical barriers between the vehicles and bicycles.
3. Moderate Stress/Moderate Comfort: Relatively low-traffic road without bike lanes. Also includes roads with higher speeds and shoulders. Acceptable for those who are comfortable riding in traffic or near higher speed traffic with limited physical separation.
4. High Stress/Low Comfort: Large, multi-lane road with high speeds and no cycling infrastructure. Most cyclists would not bike here except in extreme circumstances. Examples include highly skilled cyclists.

GIS analysis was used following the tagging of roadway traffic volumes and travel speeds to spatially represent the network based on the BLOS index. Figure 2.3 displays BLOS for the TMPO Region.

No Stress/Trail classifications include of Nix Creek Trail, Trice Trail, Bringle Lake Trail, Bobby F. Ferguson Park, and Hobo Jungle Park. These facilities are completely separated from automobiles. Low stress segments consist of residential roadways clustered around the downtown area and suburban/rural neighborhoods. Moderate stress roads include facilities like those considered high stress, however they generally carry lower traffic volumes and have lower speed limits. These roads can be used by cyclists, but do not typically experience heavy ridership. High stress roads in the region are those typically categorized as rural highways/farm to market roads, or major arterials and thoroughfares when in closer proximity to the city (interstate highways were not included as bicycles are not allowed to travel on them).

Due to the region's unique location, data for average daily traffic volume and facility speeds were obtained from the TxDOT and ArDOT roadway inventories. Data gaps existed with speed measurements; in these cases, Google Earth was used to find the most accurate/up to date posted speeds for each roadway segment.

Barriers Analysis

Barriers to accessing active transportation facilities is a major inhibitor to using those facilities. Understanding active transportation barriers further contribute to properly understanding a region's existing conditions. The following features were considered transportation barriers for bicyclists and pedestrians;

- Major Roadway Intersections: intersections which experience high volumes of traffic.
- Freeway Bridge Crossings: This includes overpasses (no shoulder/ connectivity) and at grade crossings, which create a dangerous setting for bike/pedestrian activity.
- Railroad Crossings: any at grade crossing involving railroads in the region.
- Rivers/Creeks/Water bodies: natural barriers which influence the design of active transportation infrastructure.

Figure 2.3: Bicycle Level of Stress

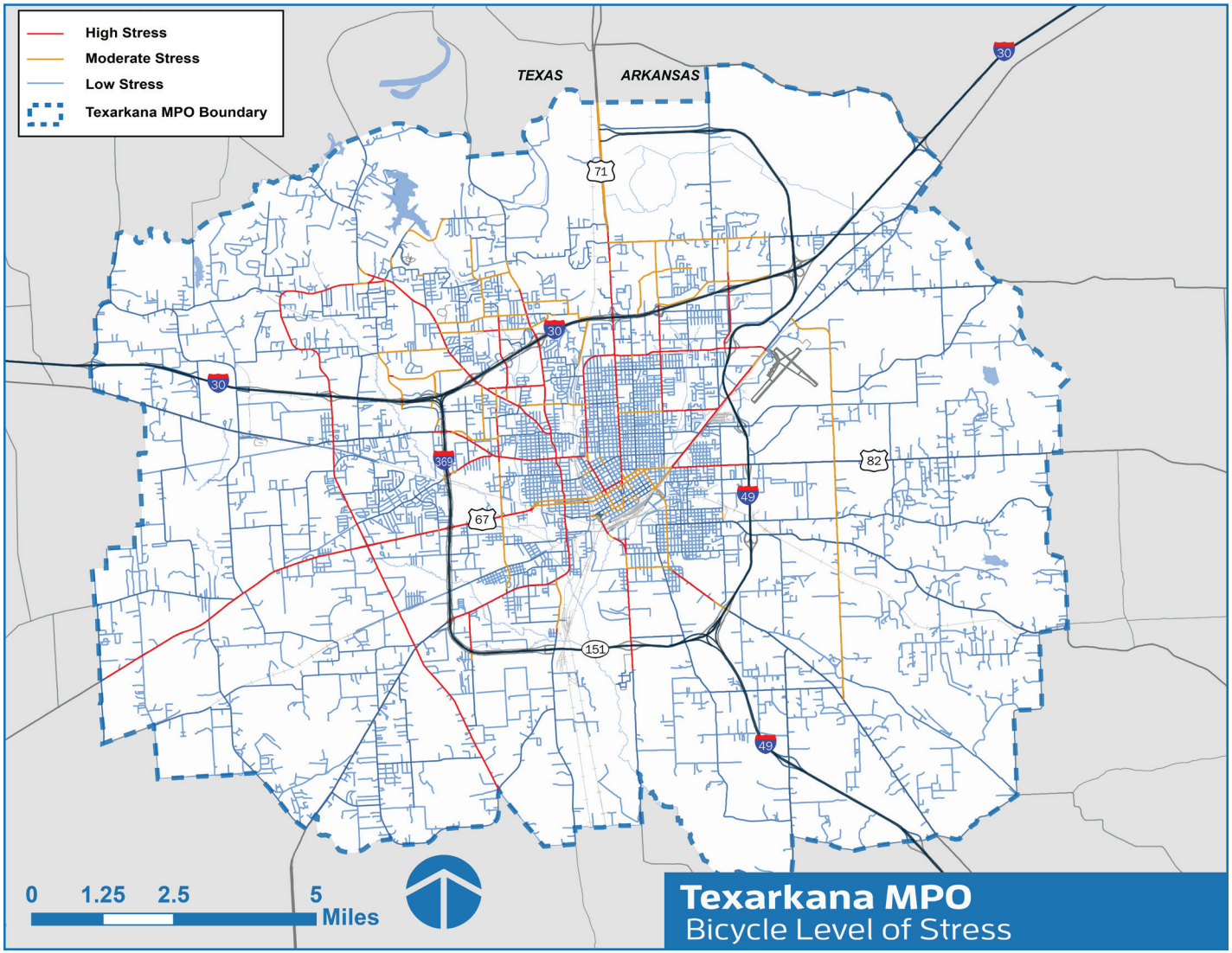


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Figure 2.4 displays the urban region largely surrounded by freeway bridge crossing barriers, such as IH 30, IH 49, and IH 369 which surround the urban area. Major intersections are dispersed throughout the urban area, located along major arterials such as State Line Avenue, Arkansas Boulevard, and Richmond Road. Railroad barriers cluster centrally near the railroad depot and extend to rural areas south, east, and west of the city.

Needs Assessment

The needs of a region's active transportation system change over time in response to evolving community travel behavior, the demographic profile of the region's population, and the availability of transportation facilities. Analyzing the demand for new/improved active transportation facilities represents an important component in developing a regional vision. Considerations such as user safety, the quality and availability of active transportation infrastructure, and regional connectivity were viewed as critical aspects when assessing the needs of the Texarkana MPO Region, and analyzed accordingly.

Crash Analysis

Bicycle and pedestrian infrastructure typically share/or are near automobile facilities. While accidents involving cyclists and pedestrians are not nearly as frequent as automobile accidents, collisions involving the non-motorized modes can result in incidents with a higher probability of severe injury or in some instances fatality. Because active transportation users are naturally more vulnerable to the dangers created by transportation networks, it is critical to design systems with safety for all users as a top priority. The following analysis details bicycle and pedestrian accidents in the Texarkana MPO Study Area from 2010 to 2017, creating a better understanding of where safety concerns exist.

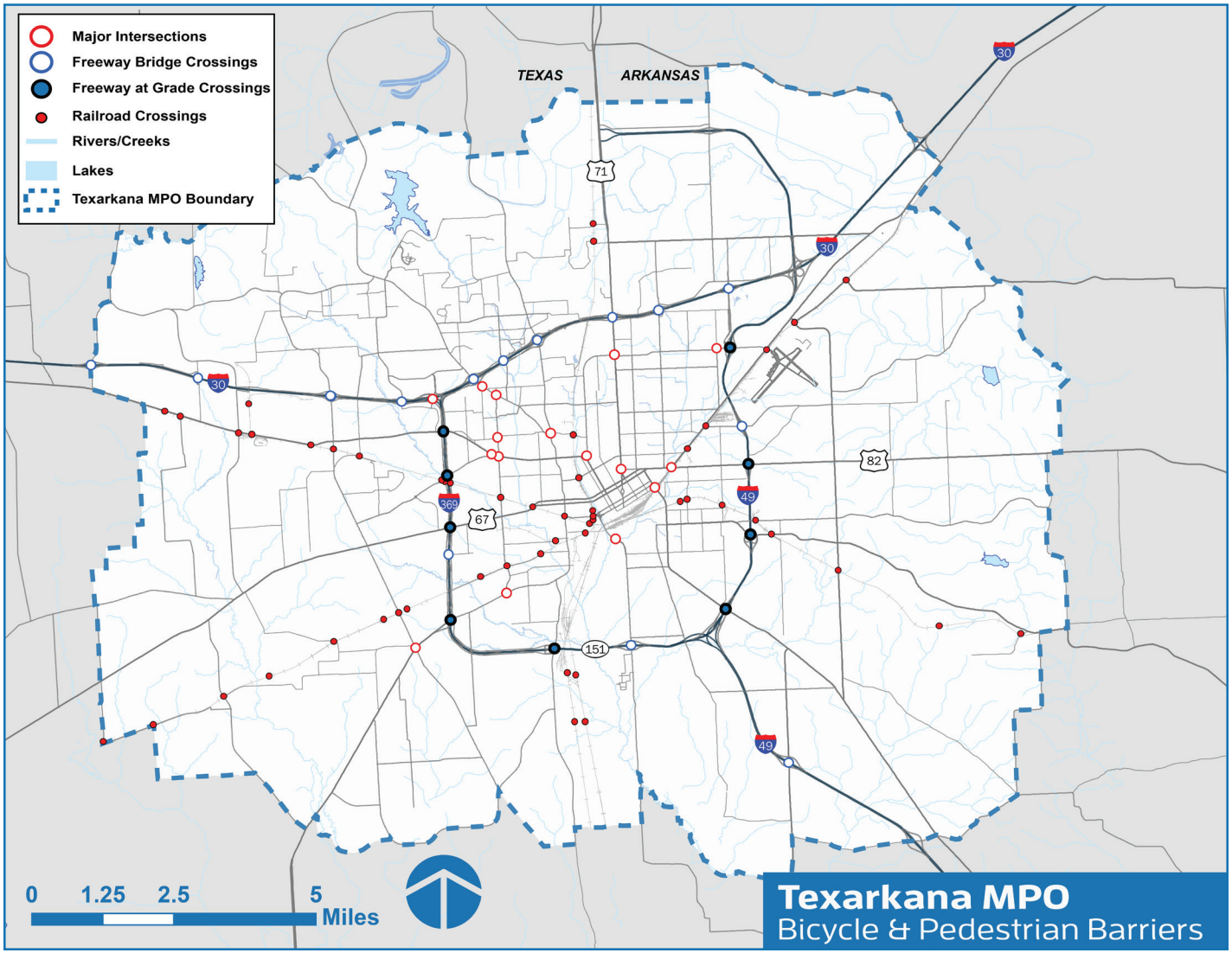
Methods

The Texarkana MPO Study Area is split between Texas and Arkansas. Crash data was first collected separately for both Texas and Arkansas within the MPO area and then joined. All Texas crash statistics were provided by TxDOT from their Crash Records Information System (CRIS). The CRIS query tool allows users to obtain public crash data annually and is updated every June. Arkansas crash data was obtained from the Arkansas State Police crash database.

Following data collection, all retrieved crash locations were geocoded, including pedestrian, bicycle, and automobile accidents to create a comprehensive crash database resulting in a heat map analysis displaying all crash density clusters throughout the region. A 750-foot search radius was used for the heat map exercise.

Heat mapping the crash database created a base layer on the MPO roadway network illustrating where most crashes occurred between 2010 and 2017. The crash database was then filtered to only display pedestrian and bicycle accidents in the region, and compared to the crash heat map to show any relationships.

Figure 2.4: Bicycle and Pedestrian Barriers



2 Assessment of Current Conditions and Needs

The final merged crash points were then distinguished between bicycle and/or pedestrian crash types/counts, the year of the crash, injury total, and death total. These attributes allowed staff to measure the level of severity for each crash included in the study.

Results

The region experienced a total of 131 bicycle- and pedestrian-related accidents from 2010 to 2017. This figure can be further broken down into 46 crashes involving bicyclists and 85 pedestrian related crashes. Heat map analysis (Figure 2.5) shows that most of the recorded crashes occur on major thoroughfares, corridors, and rural highways. Figure 2.6 displays all bicycle and pedestrian accidents within the Texarkana MPO Region. Further, heat mapping showed a direct relationship between bike/pedestrian accidents and levels of traffic flow or vehicle miles traveled along roadway segments signifying that higher speeds and volumes are not conducive to safe bicycle and automobile interaction.

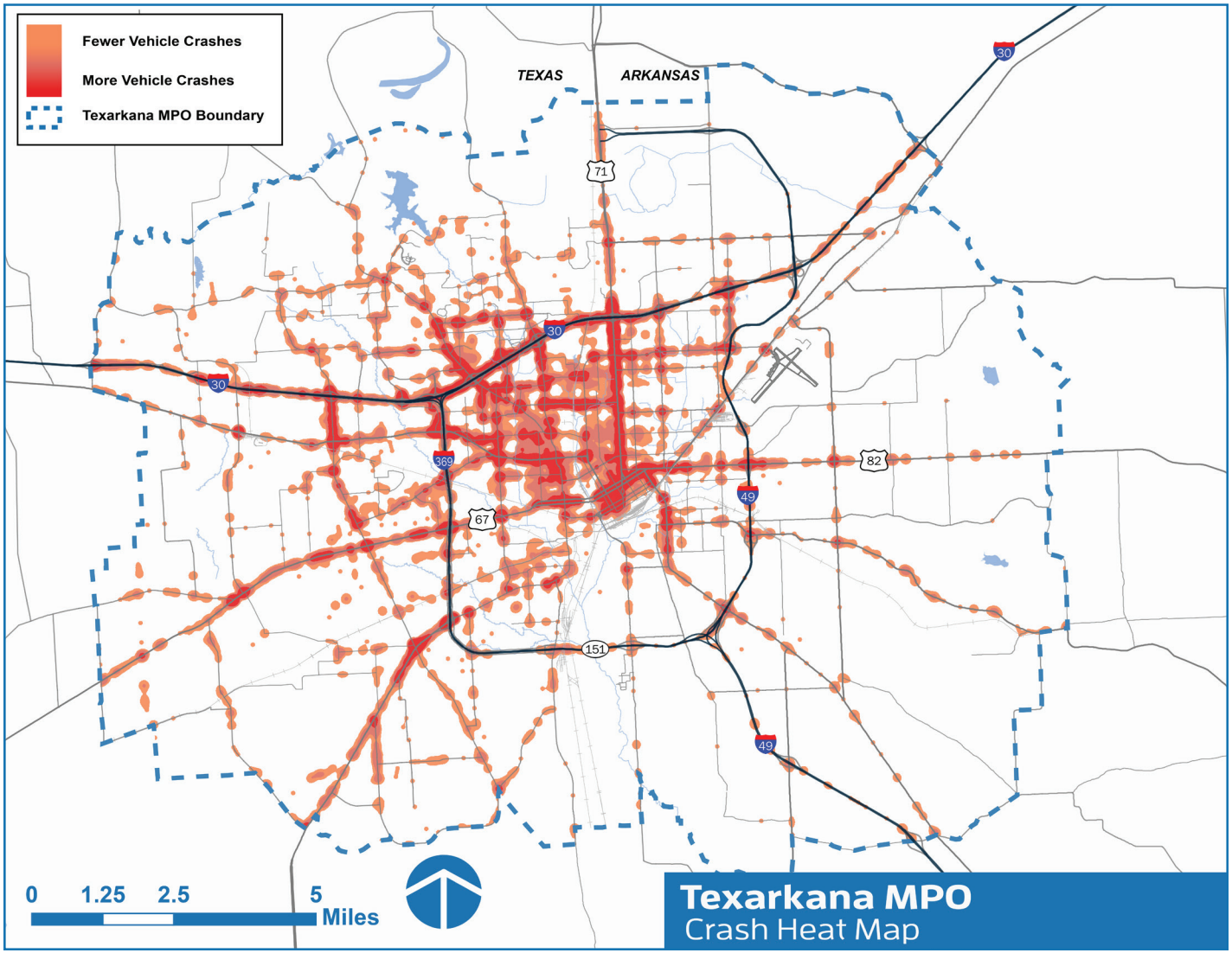
Arkansas

Arkansas experienced significantly fewer bike/pedestrian incidents over the period of analysis. Out of 20 total non-motorized crashes, 18 involved pedestrians and 2 involved bicyclists. Regarding the severity of the accidents, the Arkansas State Police's accident severity scale was utilized, which quantifies accidents using a numeric scale (1 to 5). Accidents labeled a one show crashes which resulted in a fatality and those rated a two represent those which experienced an incapacitating injury. Accordingly, only one crash resulted in a fatality. Two resulted in incapacitating injuries.

Texas

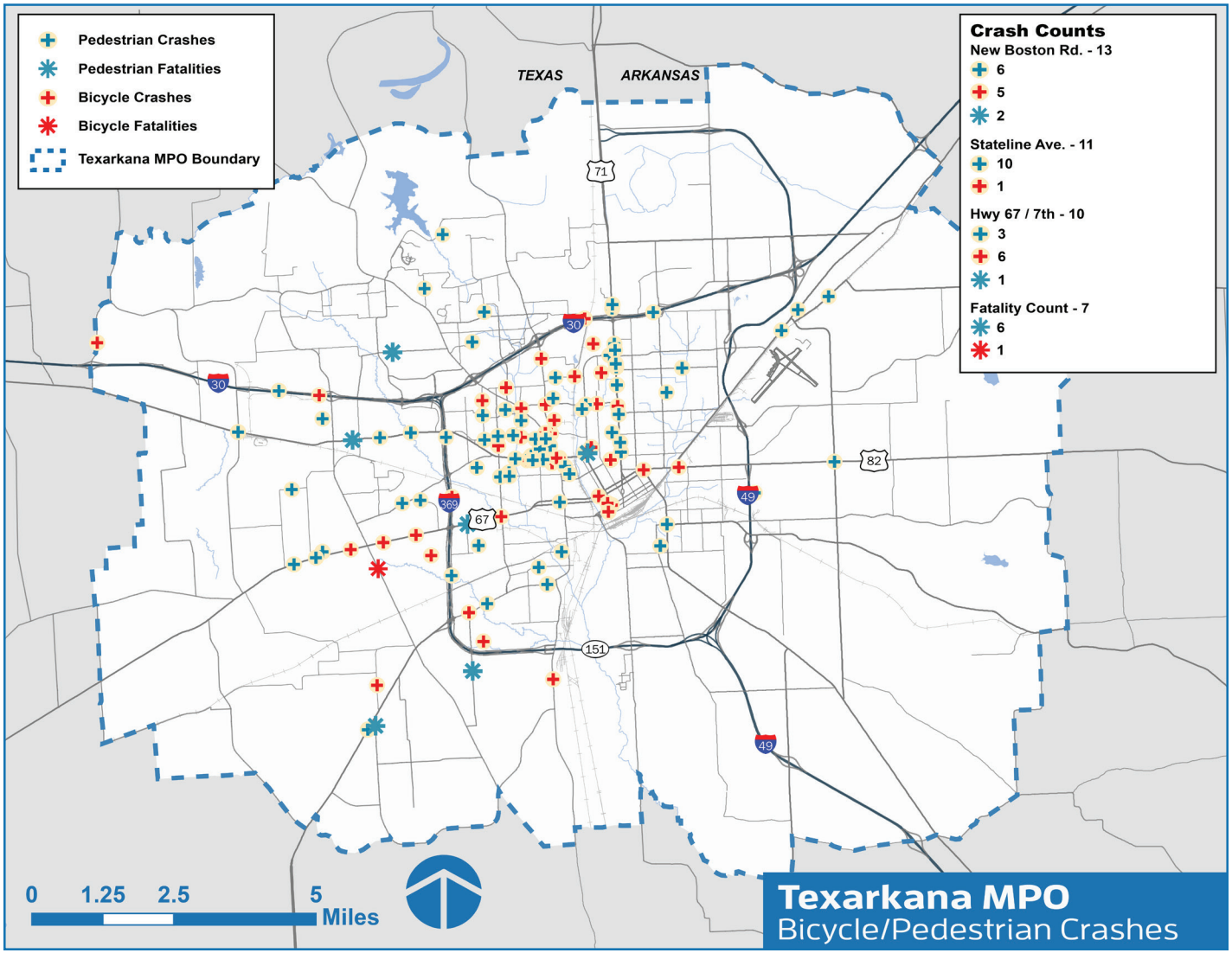
The Texas portion of the MPO region experienced the majority of the bike/pedestrian accidents from 2010 to 2017, with 111 total accidents. Bicycle (44) and pedestrian (67) accidents were more evenly geographically distributed throughout the Texas portion of the study area, however pedestrian accidents were still more common. TxDOT CRIS data determined that of the 111 crashes, 90 resulted in a noteworthy injury and 5 resulted in injuries to two or more citizens involved in the crash. A total of 7 fatalities occurred within the analyzed time frame.

Figure 2.5: Vehicular Crash Heat Map



2 Assessment of Current Conditions and Needs

Figure 2.6: Bicycle and Pedestrian Crashes



Bicycle and Pedestrian Connectivity

Bicycle and pedestrian infrastructure are the backbone of a region's active transportation system. Both modes can have infrastructure unique to specific users or infrastructure that allows both modes to share a common facility. The latter is typically used in regions as it is more space and cost efficient as less facilities equates to lower maintenance and repair costs over the long term. The following will review current bike and pedestrian infrastructure and its connectivity throughout the Texarkana region, and detail the methods used to locate specific bicycle and pedestrian facilities.

Pedestrian Infrastructure/Sidewalks

Texarkana's current sidewalk inventory (2017 Sidewalk Inventory and Analysis) consists of roughly 121 linear miles of sidewalk infrastructure. Amongst this inventory, 87 miles (72%) of the sidewalk is rated as being in "good" condition. This refers to sidewalk infrastructure that is accessible to anyone who could, hypothetically, use an ADA accessible sidewalk. While 28 miles (23%) of the network is rated "fair", this also includes sidewalk segments categorized as "damaged", suggesting they do not provide universal accessibility. This includes failing to meet ADA standards and containing obstacles for some walkers/cyclists. Roughly 7-miles (5%) of the network is labeled as being in "poor" condition. These sidewalks pose obstacles/safety hazards to nearly all types of users.

Table 2.1 displays Texarkana's current sidewalk inventory by sidewalk condition. A majority of the current sidewalk infrastructure is located in the urban area of the region. Downtown Texarkana contains the most dense, gridded sidewalk facilities throughout the region. Sidewalks begin to dissipate closer to the perimeter of the urbanized area. While clusters of sidewalk structures do exist in recently developed fringe areas, there is a lack of contiguous and constructive connectivity outside of the downtown area. Rural Texarkana currently contains minimal sidewalk coverage.

Table 2.1: Sidewalk Inventory by Condition

	GOOD	FAIR	POOR	TOTAL
Miles	87	28	7	121
Percent	72%	23%	5%	100%

Bicycle Infrastructure

Texarkana bicycle infrastructure can be separated into three categories; roadway shoulders, high quality roadway shoulders and recreational trails. Regarding the former, analysis was conducted to find road segments in the MPO region containing ideal shoulder widths for cyclist to use. Ideal, or high-quality, in this case refers to roadways containing shoulders with measures greater than or equal to 4-feet in width. This differs from "regular/typical" bicycle shoulders which count any shoulder with a width greater than or equal to 3-feet. Shoulder width data was provided by both TxDOT and ArDOT and was used to create a high-quality shoulder width network. Figure 2.2 displays the current ideal shoulder segments found in the region, measuring roughly 50-miles

in total length with an average segment length of .5-miles. Nearly all the high-quality shoulders in the region are found outside of the immediate downtown area, on rural highways (67, 82, 59, 71, etc.), and farm to market roads (296, 93).

Texarkana currently has five main recreational trails that provide bicyclists safe/separated areas to ride (Figure 2.2).

- Bringle Lake Trail: Located northwest of the city adjacent to the Texas A&M University Texarkana Campus, the trail provides pathways around the lake.
- Bobby Ferguson Park: Found west of the fairgrounds with a loop trail for riders. Park amenities can be found throughout the trail.
- Hobo Jungle Park Trail: Located south of the downtown rail yard, the park contains a paved trail that weaves around baseball facilities and connects Division Street to Roberts St. The trail also provides connectivity to Nix Creek Trail.
- Nix Creek Trail: Extends from Hobo Jungle Park to Arkansas Boulevard, south to north on the Arkansas/ eastern side of the city. Nix Creek Trail is paved and provides riders the most connectivity options out of all trail systems.
- Trice Trail: is located just northeast of the northern Nix Creek Trail Head, and provides riders a paved pathway connecting E 48th Street to Pinson Drive.

School Connectivity

Bicycle and pedestrian infrastructure are critical for equitable and healthy regional transportation systems. Those that provide citizens with contiguous facilities provide the option to bicycle or walk to everyday destinations such as places of employment, recreational complexes, and school. Per results of the public engagement activities, connectivity to schools stands above most options as a critical element to a vibrant and accessible active transportation network. School populations in a region include those 18 years or younger who typically walk, bike, or utilize transit to reach their final school destination.

Accordingly, the project team conducted analysis on Texarkana schools and their sidewalk/transit connectivity to further highlight gaps in the transportation system.

Methods

Public school facilities ranging from elementary to high school level within the Texarkana sidewalk network were selected for analysis. Elementary and middle schools (23 total) were grouped together, with high schools (8 total) forming the second group for buffer analysis. Elementary/middle schools were given a 0.5-mile buffer, while high schools were given a 1-mile buffer. Each buffer was then intersected with the region's sidewalk and transit networks. Intersected sidewalk lengths were then analyzed for each school's buffered area. Further, intersected sidewalk lengths were separated into three categories based on condition (good, fair, poor) to show what condition each school's sidewalk network near each school.

A primary connectivity measure was created based off the sidewalk to roadway ratio found within a given school's buffer. The ratio quantifies the amount of existing sidewalk coverage in comparison to roadway mileage within a buffer. Schools with higher ratios have more frequent and better-connected sidewalks within walking distance. Where a school's buffer contained transit stops within walking distance it was deemed connected to transit. These intersections with the transit network were used as ancillary measures of connectivity. Buffers were given a binary transit availability rating (1 or 0). Finally, a qualitative barrier analysis took place to identify any natural/man-made obstructions towards school connectivity. Most buffers consisted of large roadway facilities and major intersections. However, barriers also included natural features and large land uses.

Results

Elementary/Middle Schools

Sidewalk connectivity among elementary and middle schools in Texarkana appears to be low across the board (Table 2.2). Total sidewalk coverage within buffers ranged from 0 to 16.4-miles. Only one school buffer contained greater than 10-miles in sidewalk coverage, the next closest school buffer contained roughly 5.1-miles. The amount of good sidewalk per buffer saw a direct relationship with a zone's total sidewalk amount; those with higher sidewalk coverage had larger amounts of "good" sidewalk conditions. Fairview Middle School displays the highest sidewalk ratio (75%), followed by Highland Park Elementary (54%) and Theron Jones Early Literacy Center (34%). After Waggoner Creek Elementary (25%), sidewalk ratios drastically decrease, reaching measures as low as 1% (Trice Elementary School). Regarding transit accessibility, 14 out of 23 schools analyzed were considered transit accessible. View Table 2.2 for detailed information on all elementary/middle school connectivity factors.

High School Results

Total sidewalk mileage and sidewalk ratios appear comprehensively higher than elementary and middle schools (however, high school buffers are twice the size as those used for elementary and middle schools) (Table 2.2). In fact, five out of the eight schools contain ratios greater than 30%. Texarkana Area Career & Technology Center contained the highest sidewalk mileage total (39.2-miles) and highest sidewalk ratio (57%), followed by Arkansas High School (28.1-miles, 46%, respectively). Pleasant Grove High School contains the lowest sidewalk length (1.13-miles) and sidewalk ratio (5%) apart from Liberty Eylau High and Liberty Eylau School of Success, which do not have any sidewalks within walking distance. Refer to Figures 2.7, 2.8 , and 2.9 for a spatial analysis of the region's school connectivity.

2 Assessment of Current Conditions and Needs

Table 2.2: Public School Sidewalk Connectivity

SCHOOL NAME	TOTAL SIDEWALK MILES	POOR SIDEWALK MILES	GOOD SIDEWALK MILES	ROADWAY MILES WITHIN BUFFER	SIDEWALK TO ROAD RATIO	ACCESS TO TRANSIT
Fairview Elementary	16.47	2.99	6.42	21.91	75%	Y
Highland Park Elementary	11.94	1.13	6.39	22.20	54%	Y
Theron Jones Early Literacy Center	5.07	0.36	3.88	14.94	34%	Y
Texas Middle School	3.25	0.00	3.17	10.45	31%	Y
Spring Lake Elementary	3.60	0.00	3.26	13.29	27%	Y
Waggoner Creek Elementary	1.31	0.00	1.31	5.15	25%	N
College Hill Middle	2.85	0.00	2.46	14.56	20%	Y
Westlawn Elementary	1.50	0.00	1.31	9.76	15%	Y
Union Elementary	1.59	0.00	1.53	11.85	13%	Y
College Hill Elementary	1.49	0.00	0.66	13.62	11%	Y
Pleasant Grove Elementary	0.88	0.00	0.88	8.74	10%	N
North Heights Junior High	0.92	0.00	0.62	9.77	9%	N
Kilpatrick Elementary	1.42	0.00	1.13	17.44	8%	Y
Pleasant Grove Middle	0.65	0.00	0.65	10.47	6%	Y
Nash Elementary	0.41	0.00	0.41	7.93	5%	Y
Morriss Mathematics & Engineering Elementary	0.23	0.00	0.23	5.48	4%	N

SCHOOL NAME	TOTAL SIDEWALK MILES	POOR SIDEWALK MILES	GOOD SIDEWALK MILES	ROADWAY MILES WITHIN BUFFER	SIDEWALK TO ROAD RATIO	ACCESS TO TRANSIT
Wake Village Elementary	0.42	0.00	0.42	11.66	4%	Y
Trice Elementary	0.09	0.00	0.09	8.91	1%	Y
Liberty Eylau C.K. Bender Elementary	0.00	0.00	0.00	3.85	0%	N
Liberty Eylau Pre-Kindergarten	0.00	0.00	0.00	0.30	0%	Y
Liberty Eylau Primary School	0.00	0.00	0.00	4.78	0%	N
Red Lick Elementary	0.00	0.00	0.00	4.86	0%	N
Red Lick Middle	0.00	0.00	0.00	4.93	0%	N
Arkansas High	28.12	4.50	13.96	60.49	46%	Y
Washington Academy Charter School	20.20	1.74	12.53	55.62	36%	Y
OPTIONS Academic Alternative High School	14.49	0.00	13.62	43.51	33%	Y
Texas High	17.48	0.25	14.95	58.16	30%	Y
Pleasant Grove High	1.14	0.00	1.14	23.88	5%	N
Liberty Eylau High	0.00	0.00	0.00	19.34	0%	N
Liberty Eylau School of Success	0.00	0.00	0.00	18.60	0%	N
Texarkana Area Career & Technologies Center	39.30	4.66	22.34	68.80	57%	Y

2 Assessment of Current Conditions and Needs

Figure 2.7: Texarkana MPO Region School Locations

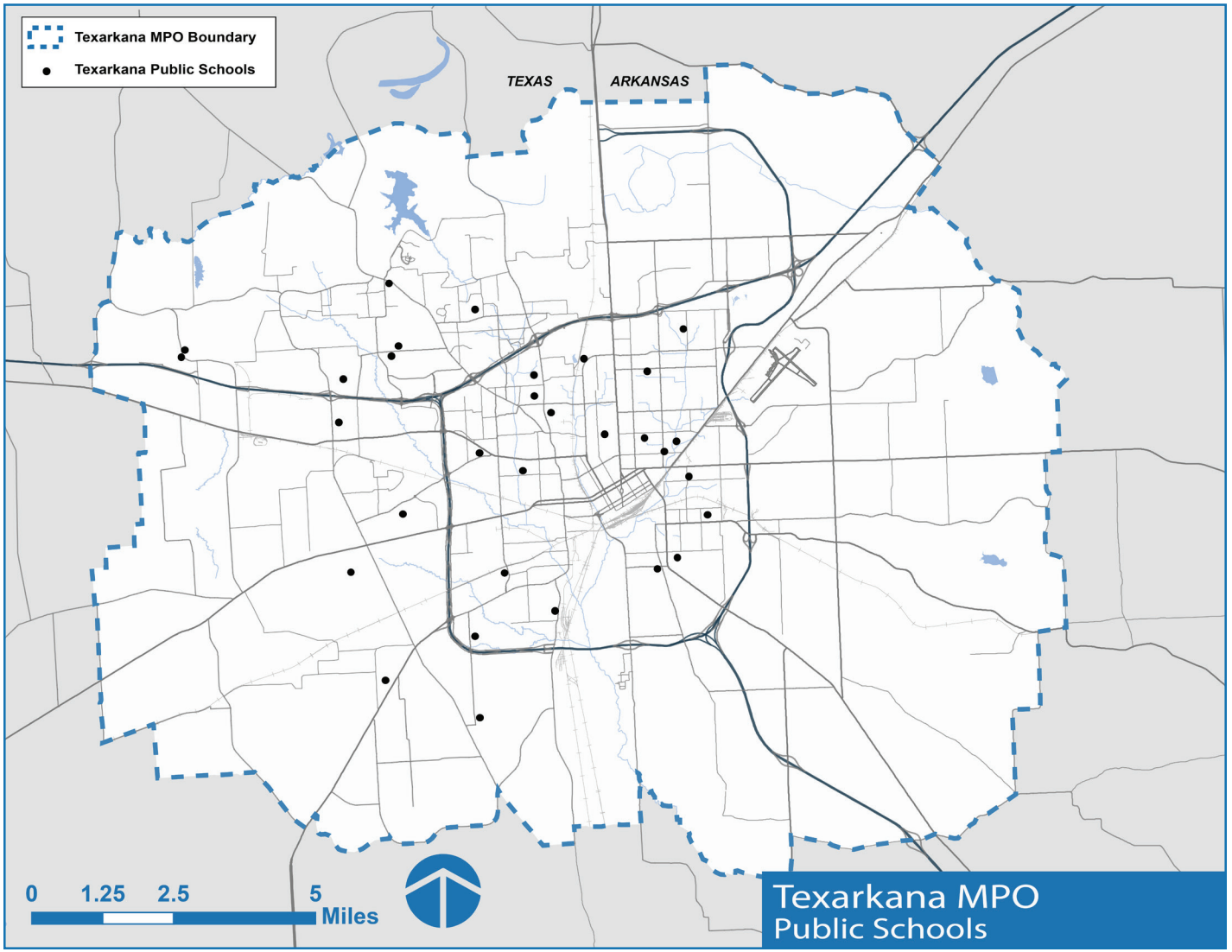
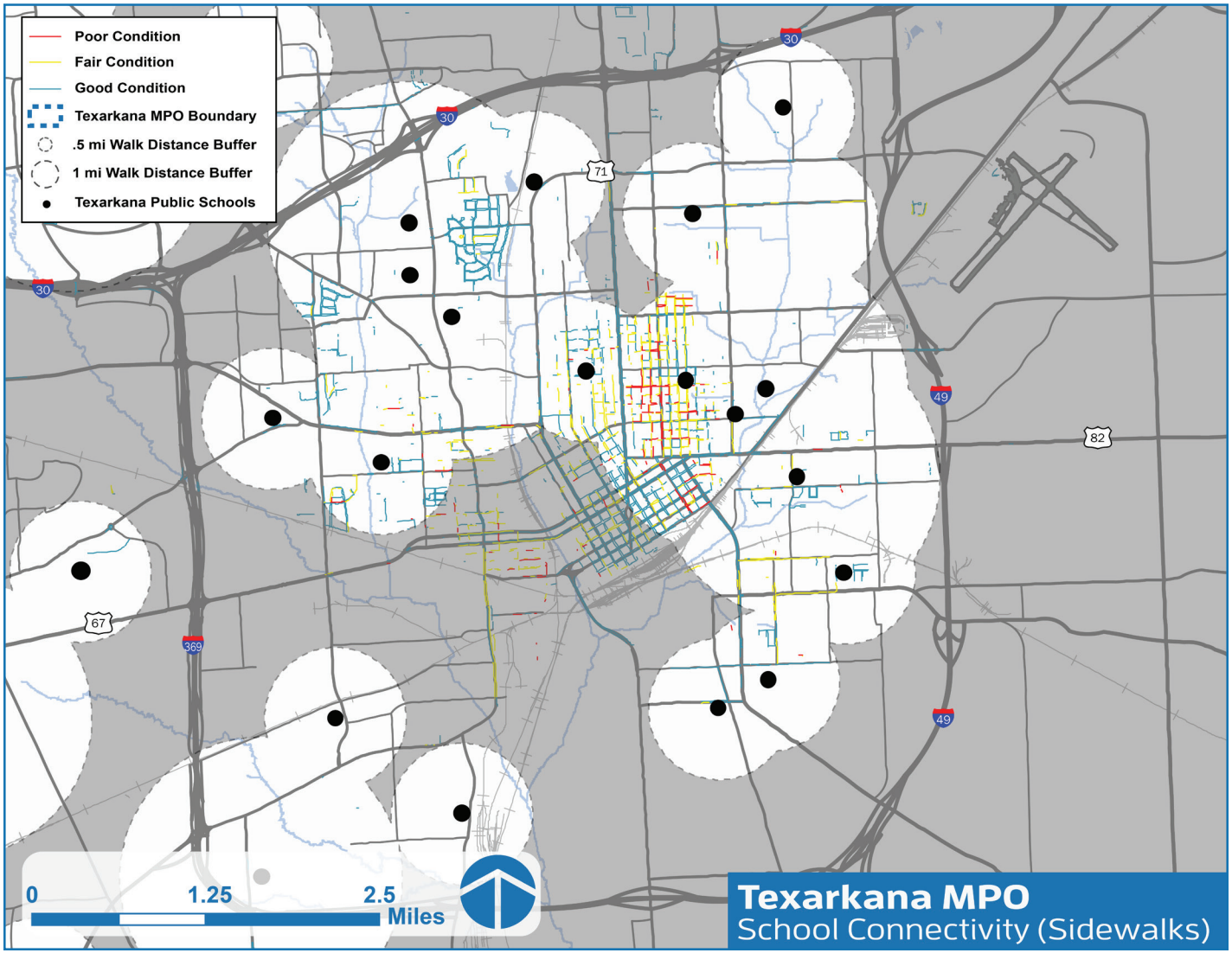
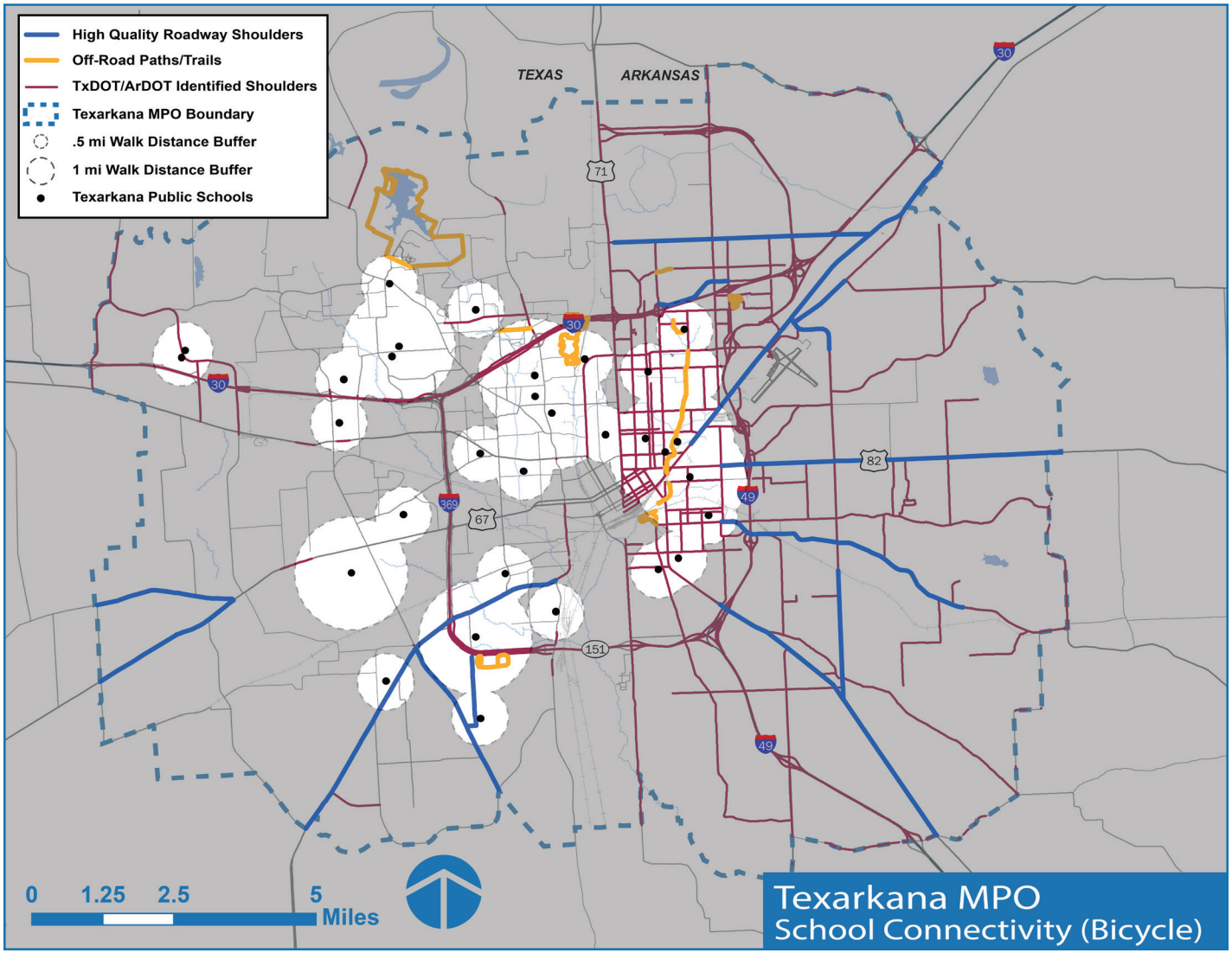


Figure 2.8: School Sidewalk Connectivity



2 Assessment of Current Conditions and Needs

Figure 2.9: School Bicycle Connectivity



Transit Connectivity

Transit and active transportation share an interdependent relationship and it is essential for this plan to develop a shared understanding of the Texarkana Urban Transit District (TUTD) and its interaction with existing bicycle and pedestrian facilities. All transit trips begin with a passenger biking or walking to the stop or station, which makes it vital to coordinate planning efforts for the modes.

The fixed-route bus system, the T-Line, provides transit service through eight routes that run throughout the Texarkana area in both Texas and Arkansas. The system functions as a hub-and-spoke network centered at the T-Line Transfer Station located in downtown Texarkana at 1402 Texas Blvd. Service is offered Monday through Friday from 5:30 a.m. – 6:20 p.m. All routes connect at the Transfer Station and have 13 round trips per day. Half of the routes are on a 60-minute cycle time and the other half run on approximately 30-minute cycle times and are paired or interlined with each other. The routes operate in a combination of circulating loop routes and direct bi-directional routes providing good coverage throughout the service area. A good transit system paired with a comprehensive active transportation network can improve accessibility and mobility throughout a region. Figure 2.10 illustrates existing transit routes and stop locations throughout the MPO Study Area.

Transit Route Profiles

Route 1 – Stateline Avenue

Route 1 provides services on weekdays from 5:30 a.m. to 6:20 p.m. beginning at the downtown Transfer Station and leaving every hour at a half past the hour. Route 1 provides service to the UAMS AHEC Clinic and the Wadley Senior Clinic at its northernmost extent. The route operates as a bi-directional route along State Line Avenue between downtown and North Texarkana. Once it arrives at the North end of town it functions in a loop pattern in the clockwise direction on the Eastside of Stateline Avenue and in the counter-clockwise direction on the Westside of Stateline Avenue where it serves the Arkansas-Texas Council of Governments. There is a route deviation on the Eastside of Stateline Avenue to provide front door service to the Walmart on Arkansas Blvd. With 72 percent as the bicycle to roadway ratio, Route 1 has the highest ratio using a .25-mile buffer.

Major Destinations:

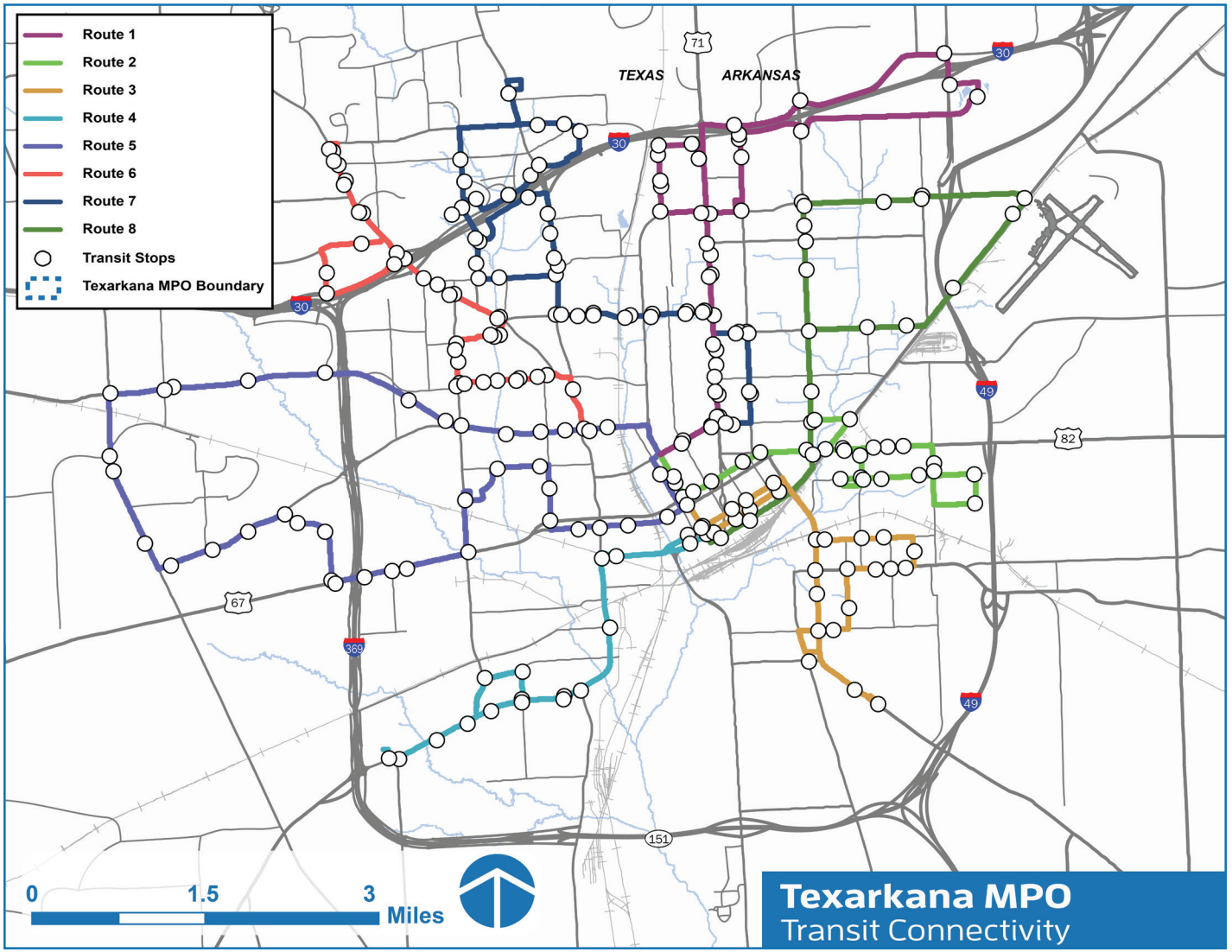
- Downtown
- Stateline and Woodlawn Cemeteries
- UAMS AHEC Clinic
- Wadley Senior Clinic
- Arkansas-Texas Council of Governments
- Walmart

Route 2 – East 9th Street

Route 2 provides services on weekdays from 5:30 a.m. to 6:20 p.m. Route 2 is interlined with route 8 – Jefferson Avenue/ Arkansas Blvd and begins at Jefferson Park leaving every hour at 48 minutes past the hour. Route 2 provides service to the residential and apartment clusters at its easternmost extent. The route operates in a circuitous loop pattern in conjunction

2 Assessment of Current Conditions and Needs

Figure 2.10: T-Line Transit Routes and Stop Locations



with route 8. It circulates through East Texarkana where it serves residential areas, Ingram Park and Pool and some light retail. It operates one-way along 9th Street, which turns into Dr. Martin Luther King Jr Blvd, and then it travels along Texas Blvd into downtown where it arrives at the Transfer Station every hour at a quarter past the hour. With 60-62 percent as the sidewalk to roadway ratio, route 2 has the highest ratio using both a .25- and .5-mile buffer.

Major Destinations:

- Jefferson Park
- Ingram Park
- Ingram Pool
- Texarkana Water Utilities
- Wadley Regional Medical Center
- Downtown

Route 3 – Hwy 71 South

Route 3 provides services on weekdays from 5:30 a.m. to 6:20 p.m. beginning at the downtown Transfer Station and leaving every hour at a half past the hour. Route 3 provides service to the Village Park South Apartments and the Miller County Correctional Facility at its southernmost extent and it is interlined with route 4 – South Lake Drive. Essentially route 3 operates as a bi-directional route in conjunction with route 4 in and out of downtown along Texas Blvd. From Texas Blvd to East Street route 3 operates as a bi-directional route on the 3rd and 4th Street couplet and on East Street between 3rd and Dudley Streets. From Dudley Street, it functions in a circuitous loop pattern in the counter-clockwise direction serving neighborhoods, shopping centers and medical facilities. Route 3 has the most sidewalk facilities categorized as 'Good' within a .25-mile buffer.

Major Destinations:

- Downtown
- Salvation Army
- Super Value Foods
- Miller County Dialysis
- Village Park South
- Miller County Correctional Facility
- Housing Authority
- Public Library

Route 4 – South Lake Drive

Route 4 provides services on weekdays from 5:30 a.m. to 6:20 p.m. Route 4 is interlined with route 3 – Hwy 71 South and begins at the Public Library where route 3 ends leaving every hour at 48 minutes past the hour. Route 4 operates as a bi-directional route from Texas Blvd to its westernmost extent where it provides service to the Lakeridge and Winfield Estates Apartments. There is a route deviation along Allen Lane, Norris Cooley Drive and South Robison Road where it serves Sunset Apartments and residential areas North of South Lake Drive. This area is only served in the outbound direction. On its inbound alignment into downtown it travels along Texas Blvd where it arrives at the Transfer Station every hour at a quarter past the hour. Route 4 has average performance as it relates to bicycle and pedestrian facilities.

Major Destinations:

- Public Library
- Sunset Apartments
- Winfield Estates Apartments

- Lakeridge Apartments
- Wadley Regional Medical Center
- Downtown

Route 5 – Nash/Wake Village

Route 5 provides services on weekdays from 5:30 a.m. to 6:20 p.m. beginning at the downtown Transfer Station and leaving every hour at a half past the hour. Route 5 provides service along North King Hwy at its westernmost extent. Serving neighborhoods, schools and shopping centers throughout West Texarkana route 5 operates in a loop pattern in the counter-clockwise direction. Route 5 has average performance as it relates to bicycle and pedestrian facilities.

Major Destinations:

- Oaklawn Village
- Westlawn Elementary School
- Lowe's
- Walmart
- Pine Ridge Estates
- Wake Village Elementary School
- Healthcare Express
- Southwest Center Park
- Theron Jones Early Literacy Center
- Bowie County Health Center
- Downtown

Route 6 – Richmond Road

Route 6 provides services on weekdays from 5:30 a.m. to 6:20 p.m. beginning at the downtown Transfer Station and leaving every hour at a half past the hour. Route 6 provides service to the Cornerstone Retirement Community at its northernmost extent. Serving neighborhoods, Texarkana College and shopping centers throughout Northwest Texarkana route 6 operates as a bi-directional route with two route deviations along the route. The first route deviation operates in a loop pattern in the counter-clockwise direction serving residential and retail services along Lincoln Avenue, College Drive and Summerhill Road. The second route deviation operates in a loop pattern in the clockwise direction serving big box retail stores such as Home Depot, Kohl's and Target at the Texarkana Shopping Center. Route 6 had the lowest sidewalk and bicycle to roadway ratios for both .25- and .5-mile buffers. It also had the least amount of sidewalk under all three criteria within both .25- and .5-mile buffers.

Major Destinations:

- Texarkana Community College
- Central Mall
- Walmart
- Health Care Express
- Texarkana Shopping Center
- Windsor Apartments
- Cornerstone Retirement Community
- Downtown

Route 7 – County Avenue/Moores Lane

Route 7 provides services on weekdays from 5:30 a.m. to 6:20 p.m. beginning at the downtown Transfer Station and leaving every hour at a half past the hour. Route 7 provides service to the Social Security Office at its northernmost extent. Serving neighborhoods, schools, medical centers and shopping centers throughout Central and North Texarkana route 7 operates as a bi-directional route from downtown to Summerhill Road and Kennedy Lane. From there it operates in loop pattern in

the clockwise direction serving Texas High School and the Central Mall until it crosses Interstate 30 where it also operates in a clockwise direction serving Christus St. Michael Health Care Center and residential and retail services. Route 7 has the most sidewalk facilities categorized as 'Good' within a .5-mile buffer and the most categorized as 'Fair' and 'Poor' for both .25- and .5-mile buffers.

Major Destinations:

- YMCA
- Texas High School
- Central Mall
- Convention Center
- Cowhorn Creek Retirement Home
- Social Security Office
- Texarkana Surgery Center
- Christus St. Michael Health Care Center
- Downtown

Route 8 – Jefferson Avenue/Arkansas Blvd

Route 8 provides services on weekdays from 5:30 a.m. to 6:20 p.m. Route 8 is interlined with Route 2 – East 9th Street and begins at the downtown Transfer Station and departs every half past the hour. Route 8 provides service to the Texarkana Regional Airport at its northeastern most extent. The route operates as a bi-directional route in conjunction with route 2 from downtown to Jefferson Avenue and East 24th Street. From there it functions in a loop pattern in the clockwise direction serving residential areas, the airport and Ed Warrell Park. Once it reaches its end of line at Jefferson Park it turns into route 2. With 74 percent as the bicycle to roadway ratio, route 8 has the highest ratio using a .5-mile buffer.

Major Destinations:

- Downtown
- Wadley Regional Medical Center
- Arkansas City Hall
- Texarkana Regional Airport
- Ed Warrell Park
- Arkansas High School
- Jefferson Park

2 Assessment of Current Conditions and Needs

Transit Connectivity Methodology

As part of the transit analysis for this study the transit routes were given a quarter- and half-mile buffer to index all of the existing bicycle and pedestrian facilities adjacent to the transit routes. Typically, a .25-mile buffer is considered walking distance to transit, however, a .5-mile buffer provides additional insight about transit access in areas where transit dependent populations are more likely to travel longer distances to access transit services. The inventory of existing sidewalks was categorized by condition. It should be noted that all local streets were considered as bike facilities for this analysis due to their low stress/ high comfort environment for bicyclists. The sidewalk ratio can be explained as (total linear miles of sidewalk) divided by (total linear miles of roadway) within a designated buffer of the transit route. The bicycle ratio is similar and can be defined as (total linear miles of bicycle facilities) divided by (total linear miles of roadway) within a designated buffer of the transit route.

It is important to evaluate the bicycle and pedestrian facilities within both a quarter- and half-mile buffer. The distance a pedestrian or cyclist is willing to walk or bike varies based on multiple factors such as age, health, transit dependency, income, personal preference, etc. For this analysis, the project team focused on facilities located within one-quarter mile of a transit stop, however, an analysis was also completed for facilities within one-half mile of a transit stop. This is important to analyze as locations with a significant amount of transit dependent population tend to walk or bike farther distances to access transit.

Results

Quarter-mile transit stop buffers were used for the final transit connectivity spatial analysis. Accordingly, a majority of the Texarkana MPO Region's existing sidewalks fall within the quarter-mile buffer used for analysis, however, this only illustrates a 30% sidewalk to roadway ratio. Meaning that only 30% of the roadway segments within .25-mile of a transit stop have sidewalks. This information is shown in Table 2.3 and Figure 2.11.

All transit routes in the region contain a bicycle ratio of 60% or higher. The bicycle connectivity map (Figure 2.12) displays the shoulders and off-road trails found within the quarter-mile buffer. As the fixed route system does not extend completely through the rural areas of the region, several segments of bicycle infrastructure do not overlap with transit service.

The following figures provide an in depth look at each route regarding bicycle and pedestrian coverage.

Table 2.3: Transit Buffer Analysis

ROUTE	BUFFER DISTANCE	GOOD SIDEWALK MILES	FAIR SIDEWALK MILES	POOR SIDEWALK MILES	TOTAL SIDEWALK MILES WITHIN BUFFER	SIDEWALK TO ROADWAY RATIO	LENGTH OF BIKE FACILITIES	BIKE FACILITY TO ROADWAY RATIO
Route 1: Stateline	0.25 miles	10.84	5.44	1.67	17.95	35%	36.41	72%
	0.50 miles	23.45	12.96	3.81	40.22	38%	77.62	73%
Route 2 East 9th Street	0.25 miles	18.15	5.42	1.56	25.13	62%	28.84	71%
	0.50 miles	31.24	10.95	3.59	45.78	60%	53.25	70%
Route 3: Hwy 71 South	0.25 miles	21.59	5.73	1.16	28.48	55%	34.51	66%
	0.50 miles	31.24	10.07	2.22	43.53	50%	59.76	69%
Route 4: South Lake Drive	0.25 miles	10.91	4.47	0.41	15.78	47%	22.73	68%
	0.50 miles	21.32	8.67	0.96	30.95	45%	45.71	66%
Route 5: Nash/Wake Village	0.25 miles	12.70	5.88	1.10	19.68	25%	52.54	68%
	0.50 miles	23.85	8.99	1.50	34.34	24%	96.48	68%
Route 6: Richmond Road	0.25 miles	5.84	1.36	0.09	7.29	18%	24.56	60%
	0.50 miles	9.51	2.16	0.31	11.98	16%	46.30	61%
Route 7: County Avenue/ Moores Lane	0.25 miles	15.65	9.03	3.23	27.90	47%	38.80	65%
	0.50 miles	36.27	14.53	4.06	54.87	43%	90.69	72%
Route 8: Jefferson Avenue/ Arkansas Blvd	0.25 miles	15.71	3.87	0.54	20.13	42%	33.78	70%
	0.50 miles	32.30	12.31	2.69	47.31	44%	79.09	74%
Systemwide	**0.25 miles**	**63.29**	**24.49**	**5.93**	**93.71**	**30%**	**212.57**	**67%**
	0.50 miles	**76.06**	**27.47**	**6.52**	**110.05**	**24%**	**325.08**	**70%**

2 Assessment of Current Conditions and Needs

Figure 2.11: Sidewalks within One-Quarter Mile Buffer of Transit Stops

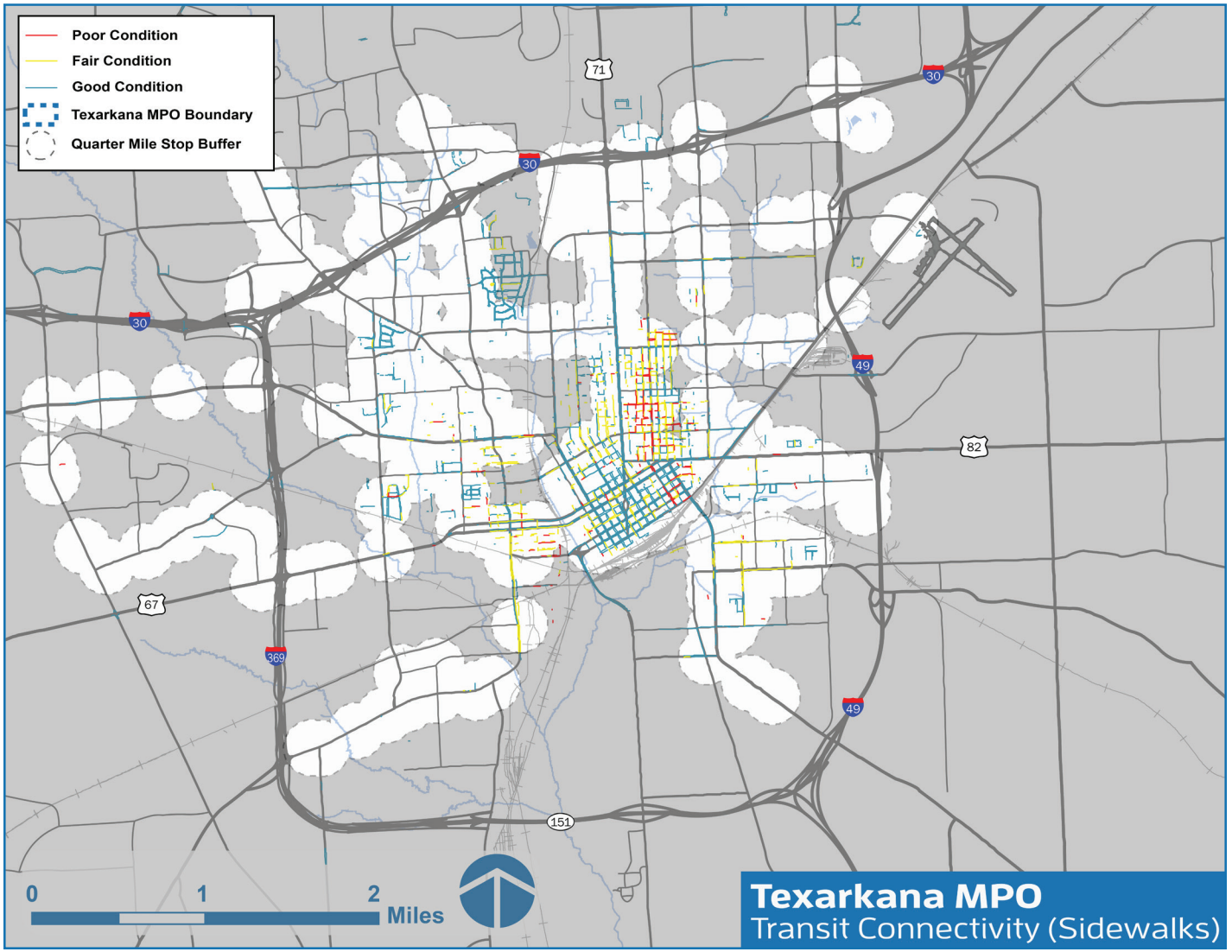
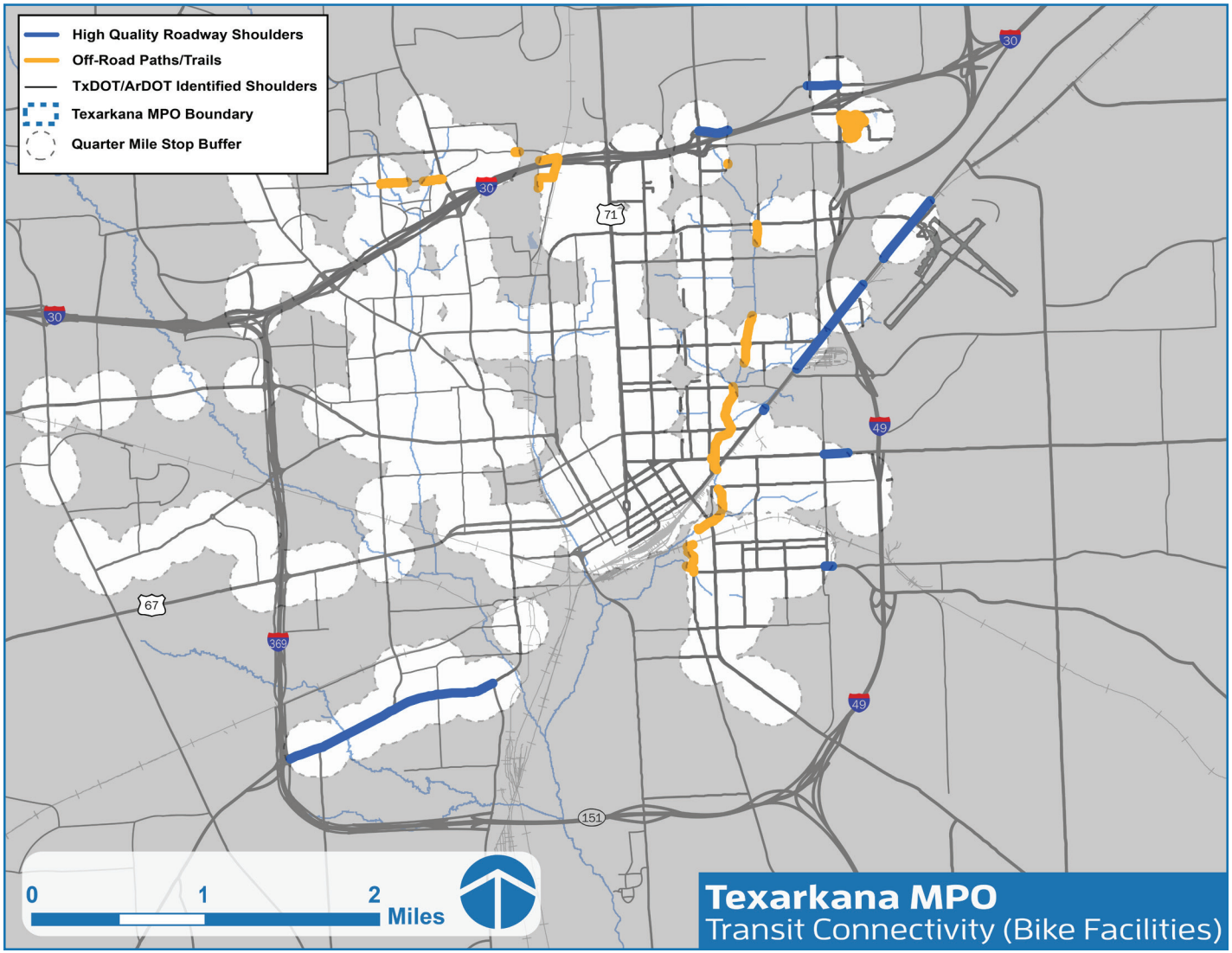


Figure 2.12: Bicycle Facilities within One-Quarter Mile Buffer of Transit Stops



2 Assessment of Current Conditions and Needs

Pedestrian and Bicycle Generator Connectivity

Community destinations are key attractors for walking and biking trips. To adequately plan for walking and biking, it is important to assess where destinations that might generate walking and biking trips are located and whether the destinations are adequately supported by pedestrian and bike infrastructure. Connecting attractive destinations to the bicycle and pedestrian network with infrastructure such as sidewalks and bike lanes ensures that individuals may comfortably, safely, and efficiently reach these destinations by walking or biking. Providing bicycle and pedestrian connectivity may likely encourage more walking and biking trips to such destinations. For these purposes, we have determined key community destinations that will likely serve as walking and biking trip generators and analyzed the extent of their pedestrian and bicycle connectivity. These findings serve as suggestions for where additional infrastructure is needed to best complete the bicycle and pedestrian network.

Methodology

Our analysis of walking and biking generators incorporated data gathered from previous regional generator analyses that was checked and revised for accuracy. The generators were then assigned into the following categories: Arts & Humanities, Community Centers, Community Parks, Medical, Public Facilities, Retail, Schools, Service, and Transportation. Each generator point was analyzed spatially regarding proximity to both pedestrian facilities (sidewalk inventory) and bicycle facilities (wide shoulders, existing trails) and then qualitatively assessed for overall connectivity.

Connectivity

The generator connectivity analysis found some bicycle and pedestrian facilities located near key generators while many generators found little to no facilities. Detailed in the following section are the connectivity findings for each generator category. Figures 2.13 and 2.14 illustrate key generators in relation to bicycle and pedestrian facilities.

Arts & Humanities

Four generators were designated as Arts & Humanities and evaluated for bicycle and pedestrian connectivity. These include museums, theaters, and a performing arts center. All generators in this category were located downtown and found to have high pedestrian connectivity. While some were close to existing trails to the southeast, bicycle connectivity was found to have low connectivity around these generators.

Community Centers

Five generators were designated as Community Centers and evaluated for bicycle and pedestrian connectivity. These include convention/recreation centers and neighborhood centers. Pedestrian connectivity was found to be low except of one neighborhood center (Glendale Park Center) that has existing continuous sidewalks present. Bicycle connectivity was found to be low given that the centers are not connected to roadways with adequate should or existing trails.

Community Park

Twenty-two generators were designated as Community Park and evaluated for bicycle and pedestrian connectivity. These were found to have adequate pedestrian connectivity given that several parks are located within neighborhoods with continuous sidewalks. Bicycle connectivity was also found to be adequate as several parks are located near existing trails and serve as trail connectors.

Medical

Seven generators were designated as Medical and evaluated for bicycle and pedestrian connectivity. These include hospitals, clinics, and rehab centers. Given that more than half of the medical generators are located in the urban core where sidewalks are present, pedestrian connectivity was found to be adequate. However, given the lack of bicycle facilities present these generators were found to have low connectivity.

Public Facilities

Six generators were designated as Public Facilities and evaluated for bicycle and pedestrian connectivity. These include post offices, social security, sheriff's office, and libraries. These were found to be within areas with sidewalks therefore deemed as having adequate connectivity. Only one facility is located near an existing bike trail and wide shoulder, thus bike connectivity was found to be low around these facilities.

Retail

Seventeen generators were designated as Retail and evaluated for bicycle and pedestrian connectivity. These include malls, retail centers, and big box stores. Given the majority of these retail generators are located near interstate crossings and lack adequate pedestrian facilities, they were found to have low pedestrian connectivity. Similarly, due to the lack of bicycle facilities and the proximity to interstate crossings, these generators were found to have low bicycle connectivity.

Schools

Thirty-three generators were designated as Schools and evaluated for bicycle and pedestrian connectivity. Schools that are located within the urban core were found to have high pedestrian connectivity while those located within the rural areas were found to have low pedestrian connectivity. Conversely, given the presence of wide shoulders, schools located in rural areas were found to have adequate bicycle connectivity while schools within the urban core were found to have low bicycle connectivity.

Service

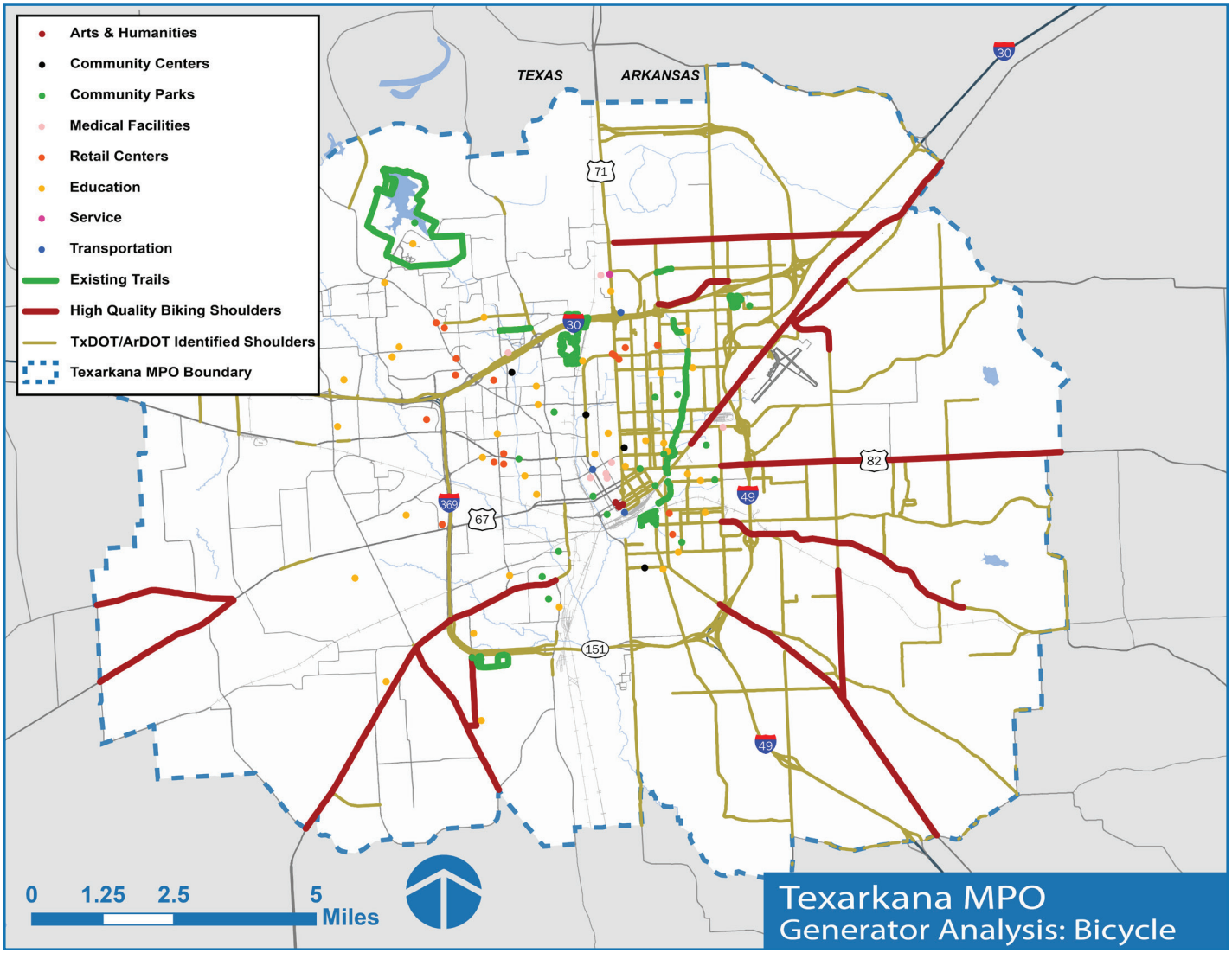
One generator was designated as Service and evaluated for bicycle and pedestrian connectivity. This generator was found as both low in pedestrian and bicycle connectivity. However, some wide shoulders exist but limited to the rural northeastern areas.

2 Assessment of Current Conditions and Needs

Transportation

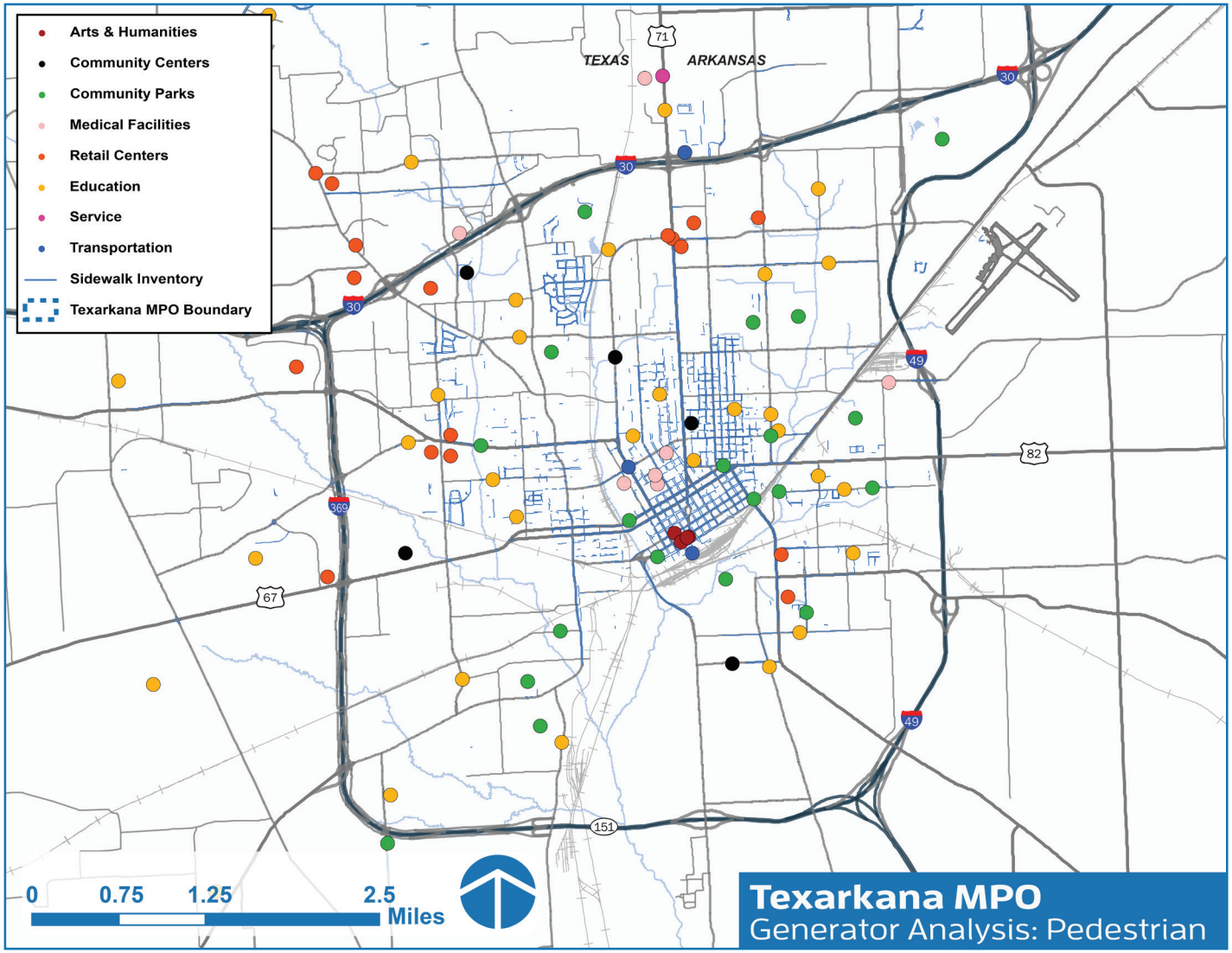
Three generators were designated as Transportation and evaluated for bicycle and pedestrian connectivity. These include a Greyhound bus station, Amtrak station, and the T-Line Transit Center. Given the presence of sidewalks near each generator, they were found to have adequate connectivity. Two of the generators were found to have low bicycle connectivity while one was found to have adequate connectivity.

Figure 2.13: Bicycle Generator Connectivity



2 Assessment of Current Conditions and Needs

Figure 2.14: Pedestrian Generator Connectivity



Conclusion

Understanding a region's state of current infrastructure enables a community to identify gaps in facilities and highlight/prioritize new projects. This existing condition and needs assessment conducted for the Texarkana MPO Region's active transportation system serves as a catalyst towards future coordination and planning for system improvements. The results and gaps were provided to stakeholders and the public to help define conceptual active transportation networks and specific projects.

Regarding safety, the Texarkana Region saw roughly 130 bicycle/pedestrian accidents from 2010 to 2017. Most of these accidents (121) took place on the Texas side of the region. Analysis also displays both bicycle and vehicular accidents taking place on large arterial intersections that provide unsafe bicycling and walking conditions.

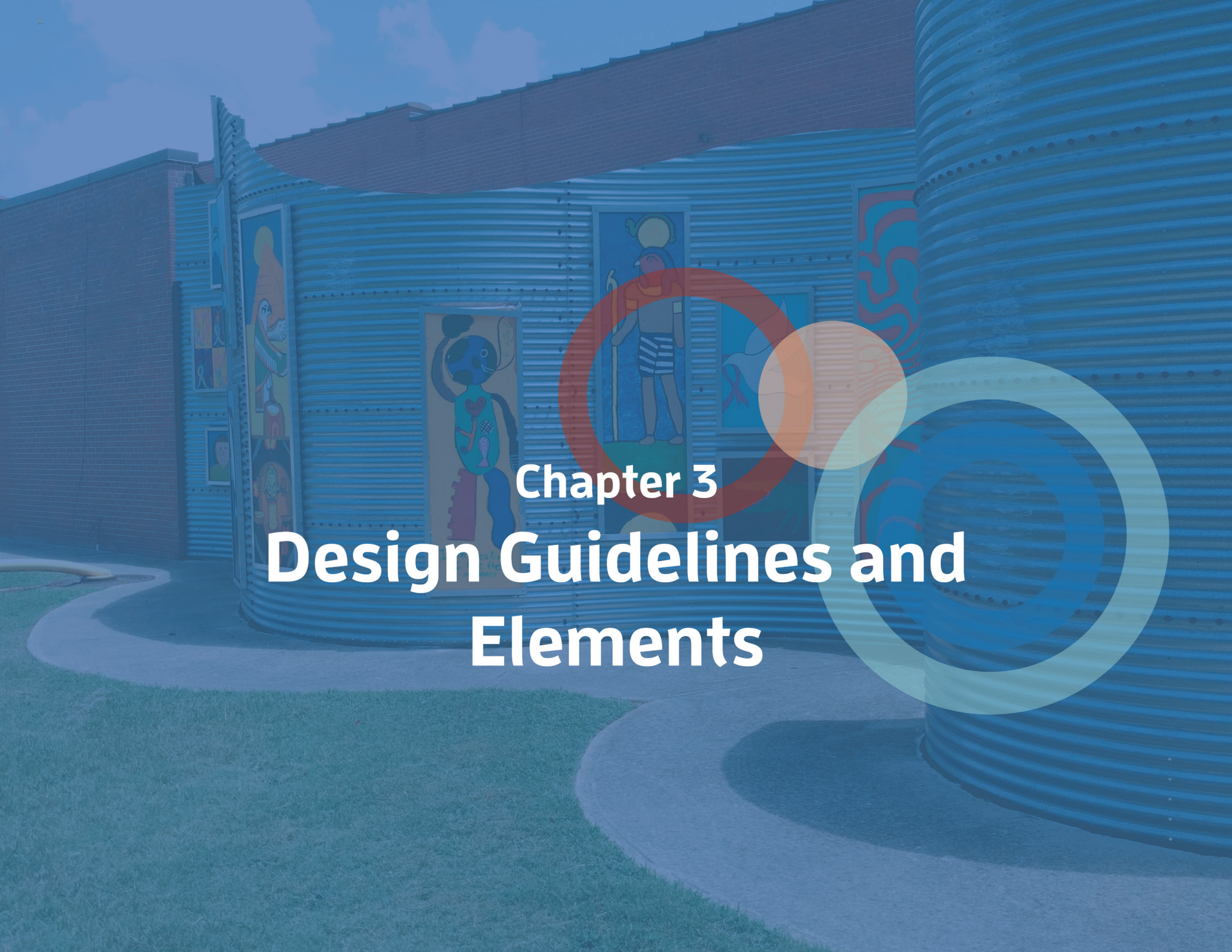
Analysis shows the Texarkana MPO Region to contain substantial bicycle and pedestrian infrastructure throughout the area. A majority of the existing sidewalk infrastructure (72%) is in "good" condition, however the overall system is lacking connectivity to perimeter areas of the MPO jurisdiction. In addition, there are significant gaps in coverage along major roadways that make traveling safely throughout the region difficult for those who are walking.

Current bicycle facilities consist primarily of roadway shoulders, with a substantial amount of said shoulders falling within the "regular" shoulder category (less than 4 feet wide). Most "high-quality" shoulders are found in the rural areas of the region, along rural highway infrastructure. Analysis on school connectivity resulted in mixed findings, as elementary and middle schools typically have lower sidewalk ratios in comparison to high schools. It must be noted that 1) middle schools were given smaller buffer zones (.5 miles) and 2) there are fewer high schools and they are generally located in more centralized locations.

The project team's transit connectivity analysis displays a fixed bus route system that covers a substantial amount of the urbanized Texarkana area through eight separate routes. Transit stops are generally accessible to most public schools; however, sidewalk gaps illustrate a major concern. Regarding pedestrian and bicycle connectivity, results varied. System connectivity (sidewalk ratio) for pedestrian infrastructure totaled 30% while the bicycle infrastructure (bike ratio) reach near 70%. This high ratio is largely due to local roads being categorized as adequate bicycle facilities.

The transit analysis shows a region with an active transportation system that provides moderate connectivity where available and is in relatively good condition. However, the analysis also presents numerous gaps in connectivity between both bicycle and pedestrian infrastructure and transit facilities, highlighting areas of opportunity and need.


Texarkana



Chapter 3
Design Guidelines and Elements

3 Design Guidelines and Elements

Design Guidelines and Elements

The Texarkana Regional Active Transportation Master Plan vision and active transportation networks consist of facilities for both bicyclists and pedestrians of all ages and abilities. This chapter illustrates typical active transportation facilities. Each facility has a description, key benefits and considerations, design standards, and information on cost and ease of implementation. These facilities are meant to improve access and comfort for various types of users of the active transportation system.

Active Transportation User Typologies

There are numerous types of active transportation users, ranging in skill level. The following typologies were considered when planning for bicycle and pedestrian facilities.

Pedestrian Travelers

Pedestrians, like people in general, do not have one set of defining characteristics. They can generally be divided into several categories:

Walk Dependent/Choice Walkers

These types of people walk as their primary mode of travel, whether by choice or need. They are not deterred by poor sidewalk conditions or gaps in the sidewalk network. Many seek direct connections to their jobs/destination or transit stops for quick travel.

Recreation/Leisure

These types of pedestrians walk/run separately for exercise and/or fun. They feel most comfortable utilizing connected sidewalks, trails, or paths. They have some level of comfort on low stress local streets with limited sidewalks.

Mobility Impaired

Mobility impaired pedestrians have limited ability to traverse a difficult sidewalk network. This type of person typically uses walking aids or a wheel chair and needs clearly defined sidewalks that are in good condition. Intersections are difficult for them if they are not ADA compliant with pedestrian awareness signage.

Those with disabilities require certain conditions to travel safely throughout a motorized environment. Careful consideration should be given to their needs and limitations when designing a non-motorized system. Senior adults, ages 60 and up, begin a gradual decline in physical and physiological performance. They may be starting to experience a loss in vision, agility, speeds, balance, concentration, and strength. A lack of hearing or situational awareness may put them at greater risks for traffic collisions.

Low-Skill Walkers/Children

Children or low-skill walkers require sidewalk facilities and may be unable

or unwilling to travel roadways with gaps in the sidewalk network. Low skill/ children walkers feel most comfortable on low volume/low speed roadways with dedicated pedestrian facilities, as well as trails and paths. Children have limited training and a lack of experience which can result in impulsive and unpredictable behaviors. Their short stature and small size make them difficult to see, which creates dangerous situations as they are often unfamiliar with roadway etiquette. Their desire to mimic those they look up to results in them attempting to act like adults, walking in the roadway or standing close to traffic.

Bicycle Travelers

In both Texas and Arkansas, bicycles are considered "vehicles" and they may use the streets and highways unless a facility specifically does not allow that. In general, bicyclists travel faster than pedestrians and as quickly as slow motor vehicles. For the Texarkana Regional Active Transportation Master Plan analysis bicyclists are broken down into four categories.

Strong and Fearless

Strong and fearless riders are those willing to bicycle with limited or no bicycle facilities. These riders are comfortable on high speed, high volume roadways in urban areas and roadways with little shoulder width in rural areas.

Enthused and Confident

Enthused and confident riders are people willing to bicycle if bicycle facilities/ signage exist. These riders are comfortable on moderate speed, moderate volume roadways in urban areas if there is a designated space for bicycles. Moreover, they are more than comfortable on low stress roadways. These users will actively avoid on-road bicycling in rural areas with limited roadway shoulders.

Interested but Concerned

Interested but concerned users are those willing to bicycle if high quality infrastructure is in place. These riders are most comfortable on buffered bicycle facilities, off road paths/trails and local streets in urban areas.

Low Skill/Little Interest

Low skill/little interest users are those unwilling to bicycle even if high quality bicycle infrastructure is in place. These people do not feel comfortable riding on any on-road facility but may in some circumstances utilize an off-road path/ trail.

Facility Typologies

It is important to include an array of options for all types of users in an active transportation network. While most facilities are bicycle or pedestrian oriented, several facility types accommodate both bicyclists and pedestrians.

Bicycle Facilities

Bicycle facilities provide people who bike with increased safety and mobility throughout a region. Bicycle facilities

3 Design Guidelines and Elements

vary based on roadway and cross section details. On lower stress roadways, simpler facilities such as a sharrow or a "share the road" sign can alert auto drivers that a bicyclist may be present, resulting in safer routes for bicyclists. On busier streets and streets where vehicles travel at higher speeds, a separated facility, such as a bicycle lane or a buffered bicycle lane, provides improved safety for bicyclists and gives them their own space to maneuver. Clearly marked bicycle lanes illustrate to drivers where dedicated bicyclist space exists. In rural areas, wide shoulders can provide improved safety for commuters or recreational users. In areas where traveling via bicycle on a roadway is deemed unsafe, shared use paths, side paths, or cycle tracks provide the highest level of safety for bicyclists.

Facility types include:

- Shared use paths
- Side Paths
- Cycle Track
- Bicycle Lane
- Buffered Bicycle Lane
- Wide Shoulder
- Shared Lane
- Bicycle Boulevard

Pedestrian Facilities

For people who choose to or need to walk as a form of transportation, pedestrian facilities provide improved safety along roadways. Pedestrian facilities range from off-road paths and trails to sidewalks and crosswalks. Increased safety in high pedestrian and traffic activity areas and at intersections can be provided through clearly marked crosswalks, pedestrian signage, and mid-block crossings.

Facility types include:

- Sidewalks
- Trails
- Crosswalks
- Pedestrian Refuge Islands
- Grade-Separated Crossing
- Mid-Block Crossings
- Pedestrian Signs
- Lighting

Design Guidelines

The remainder of this chapter includes design guidelines and considerations for bicycle and pedestrian facilities. Each facility includes the following components that provide an overview of the facility:

- **Description:** A brief summary of key characteristics that define the facility.
- **Benefits/Considerations:** Key safety or comfort information and items that need to be considered when constructing these facilities.
- **Typical Design Standard:** Key dimensional standards associated with each facility. Note that local context and engineering judgment should be made when determining final dimensions.
- **Ease of Implementation:** General scale of how easy a project is to implement based on right-of-way availability, public acceptance, roadway impact, and constructability, among others.
- **Typical Cost:** A scale of relative costs for each facility type.

SHARED USE PATH

DESCRIPTION

Shared use paths, also referred to as multi use or mixed use trails, are intended to be used by both bicyclists and pedestrians. Shared use paths occupy corridors that are completely separated from streets, such as waterways, utility right of ways, greenbelts, or areas within parks.

BENEFITS / CONSIDERATIONS

Benefits

- Highest level of comfort and safety for bicyclists and pedestrians
- Encourages a wide variety of users

Considerations

- Appropriate for corridors along bodies of water, irrigation channels, drainage canals, utility right of ways, and existing or abandoned rail lines
- Develop stronger linkages for pedestrians and bicyclists between park facilities and key destinations
- Depending on the context, variations to the design/construction of a shared use path could include presence or absence of a curb edge and choice of surface materials such as crushed granite, asphalt, or concrete

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

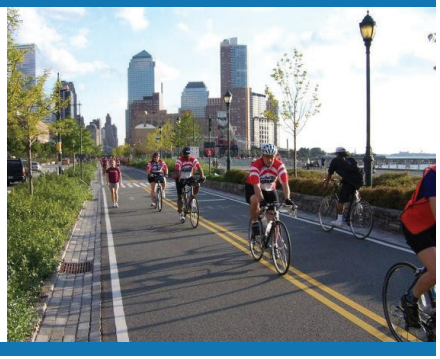
- Minimum paved width for a two-directional shared use path is 10 ft with a maximum of 14 ft
- A width of 8 ft maybe be used for a short distance due to physical constraint
- Pathways with heavy peak hour and/or seasonal volumes should use a centerline stripe to clarify the direction of travel and organize pathway traffic

3 Design Guidelines and Elements

SIDE PATH

DESCRIPTION

Side paths are similar to shared use paths, but are located adjacent to a roadway. Unlike sidewalks, side paths are intended for use by both bicyclists and pedestrians, and are therefore wider than traditional sidewalks. The co-location of a side path and a sidewalk may be appropriate in locations with high pedestrian traffic.



BENEFITS / CONSIDERATIONS

Benefits

- Removes bicyclists from the roadway while keeping them connected to the overall street network
- Encourages a wide variety of users by increasing a sense of safety and comfort

Considerations

- May connect to shared use paths that diverge from the roadway
- Suitable for streets that have heavy traffic, have high speed limits, and have few driveway intersections
- Provides two-way bicycle flow on one side of the street
- Appropriate where bicycle and pedestrian interactions won't create continual conflict

EASE OF IMPLEMENTATION

TYPICAL COST

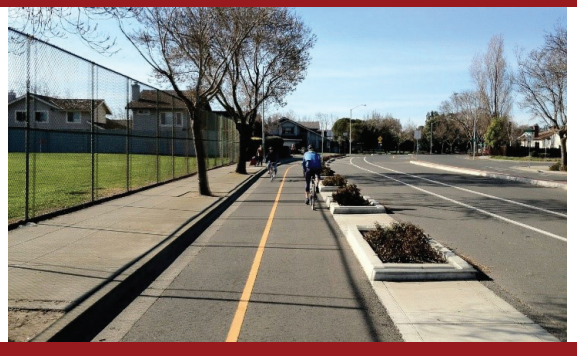
TYPICAL DESIGN STANDARDS

- Side paths are most commonly designed for two-way travel accommodated in a single treadway, though multiple treadways are possible
- The minimum width for a two-directional side path is 10 ft, with the desired width of 12-14 ft

CYCLE TRACK

DESCRIPTION

Cycle tracks are exclusively bike facilities that combine the user experience of a separated path with the on-street infrastructure of a conventional bike lane. Cycle tracks are always physically separated from motor traffic and distinct from the sidewalk. There are three types of cycle tracks: one-way, two-way, and raised.



BENEFITS / CONSIDERATIONS

Benefits

- Improves real and user-perceived safety for bicyclists by protecting cycling space from motor vehicles
- Track separation prevents motor vehicles from parking in the cycling space

Considerations

- Suitable for streets with parking lanes and high parking demand, high traffic volumes and speeds, and high bicycle volumes
- Two-way cycle tracks may be used on one-way streets
- Can control flow of bicyclists between the cycle track and the street by using different separating elements, such as curbs for controlled entrances/exits and bollards or armadillo bumps for more free flowing entrances/exits

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- Bike lane markings should be painted at the start of the track and at intervals along the facility
- Depending on context, painted markings or physical barriers can separate the track from adjacent facilities
- Minimum track width is 6 ft, increased to 7 ft for high bike volume or uphill areas, and 3 ft of buffer should be left between the track and adjacent parking

3 Design Guidelines and Elements

BICYCLE LANE

DESCRIPTION

Bike lanes use pavement markings and signage to designate cycling space directly on roadways. Bike lanes are generally found adjacent to and on the right side of the outermost motor vehicle lane, between motor vehicle traffic and the parking lane, curb, or roadway edge. Bike lane traffic flows the same direction as motor traffic.

BENEFITS / CONSIDERATIONS

Benefits

- Increases bicyclists' comfort and confidence on busy streets by creating separation between them and motor vehicles
- Increases predictability of bicyclist and motorist interactions and movements
- Relatively low-cost treatment for establishing bicycle facilities

Considerations

- Have the most positive impact on streets with average daily traffic of more than 3,000 vehicles, streets with posted speed between 25-35 mph, and streets with high transit vehicle volume

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- Minimum 5 ft width against a curb or adjacent to a parking lane
- Adjacent to curb face: desired width of 6 ft
- Adjacent to parking lane: desired width from curb face to edge of bike lane is 14.5 ft (minimum width is 12 ft), with a bike lane width of 5 ft minimum, unless there is a marked buffer between the parking lane and the bike lane
- Bike lane markings should be used to designate the cycling space
- A 6-8 in solid white line should be used to mark the boundaries of the bike lane
- Gutter seams, drainage inlets, and utility covers should be flush with the ground to prevent conflicts with bike tires

BUFFERED BIKE LANE

DESCRIPTION

A buffered bike lane is a conventional bike lane paired with a designated buffer space separating the bike lane from the adjacent motor vehicle travel lane and/or parking lane. The buffer typically consists of a zone incorporating pavement striping or physical separating elements like bollards.

BENEFITS / CONSIDERATIONS

Benefits

- Increases distance between motor vehicles and bicyclists, thereby increasing the space for bicyclists to maneuver and encouraging more cycling by improving perception of safety for bicyclists
- Separates bicycle and pedestrian traffic

Considerations

- Appropriate anywhere a standard bike lane is being considered, where existing paving allows for more substantive bicycle facilities, and on streets with high speeds and traffic/truck volumes
- Where street parking turnover is high, consider placing the buffer between the parking lane and the bike lane

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- Typical width for a buffered bike lane is 8 ft – 5 ft bike lane plus a 3 ft buffer.
- Buffer may be less than 3 ft if vertical delineators are used
- Bike lane markings should be used to designate the cycling space
- The buffer should be marked with two solid white lines, with diagonal hatching or chevron marks on the interior if the buffer is 3 ft or wider
- Buffer boundary lines should be solid if crossing is discouraged and dashed if crossing is permitted

3 Design Guidelines and Elements

WIDE SHOULDERS

DESCRIPTION

AASHTO defines shoulders as "the portion of the roadway contiguous with the travel way for accommodation of stopped vehicles, for emergency use." A shoulder can accommodate bicyclists if it is adequate in width and encounters few driveways or other crossings.

BENEFITS / CONSIDERATIONS

Benefits

- Low cost bicycle facility
- Suitable for rural areas

Considerations

- Appropriate on streets with high speeds and relatively low bike demand/use
- Facility type used principally by experienced bicyclists
- Suitable in areas where wide shoulders already exist
- Implementation of wide shoulders should correspond with resurfacing efforts to ensure the longevity of the initial investment
- Bicycle facilities on wide shoulders should remain clear of debris to maintain a safe riding environment
- Rumble strips can improve safety for bicyclists by correcting drivers veering off the road

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- Minimum of 4 ft wide to accommodate bicycle travel
- Optional buffer of 1.5-4 ft wide
- On roadways with guardrails, curbs, or other roadside barriers, recommended minimum shoulder width of 5 ft

SHARED LANE

DESCRIPTION

A shared lane is a travel lane specifically designated to serve both bicyclists and motor vehicles. This treatment is often used on streets where there is insufficient width for a bicycle lane but where bicycle travel is also likely.

BENEFITS / CONSIDERATIONS

Benefits

- Motorists are made aware of the presence of bicycles within the travel lane
- Relatively low cost to implement
- Provides bicyclists guidance and wayfinding within the street cross section

Considerations

- Suitable on streets with low traffic volumes/speeds, but not ideal where speeds and volumes are higher
- Typically incorporates shared lane pavement markings in addition to bikeway signage
- Shared lanes indicate where bicyclists may likely be found, but do not necessarily confine bicyclists to a rigidly defined path

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- The shared lane pavement marking, also called a "sharrow," includes a bicycle below two chevron markings
- Shared lane markings should not be used on shoulders, in designated bike lanes, or to designate bicycle detection at signalized intersections
- Lateral placement of the marking within the travel lane is critical to encourage bicyclists to avoid the "door zone" and to encourage safe passing behavior

3 Design Guidelines and Elements

BICYCLE BOULEVARD

DESCRIPTION

Bicycle boulevards are streets with low motorized traffic volumes and speeds, designed and designated to give bicycle travel priority. Bicycle boulevards use signs, pavement markings, and volume/speed management to discourage through trips by motor vehicles and create safe, convenient bicycle crossings at busy streets.

BENEFITS / CONSIDERATIONS

Benefits

- Increases comfort and safety for bicyclists
- Cost effective use of existing roadways by connecting a series of relatively minor treatments that substantially improve bicycling conditions on local streets
- Creates alternate routes for bicycles that are still connected to the street network

Considerations

- Suitable for streets with low traffic volumes/speeds and streets that run parallel to popular arterials or collectors
- Intersection improvements should take advantage of actuated signaling, such as bicycle activated signals, bicycle sensitive loop detectors, or push button signals conducive to bicycle access
- A pocket lane at intersections is an appropriate treatment to increase visibility and safety of bicyclists

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- Volume and speed management techniques should be implemented if necessary
- Treatments for minor street crossings, major street crossings, and offset intersections should be implemented to minimize bicyclist delay and maximize bicyclist safety and comfort

TRAIL

DESCRIPTION

Trails are paths that are physically separated from motor vehicle traffic by an open space or barrier and are either within the highway right of way or within an independent right of way. Trails may or may not be parallel/ adjacent to a roadway.

BENEFITS / CONSIDERATIONS

Benefits

- Increase safety and comfort by distancing or removing the pedestrian environment from the streetscape where motor vehicle traffic can be dangerous
- Generally provide a more visually appealing pedestrian environment
- Provide increased recreational opportunity for users

Considerations

- Can be located along rivers, ocean fronts, canals, abandoned or inactive railroad right of ways, roadway corridors, limited access freeways, within college campuses, or within parks and open space areas
- May be paved or unpaved, using materials such a concrete, asphalt, crushed granite, or others

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- Recommended paved width of 10-12 ft with 2 ft graded shoulder on both sides
- Vertical clearance of obstructions should be at least 8 ft
- Minimum separation of trails from roadways should be 5 ft
- Grades should be 5% maximum, with a graduated scale to 11% for short distances
- Cross slopes should not exceed 2%
- Path/roadway intersections should be carefully designed

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SIDEWALK

DESCRIPTION

Sidewalks are the basic facility necessary to establish a pedestrian network. Sidewalks are designed for pedestrian use only, and are intended to serve all people regardless of age or ability. These facilities are located within or parallel to the street right of way.

BENEFITS / CONSIDERATIONS

Benefits

- Increase comfort and safety by providing a distinct area of travel for pedestrians and significantly limiting their interaction with motor vehicles
- Provide connectivity within and between urban areas and neighborhoods

Considerations

- Context of the area and the adjacent roadway should help determine the facility's distance from the street and other dimensional characteristics that will optimize comfort and safety for pedestrians
- If possible, including a buffer of trees or other vegetation as well as lighting and furniture such as benches adjacent to or along the edge of the sidewalk facility can greatly improve the pedestrian's perception of comfort and safety

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- Minimum desired width for a sidewalk: 5 ft excluding any attached curb
- Ideally, sidewalks should be separated from the roadway by an unpaved buffer
- If the facility must be less than 5 ft wide, passing spaces of at least 5 ft wide should be provided at reasonable intervals
- If the facility is flush against the curb, wider sidewalk widths of 8–10 ft are desired
- Desired width outside core urban area: 6–8 ft
- Desired width in core urban area: 10 ft or wide enough to provide desired volumes

CROSSWALK

DESCRIPTION

Crosswalks are designated pedestrian paths that traverse the width of roadways to allow pedestrians to cross streets. Crosswalks are most commonly found at roadway intersections.

BENEFITS / CONSIDERATIONS

Benefits

- Provide a distinct space for pedestrians to cross a street safely
- Can draw the attention of motor vehicles to the presence of pedestrians
- Provides clarity to both pedestrians and motor vehicle drivers where pedestrians are expected to cross a street

Considerations

- Frequency of crosswalks should increase where pedestrian volumes are greater
- Location and illumination of crosswalks should allow pedestrians to see and be seen by approaching motor vehicle traffic while crossing
- Pedestrians should experience a short wait to cross and adequate time to cross a street
- Crossing distance should be short, or divided into shorter segments with crossing islands when necessary
- Conflict points with motor vehicle traffic should be few

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

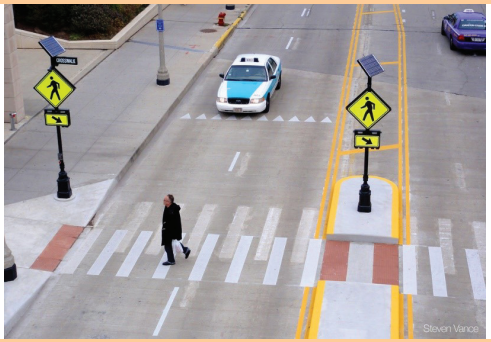
- Crosswalk width should reflect the width of the sidewalks that approach the intersection, but no less than 6 ft wide
- Intersections also require extra consideration for grade changes to ensure the necessary ADA requirements are met

3 Design Guidelines and Elements

PEDESTRIAN REFUGE ISLAND

DESCRIPTION

Pedestrian refuge islands utilize median space to create a refuge area between the two directions of traffic flow on a wide and/or busy street. Pedestrians may use the island after crossing one half of the street to wait until it is safe to cross the second half. This shortens the distance a pedestrian needs to travel at once.



BENEFITS / CONSIDERATIONS

Benefits

- Increases pedestrian safety and comfort level when crossing wide and/or busy streets

Considerations

- Can be utilized on busy two-way streets that have available median space
- Recommended where pedestrian crossing activity is high

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- The designated pedestrian space on the island should be the same width as the connecting crosswalk
- Should be protected by some type of barrier element
- Use of curbing and planted medians clearly differentiates the pedestrian refuge space from the motor vehicle travel area
- In instances where both pedestrians and bicyclists will share the crossing and median area, additional space or parallel facilities may be appropriate

GRADE-SEPARATED CROSSINGS

DESCRIPTION

At-grade intersections/crossings of pedestrian facilities and roadways may not always be feasible or safe. Grade-separated crossings provide opportunities to traverse barriers when at-grade crossings are not recommended. Grade-separated crossings include underpasses and bridges.

BENEFITS / CONSIDERATIONS

Benefits

- Provide crossings at dangerous or high-volume roadways
- Maintain separation of pedestrians from motor vehicle traffic, providing a safer pedestrian environment

Considerations

- Can be very expensive to implement
- May become sites for crime or vandalism or may decrease pedestrian safety if not properly located and designed
- Grade-separated crossings tend to serve both pedestrians and bicyclists

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- Facility is located based on need and predicted use
- Crossing structures should be built with adequate widths for safety and volumes
- Facility design should be accessible for all users
- Barriers/railings should be provided to increase perceived/actual safety
- Facility should be well-lit to provide a sense of security
- Additional safety features beyond the standard features may be beneficial to promote a sense of comfort and security for users

3 Design Guidelines and Elements

MID-BLOCK CROSSWALK

DESCRIPTION

Mid-block crosswalks facilitate crossings to destinations with high pedestrian volumes. These crossings occur between street intersections, especially on street networks with large block lengths.

BENEFITS / CONSIDERATIONS

Benefits

- Offer convenient locations for pedestrians to cross streets
- Increase safety and comfort of the pedestrian environment

Considerations

- May connect pedestrians to places such as schools, parks, museums, waterfronts, and other major social, cultural, and economic places of interest/employment where pedestrian activity is high
- Suitable for areas with large block lengths and rural or suburban areas that have fewer intersections to provide standard crosswalks
- May be appropriate next to mid-block bus stops to accommodate boarding and alighting passengers

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- Stop lines at the crossings should be set back 20-50 ft
- Crossings should be striped regardless of paving pattern or material to increase visibility for motor vehicle drivers
- Pedestrian refuge islands compliment mid-block crossings by increasing pedestrian safety
- Treatments like restricting parking near the crossing or adding curb extensions help keep the area around the crossing clear and visible

PEDESTRIAN SIGNS

DESCRIPTION

Pedestrian signs are used to demarcate the location of pedestrian facilities where they meet, cross, or conflict with other types of travel facilities. These signs also provide information about rules for pedestrians, bicyclists, and motor vehicle drivers based on the context and location of the pedestrian facilities within the travel network.

BENEFITS / CONSIDERATIONS

Benefits

- Increase safety for pedestrians, as well as bicyclists and motor vehicle drivers, by providing clarification and communication for facility users where conflict points occur
- Help alert bicyclists and motor vehicle drivers of the presence of pedestrians

Considerations

- Signs must be easy to read and placed in a readily visible area
- Vegetation, utility poles, and other objects may obstruct the sight line of pedestrian signs if the signs are not placed carefully and maintained

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- Signs are generally made in bright colors and use reflective material to help travelers see them better during the day and at night
- Most necessary pedestrian signs have standard design guidelines that should be followed
- Regulatory signs provide information on the intended use of specific facilities and areas within roadways
- Warning signs are used to notify travelers of changes in facility or roadway conditions that will affect traveling actions

3 Design Guidelines and Elements

LIGHTING

DESCRIPTION

Lighting is a crucial element of the pedestrian environment on any type of facility. Lighting for pedestrian facilities can include direct lighting fixtures, such as street lamps, or indirect lighting, such as that from adjacent buildings and digital signage.

BENEFITS / CONSIDERATIONS

Benefits

- Provides the necessary visibility for pedestrians using facilities at night or during other darkened conditions, such as during storms
- Increases level of comfort and safety for pedestrians using the facility
- Can create visual appeal and a sense of liveliness in the pedestrian environment

Considerations

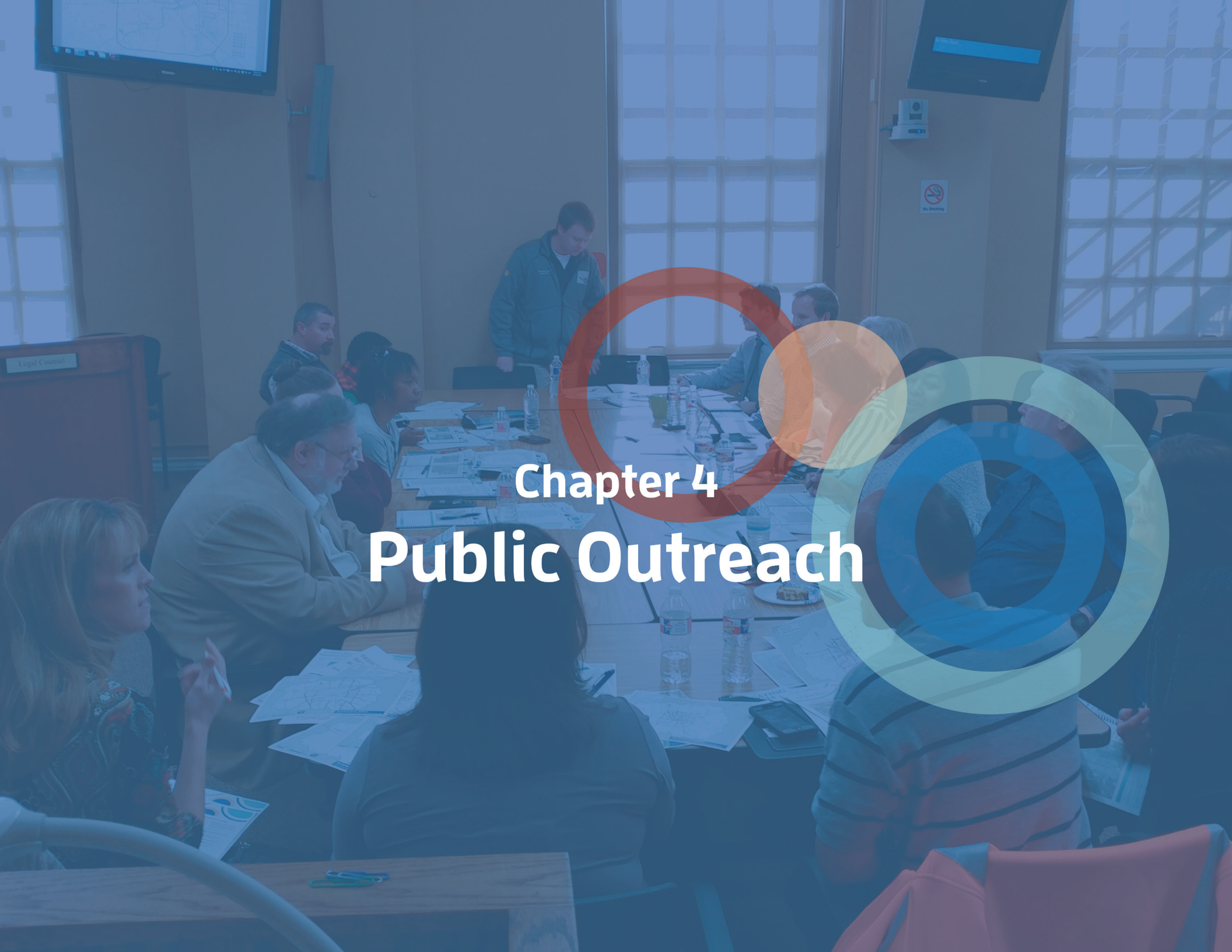
- Use of lighting at intersections and crossings should be a priority as these are the greatest conflict areas
- Facilities should be illuminated in a way that prioritizes the visibility of pedestrians and bicyclists

EASE OF IMPLEMENTATION

TYPICAL COST

TYPICAL DESIGN STANDARDS

- Pedestrian-scaled lighting is a preferred approach to create a more inviting environment and provide the appropriate amount of light
- Level of brightness is an important factor when choosing types of lighting fixtures and light bulbs



Chapter 4
Public Outreach

4 Public Outreach

Introduction

Public outreach is an important aspect of planning for active transportation in a region. People choose to bike or walk for various reasons, including recreation and leisure, or getting to and from work and other key destinations. For some, cycling and walking are the only affordable means of travel available to them. Bicyclists and pedestrians also come in all ages and abilities. Each of these considerations made it necessary for the project team to develop a clear understanding of the Texarkana community's existing active transportation habits, challenges, and needs, as well as the community vision that the public sees for its future active transportation network. To accomplish this, the project team implemented a set of public outreach techniques that are commonly used in the development of active transportation plans.

Specifically, the public outreach process of the TRATMP consisted of three primary efforts that solicited feedback from the public as well as provided informative updates on project progress. These three efforts included a user survey and two public open houses – a visioning open house and project open house.

Public Outreach Methods

User Survey

The Texarkana Active Transportation User Survey was a publicly-available survey aimed at gaining an understanding of the active transportation and transit habits of people traveling throughout the Texarkana MPO study area. The survey was created and distributed in both hard copy and online formats to make it readily available to as many people as possible. There were a total of 127 responses to the survey.

Survey Design

The survey was open from July 24, 2017 to October 13, 2017. It included questions asking respondents about their mode of commute and about their habits and experiences bicycling, walking, and using transit in the Texarkana region. The questions related to bicycling, walking, and taking transit were meant to provide insight on the following topics:

- How many respondents use these modes of travel and how often,
- Why they use these modes,
- Where they travel when using these modes,
- What possible barriers exist that prevent them from using these modes, and
- What types of improvements they want to see in the region to encourage increased use of active transportation.

For most of these questions, the respondents were allowed to select all answer choices that applied to them, meaning that many respondents selected more than one answer on individual questions. The end of the survey also included a set of optional demographic questions that inquired about age, race/ethnicity, employment status, annual household income, the presence of any physical mobility impairments, and home zip code.

Survey Results

How Do You Commute?

More than 60% of survey respondents said that they commute using a personal vehicle, while 18% said they walk and 9% said they ride a bike. This means that a little over one-fourth of respondents use active transportation to get to and from work.

Do You Ride a Bike as a Form of Transportation? If So, How Often?

45% of respondents said that they do not ride a bike, but 21% said they do ride their bike several times per week and 14% said they ride their bike at least once per week.

Why Do You Typically Ride a Bike?

Out of those that do ride a bike, most indicated that the top reasons they ride are for exercise (81%), recreation/leisure (58%), and access to other parts of the community (22%).

What Are Your Typical Biking Destinations?

People that do ride a bike said that their top biking destinations are a park, field, or path (59%), recreational areas (47%), or homes of relatives or friends (33%).

What Prevents You from Biking in the Region?

Out of the respondents who said that they do not ride a bike, their top reasons included that it is not efficient to get to their destinations (35%), other (29%), and traffic volumes/speeds along roadways (29%).

Do You Walk as a Form of Transportation? If So, How Often?

The highest percentage of respondents (38%) said that they walk as a form of transportation several times per week. The other top responses were that they do not walk as a form of transportation (30%) and that they walk at least once per week (18%).

Why Do You Typically Walk?

The majority of respondents (69%) said that they typically walk for exercise, while 42% said they walk for recreation/leisure, and 26% said they walk to access other parts of the community.

What Prevents You from Walking in the Region?

A majority of respondents said that a lack of sidewalks (59%) prevents them from walking in the region. The other top responses were that it is not efficient to get to their destinations (38%) and the traffic volumes/speeds along roadways (33%).

Do You Use Transit? If So, How Often?

The vast majority of respondents (70%) said they do not use transit. Out of those who said they do, 7% said they use transit one or fewer times per month while another 7% said they use transit several times per week.

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How Do You Access Your Nearest Transit Stop?

91% of all respondents said that they walk to their nearest transit stop, while the answer options of bike, get a ride, and other each received 3% of responses.

Are There Sidewalks Connecting You to Your Transit Stops?

57% of respondents answered no on this question while 43% of respondents answered yes.

What Prevents You from Using Transit in the Region?

Out of the respondents who indicated that they do not use transit, 38% said that there are no transit stops nearby, 31% said other, and 23% said that it is inefficient to use transit in the region.

What Kind of Improvements Would Encourage You to Bike or Walk More?

The top three answers for this question were more sidewalks (61%), better connected sidewalks (56%), and better condition of sidewalks (51%). The fourth highest answer choice was on-road bike lanes or protected bike lanes (50%). These results indicate that even though the respondents desire bicycle network growth and improvements, they place a higher priority on growth and improvements for the sidewalk network.

Figure 4.1: User Survey Results

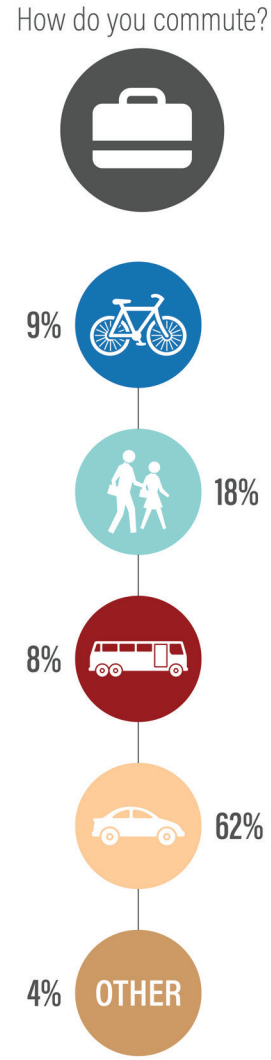
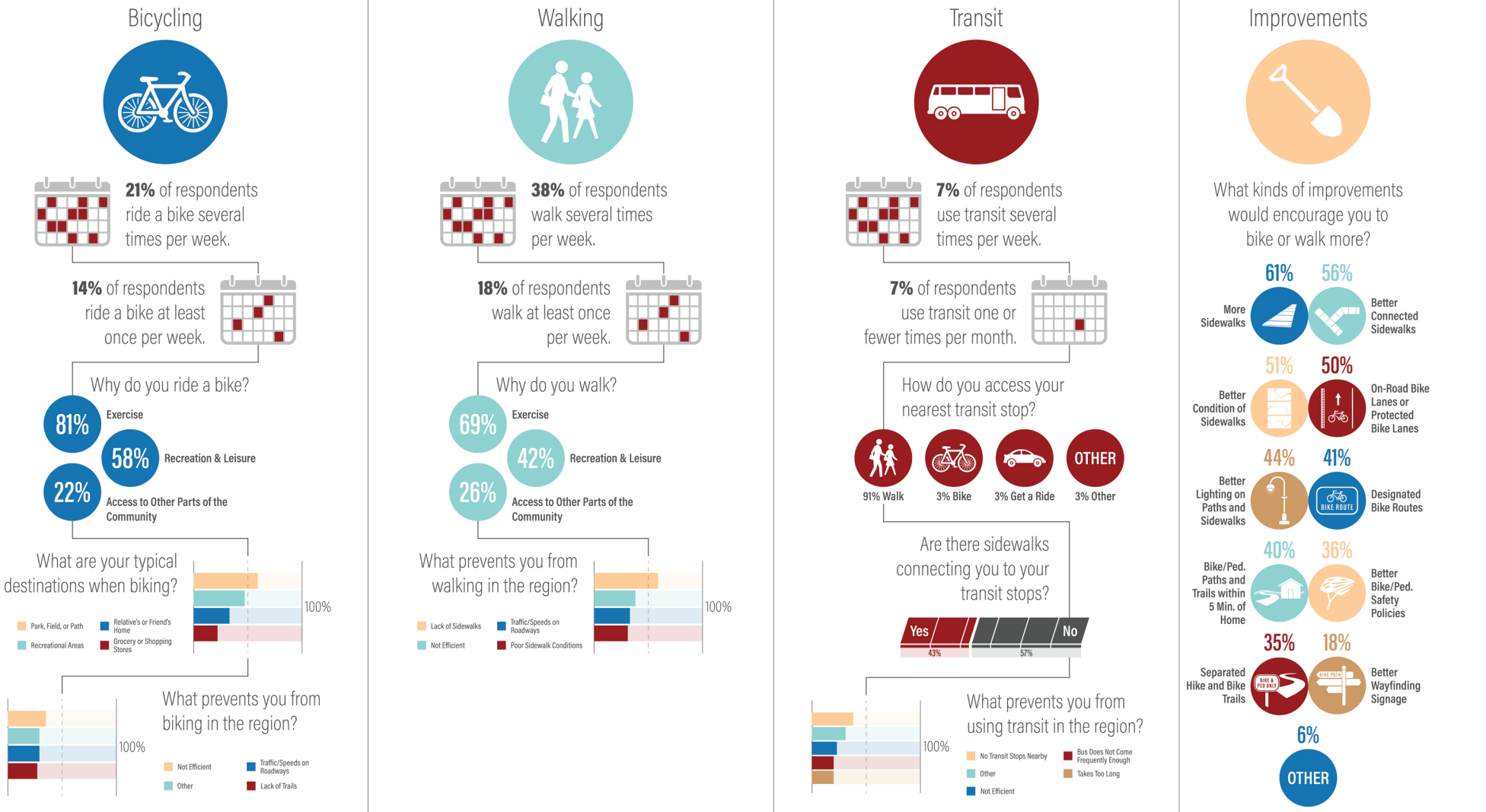


Figure 4.1: User Survey Results (Continued)



4 Public Outreach

Visioning Open House

The visioning open house was held from 4:00 pm to 7:00 pm on September 21, 2017 at the City Council Chambers in Texarkana, Texas. The primary objectives of this open house were to:

- Provide the public with an introduction to the project,
- Inform the public about the project's process and timeline,
- Show the public the existing conditions information gathered during the project team's early analyses, and
- Gather input from the public to help shape the plan's vision.

The visioning open house was set up as a come-and-go event with a set of exhibit boards, some of which were informative and others which were interactive. Attendees could arrive and leave at any point and were free to explore the exhibit boards at their own pace. The project team did not give any formal presentation to attendees, and MPO staff and other project team members were available to discuss the project with the public and address any questions or concerns that might have arisen.

Exhibit Boards

The visioning open house included a total of thirteen exhibit boards that were both informative and interactive.

Informative Boards

The informative boards included the following topics and content:

- Project Introduction
- Preliminary User Survey Results
- Crash Analysis
- Bicycle and Pedestrian Crash Analysis
- Sidewalk inventory and conditions
- Downtown Sidewalk Inventory and Conditions
- Existing Bicycle Facilities
- Bicycle Level of Stress

The purpose of the Project Introduction board was to provide attendees with an introduction to the project and its purpose, federal guidelines, process, and timeline. The other informative boards show the findings of early analyses and projects previously proposed in the 2009 plan.

Interactive Boards

The interactive boards included the following topics and activities:

- Live, Work, Play
- Preliminary Project Goals
- What Kind of Bicyclist/Pedestrian Are You?
- Barriers to Walking and Bicycling
- Future Network Mapping

The Live, Work, Play board instructed attendees to place different colored dots on a map of the Texarkana MPO region based on where they live, where they work or other crucial facilities they access each day, and where the play (i.e. where they partake in social, recreational, and entertainment activities).

The Preliminary Project Goals board provided attendees with the list of preliminary goals for the plan along with a description for each. Attendees were asked to place a dot next to the

three goals they thought were the most important to consider when planning for active transportation in the Texarkana region.

The What Kind of Bicyclist/Pedestrian Are You? board asked attendees to describe their bicycling and pedestrian level of skill, interest, and confidence. The board provided four different categories of bicyclists and four different categories of pedestrians, each with a description, and attendees were asked to place a dot to the bicycling category and the pedestrian category that they identified with the most.

The Barriers to Walking and Bicycling board provided a map with pre-identified barriers to walking and cycling activity in the Texarkana MPO region, including major intersections with limited bicycle and pedestrian facilities, major roadways, railroad crossings, narrow bridges over creeks and rivers, and interstate crossings. Attendees were asked to place dots on the map to mark and identify any additional barriers that were not already shown on the map.

Finally, the Future Network Mapping board included a map identifying existing and previously proposed active transportation network facilities. These included high quality roadway shoulders, TxDOT/ArDOT identified shoulders, existing off-road paths/trails, existing sidewalk network, the 2009 proposed bicycle network, 2009 proposed trails, and 2009 proposed pedestrian paths. Attendees were asked to draw and makes notes on the map to provide the project team with information regarding the following:

- Where they would like to see active transportation facilities built,
- Which bicycle and walking routes they travel on most frequently,
- Where wider roadway shoulders are needed,
- Where significant gaps in the sidewalk network occur, and
- Where they would like to see trails or additional off-road paths.

Other Open House Materials

A sign-in sheet was provided at the visioning open house for attendees to provide their name, contact information, home zip code, and organization or affiliation. This information helped the project team understand what mix of the community attended the open house. Attendees were also given the choice to fill out a comment card so that they could leave general comments, concerns, and questions for the project team. Comments left by the attendees included concerns about safe routes to schools, improvements to the sidewalk and bicycle networks, safety issues when motor vehicles meet bicyclists on narrow roadways, and maintenance of existing facilities.

Open House Results

Live, Work, Play

The majority of both Live dots and Work dots were placed within the loop formed by IH-30, IH-49, IH-369, and Loop 151. One Live dot and one Work dot was placed next to Bringle Lake and the Texas A&M campus. The Play dots were spread much more throughout the Texarkana MPO region, with most of the Play dots

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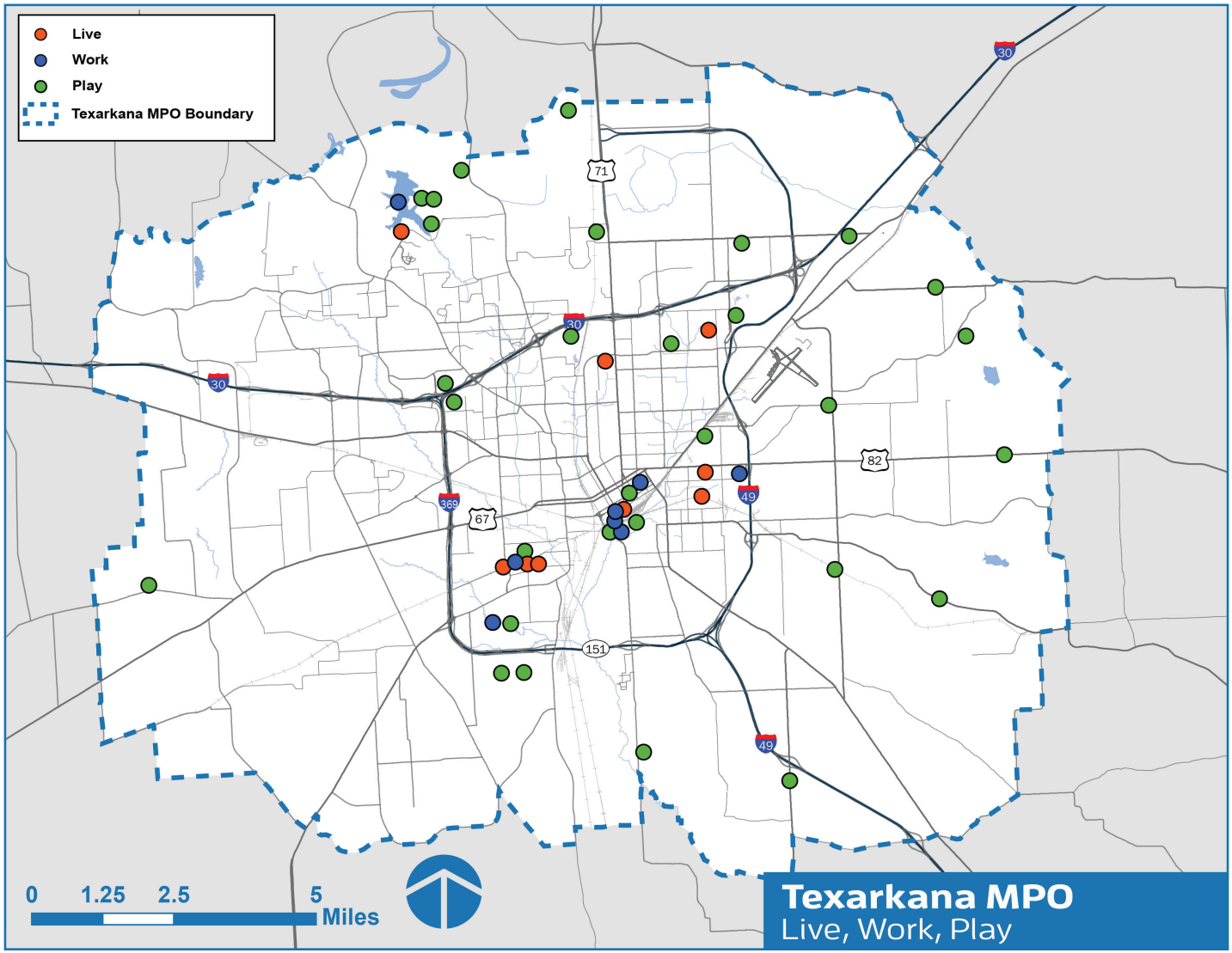
Figure 4.2: Live, Work, Play Results



occurring in the central, north, south, and east portions of the region. The densest clusters of all dot categories occurred in the downtown area, around Bringle Lake, and along Findley St. near Robison Rd. Figure 4.2 Illustrates the results of the Live, Work, Play Exercise.

Preliminary Project Goals

The Preliminary Project Goals board displayed a set of thirteen goals for the attendees to prioritize. These goals, along with their scores from this activity (i.e. the number of dots placed next to each goal) are shown in Table 4.1. To see the list of finalized project goals along with their descriptions, see Chapter 6: Implementation and Funding.

What Kind of Bicyclist/Pedestrian Are You?

Out of the four skill/interest/confidence level categories provided for the What Kind of Bicyclist Are You? exercise, the "strong and fearless" category received the most dots from attendees, meaning that there were some experienced cyclists

Table 4.1: Preliminary Project Goal Scores

GOAL	NUMBER OF DOTS
Create an "all ages and abilities" active transportation network	1
Provide safe routes to school for children	7
Maintain and repair sidewalks to improve overall sidewalk conditions	1
Build a complete network of on-road bike lanes	3
Provide access to transit stops using sidewalks and bike facilities	1
Create a connected network of bicycle/pedestrian paths and trails	4
Fill in sidewalk gaps to create a complete sidewalk network	2
Promote public health through active transportation	2
Improve bicycle and pedestrian safety along roadways	1
Develop a designated regional bicycle route system	1
Create bicycle- and pedestrian- friendly communities to boost economic activity	2
Create complete streets policies that are ready for community adoption	1
Educate the community on the benefit of active transportation investments	1

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at the open house. Figure 4.3 shows each cycling level category, their relationships to each other, and the number of dots attendees placed next to each.

Out of the four categories provided for the What Kind of Pedestrian Are You? exercise, the "recreation/leisure" category received the most dots from attendees. This means that most of the participants in this part of the exercise probably walk relatively often as a form of exercise, but not purely as a means of travel and not usually out of necessity. Figure 4.4 shows each pedestrian level category, their relationships to each other, and the number of dots attendees placed next to each.

Figure 4.3: Bicycle Category Results

	BICYCLE CATEGORY	DOTS
Higher Skill, Interest, & Confidence	Strong & Fearless	3
	Enthused & Confident	1
	Interested but Concerned	1
Lower Skill, Interest, & Confidence	Low Skill / Little Interest	1

Figure 4.4: Pedestrian Category Results

	PEDESTRIAN CATEGORY	DOTS
Higher Need, Interest, or Confidence	Walk Dependent / Choice Walkers	1
	Recreation / Leisure	3
	Low Skill / Children	0
Lower Skill, Interest, or Confidence	Mobility Impaired	0

Barriers to Walking and Bicycling

Attendees generally agreed with the existing barriers to walking and bicycling that the project team included on the activity board. Instead of adding additional barriers to the map, they talked with project team members, expanding on the issues related to the displayed barriers (such as railroad crossings, major intersections, etc.) by discussing their experiences with these barriers.

Future Network Mapping

During this activity, attendees reviewed the existing active transportation network and previously planned network from the 2009 active transportation plan. Attendees then helped draw conceptual networks that the project team later used as a guide in the network and project development process. Attendees further aided the project team by telling them about issues and considerations such as specific unsafe routes, places they bike often, roadways good for rural bicycling, etc. Chapter 5: Project Identification and Prioritization gives more detail on the proposed projects.

Project Open House

The project open house was the second and final open house of the TRATMP

project process. It was held on December 19th, 2017 with two different time slots, each held at a different location, to provide interested attendees with a choice of which time/location worked best for them. The first time slot was from 12:00 pm to 2:00 pm at the Life House Church in Texarkana, Arkansas. The second time slot was from 4:00 pm to 6:00 pm, once again held at the City Council Chambers in Texarkana, Texas. The primary objectives of this open house were to:

- Update the public on the plan's progress up to that point,
- Solicit public feedback on the results of the planning process,
- Gather public feedback on the conceptual active transportation networks and the list of proposed projects, and
- Give the public an opportunity to provide the project team with any additional comments and concerns.

Both time slots of this open house were set up similarly to the visioning open house; attendees could come and go freely within each time slot and the project team was on-hand to discuss the project with the public and address any questions or concerns they had. The project team installed a new set of exhibit boards at the open house to provide attendees with the necessary project information and solicit any desired feedback. Attendees were also encouraged to partake in an activity that involved reviewing/ranking the proposed projects.

Exhibit Boards

The project open house used a new set of exhibit boards different from those used at the visioning open house. There were fourteen boards total, all of which were informative rather than interactive. Regardless of the boards' informative nature, attendees were still encouraged to provide feedback to the project team on any of the information they saw on the boards. The exhibit boards included:

- Project Introduction, Project and Network Identification
- Conceptual Active Transportation Networks
- Overall Projects Map
- Project Profiles (eleven boards)

The purpose of the Project Introduction, Project and Network Identification board was to give anyone who did not attend the visioning open house a brief introduction to the project as well as to provide a description of the sources and analyses that the project team used during the project and network identification process.

The Conceptual Active Transportation Networks board displayed maps of the networks that resulted from the project team's analysis and the public feedback gathered through the visioning open house. These conceptual networks included urban bicycle corridors, rural bicycle corridors, pedestrian corridors, and the trail network.

The Overall Projects Map displayed a region wide map of all the proposed active transportation projects in the MPO area. The Project Profiles board displayed each proposed project in depth, including a map of each project, its name, description, length, Bicycle Level of Stress, project source(s), traffic volumes on the roadway

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(when applicable), posted speed range on the roadway (when applicable), and crashes on the roadway (when applicable).

Project Ranking and Feedback

At the project open house, attendees were given the chance to provide detailed feedback on the list of proposed projects. For this activity, the project team asked the attendees to review all the Project Profiles exhibit boards as well at the Overall Projects Map. After attendees familiarized themselves with the proposed projects, they were given an activity sheet and asked to pick five projects that they felt were the most important for the future of the Texarkana region, in essence providing the project team with a "top 5" ranking. In addition, participants were encouraged to leave any comments they had about the projects on their ranking sheets. As part of this ranking process, attendees were also given a facility design guidelines booklet. The booklet included a set of bicycle and pedestrian facility types and some general information about each. This booklet helped the participants gain a general understanding of the various types of facilities that could be built or installed in a bicycle or pedestrian network. The facility design guidelines are discussed in detail in Chapter 3: Design Guidelines.

After the completion of the activity, 31 of the 44 projects had been ranked in the "top 5" by at least one participant. The projects that received the most rankings overall were projects 019 and 025 with four each. Six other projects (006, 007, 013a, 015, 018, 029) received three rankings each.

Table 4.2 shows the results of the public project ranking activity, including the project IDs and the total number of times each project was ranked in someone's "top 5." For more in-depth project descriptions, please see Chapter 5. The table excludes the projects that were not ranked by any of the participants by the end of the activity. It is important to note that participants did not necessarily rank their "top 5" projects in order from best to worst, rather they simply picked five of the projects they thought were the most important.

Participants were encouraged to leave comments about specific projects on their ranking sheets or discuss the projects with a project team member, and a few different themes emerged from these comments:

- Install lighting or improve existing lighting to improve safety and visibility when it's dark.
- Poorer areas have a lack of facilities or their existing facilities are inadequate.
- Children and disabled people have been seen struggling to navigate dangerous areas.
- Better bicycle and pedestrian connections and facilities are needed in areas where children go often, such as schools and parks.
- Bicycle facilities need to be added or upgraded in areas that are dangerous but popular for cyclists.
- There are opportunities for general connectivity improvements to key destinations.

Table 4.2: Public Project Rankings

PROJECT ID	NUMBER OF TIMES RANKED IN "TOP 5"
002	2
003	2
004	1
005a	1
005b	1
006	3
007	3
008	2
009	2
010a	1
010b	1
012	1
013a	3
013b	2
014	2
015	3

PROJECT ID	NUMBER OF TIMES RANKED IN "TOP 5"
016	2
018	3
019	4
020	1
022	1
023	1
024	1
025	4
026	1
029	3
030	2
031	2
034	2
037	1
041	1

Other Open House Materials

As with the visioning open house, the project open house provided a sign-in sheet for attendees so the project team could have an understanding of what segments of the population were being represented. Comment cards were once again provided to attendees, however, attendees ended up discussing all of their comments, questions, and concerns directly with the project team or on their project ranking sheets.

General Comments

Some of the topics of discussion that came out of the Lifehouse Church open house time slot included those similar to many of the comments made about the projects on the project ranking sheets, such as connectivity improvements, the need for lighting, providing improved safety for children and the disabled, and the need for facilities in poor areas. Many of the comments that came out of the City Hall open house time slot

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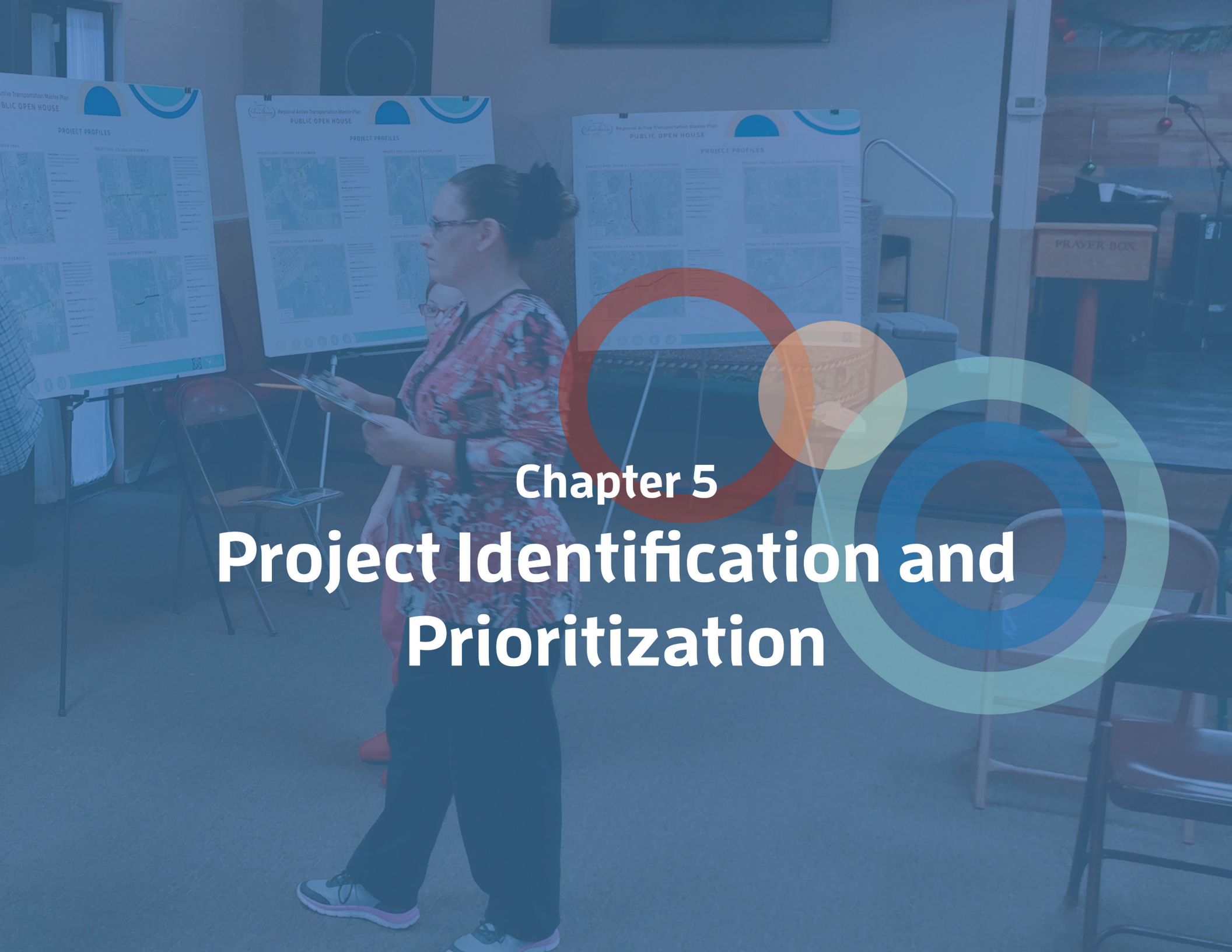
related to the trail network, specifically opportunities for connections, additional stakeholder groups, and possibilities for new right-of-way.

Other topics that emerged from attendees' discussions with project team members included the lack of sidewalks throughout the region (particularly in residential areas and near schools), maintenance along specific roadways, and considerations for safety and improved facilities in areas frequented by children.

Conclusion

The public outreach process for the Texarkana Regional Active Transportation Master Plan provided several opportunities for the public to engage in the planning process by getting informed and giving feedback. These opportunities gave the public a choice in whether they got involved remotely (through the user survey) or in person (at one of the open houses). The project team used the feedback provided by the public throughout this process to prioritize plan goals and proposed projects, as well as to create active transportation networks. This will enable the Texarkana community to feel ownership of their updated active transportation plan.



Chapter 5
Project Identification and Prioritization

5 Project Identification and Prioritization

Introduction

The public outreach and data analysis portion of the TRATMP culminated in a series of conceptual active transportation networks and projects meant to complete a connected and comprehensive active transportation system. These networks and projects were generated by reviewing previous plans, local plans, analyzing travel needs and dangerous locations, and through the public involvement efforts. Once projects were identified with the appropriate facility type and other improvements, they were reviewed and prioritized by the Texarkana MPO Technical Committee. Members of the general public were also given an opportunity to identify their top project priorities.

Conceptual Active Transportation Networks

Four types of networks define the active transportation system and include an urban bicycle network, a pedestrian network, a roadway bicycle network, and a trail network. Figures 5.1 – 5.3 illustrate those networks. Each network is meant to provide regional mobility throughout the Texarkana MPO Study Area.

Conceptual Roadway Bicycle Network

The roadway bicycle network consists of four elements that are located within the roadway space, including priority bicycle corridors, linking bicycle corridors, both of which are mostly located in more urbanized locations, existing shoulders and recommended new shoulders/ upgrades, which are generally located in areas that are more rural.

Priority bicycle corridors illustrate roadways that are major regional thoroughfares that would vastly improve regional bicycle connectivity. Based on the typology of these roadways, it is likely that they would require higher levels of investment to create a safe bicycle environment. Linking corridors provide pivotal connections to priority corridors and typically require less investment to improve safety and mobility in the region.

Outside of the urbanized core, shoulders can provide regional mobility, however, roadway design and context only allows for certain types of facilities to be built. The existing shoulder network should be completed by upgrading sub-par shoulders and/or adding new shoulders. It is important to note that due to roadway and surrounding land use context and DOT standards, “shoulders” could be interpreted in several ways, not solely based on the description noted in Chapter 3. For example, if a curb and gutter section is the typical design standard, a buffered bike lane or shared 14’ lane with ample bicycle awareness signage could provide a safe facility for bicyclists. Note that existing and recommended shoulders shown in Figure 5.1 located along interstates refer to frontage roads and not the interstate mainlanes. A context sensitive approach is recommended when designing for corridors identified “Recommended/New Shoulder Upgrades or Similar Facility.”

Conceptual Pedestrian Network

Pedestrian Corridors are broken into two categories, priority pedestrian corridors and linking streets. Priority pedestrian corridors improve regional mobility along major roadways in the urban area. Linking Streets provide pivotal connections to Priority Corridors from major destinations and neighborhoods.

Trail Network

The Trail Network consists of existing and planned off-road trail facilities. Trail facilities provide the highest level of comfort for users and allow users to travel long distances in the region on a continuous facility. Consideration should be made where facilities intersect major roadways to ensure safe crossings are provided for users. The trail network ties into pedestrian and bicycle corridors to provide a complete network.

Active Transportation Recommendations for Previously (or Currently) Programmed Roadway Projects

The following projects are previously (or currently) programmed in the MPO TIP and/or MTP for both Texas and Arkansas and were considered during the public involvement, network development, and project identification phase of this plan.

FM 989 (TX)

This roadway project extends from IH 30 to US 82. This project coincides with Project #039 shown in this chapter and includes buffered bike lanes and sidewalks as the recommended facilities. A shared 14' lane would also be suitable in this location should ample bicycle awareness signage be provided. General public perception on projects outside of the loop was that a wide shoulder or similar bicycle facility, such as a bike lane or shared use path paired with signage would improve rural recreational cycling conditions.

US 82 (TX)

This roadway project extends from IH 369 to FM 989 along US 82. No specific project recommendations were determined during the outreach and network design process, however, Project #020 directly east of this roadway segment recommends a bicycle lane. A continuation of that bicycle lane to connect to Project #031 (Wagner Creek Trail) aligns with the recommended "Recommended/New Shoulder Upgrades or Similar Facility" and is recommended for this roadway segment. In addition, the conceptual pedestrian network recommends that sidewalks be included in this segment as it is categorized as a "linking street."

FM 1397 - Summerhill Road (TX)

This roadway project extends from North Park Road to University Avenue and corresponds with Project #015 shown in this chapter. Project #015 proposes bike lanes and sidewalks as the recommended facilities along this corridor. This was a key corridor mentioned by the public as needing improved bicycle and pedestrian facilities.

5 Project Identification and Prioritization

US 67 (TX)

This roadway project extends from FM 989 to FM 2148 along US 67. No specific project recommendations were determined during the outreach and network design process, however, the Conceptual Roadway Network highlights this segment as a "Recommended/New Shoulder Upgrades or Similar Facility." Recommended bicycle accommodations along this corridor include a bicycle lane in more urban areas and a wide shoulder in the rural segments.

Highway 71 - Stateline (AR)

This roadway project extends from Highway 67 to IH-30. This project coincides with Project #025 that includes extensive sidewalk investment, should they be part of the roadway project. In terms of on road facilities, this corridor is highlighted as a Priority Bicycle Corridor. No specific project recommendation was made due to parallel routes being preferred by the public, however, ample investment (i.e. protected bike lanes) could significantly improve bicycle travel along this corridor.

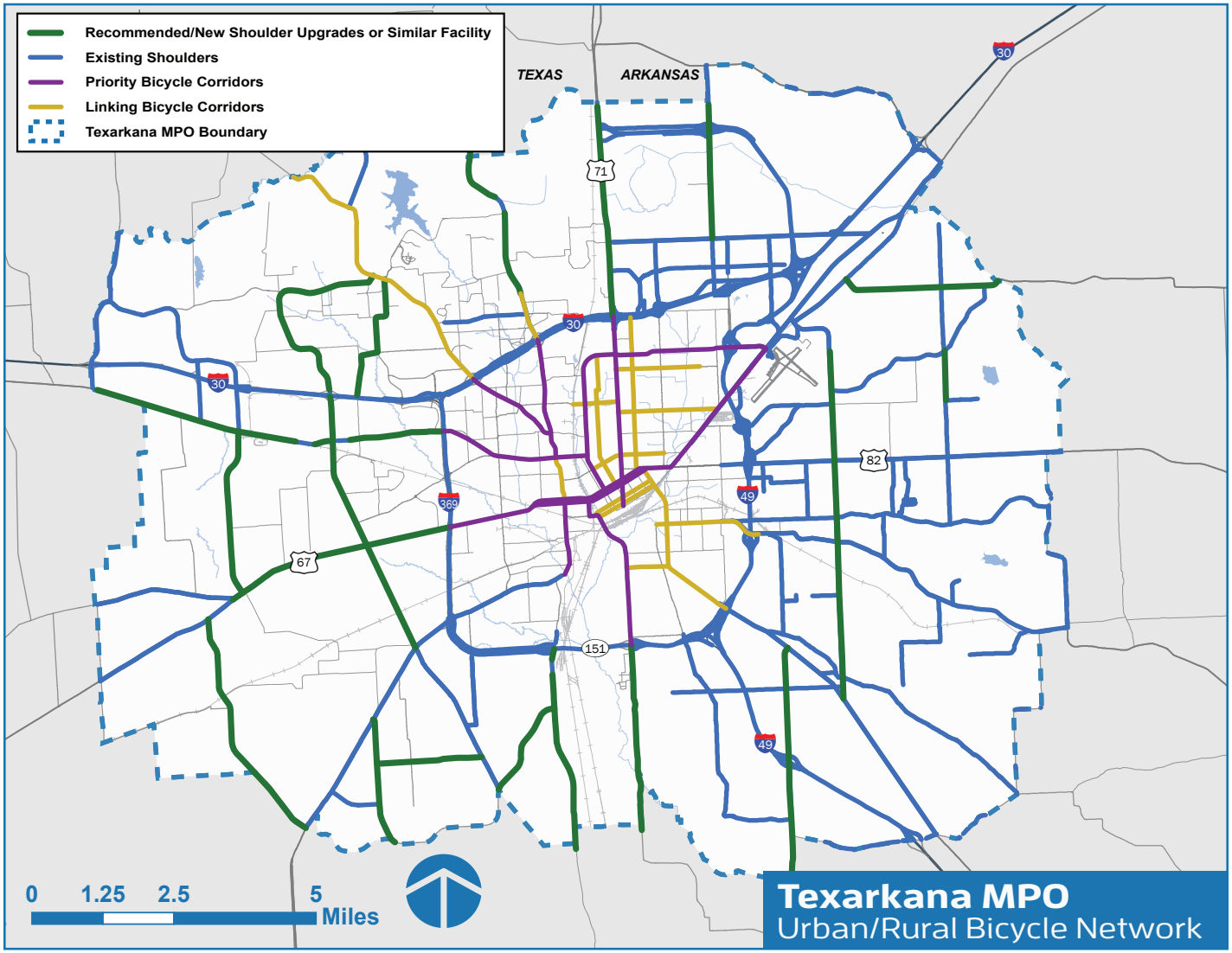
Highway 67 (AR)

This roadway project extends from the Texas State Line to I49. A portion of this project coincides with the improved bicycle infrastructure identified in Projects #010a and #010b. This roadway also coincides with Project #023, which calls for sidewalk improvements. The segment is categorized as a Priority Bicycle Corridor. This roadway is categorized as a Priority Pedestrian corridor and would benefit from improved sidewalk access throughout.

US 82 (AR)

This roadway project extends from the Highway 67 to I49. This project coincides with Projects #010a, #010b and #023 and includes bicycle and pedestrian elements. This roadway is classified as a Priority Pedestrian corridor.

Figure 5.1: Conceptual Roadway Bicycle Network



5 Project Identification and Prioritization

Figure 5.2: Conceptual Pedestrian Network

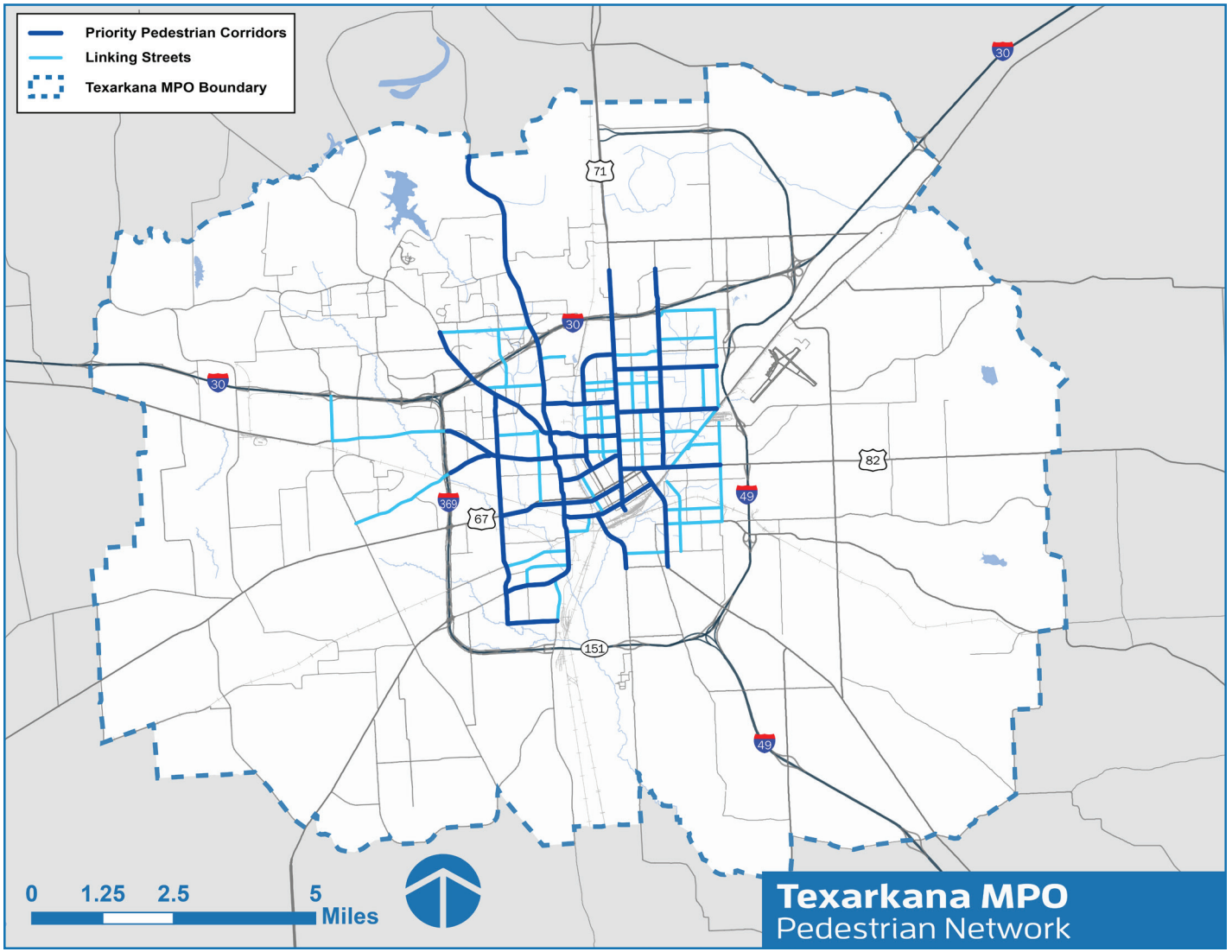
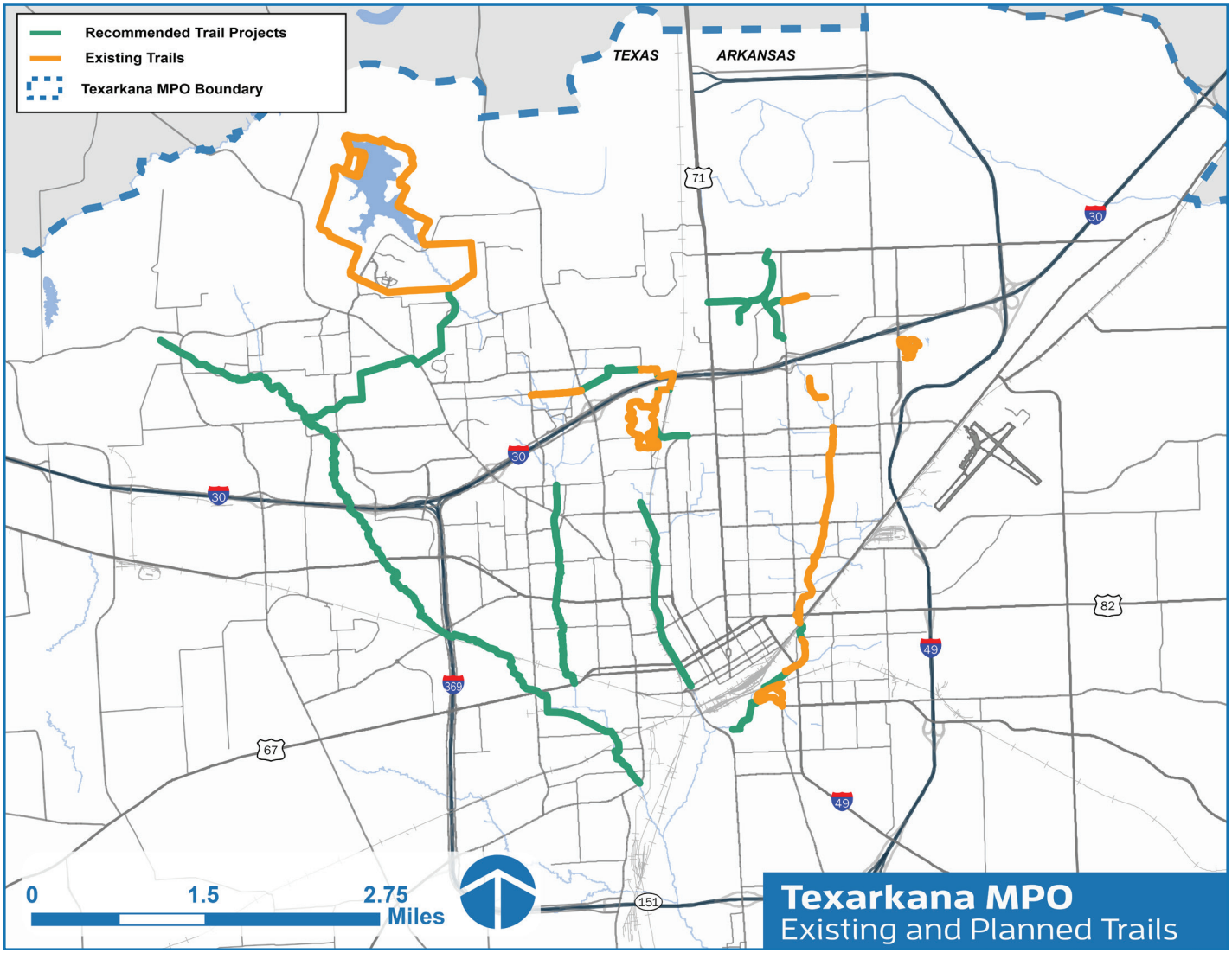


Figure 5.3: Conceptual Trail Network



5 Project Identification and Prioritization

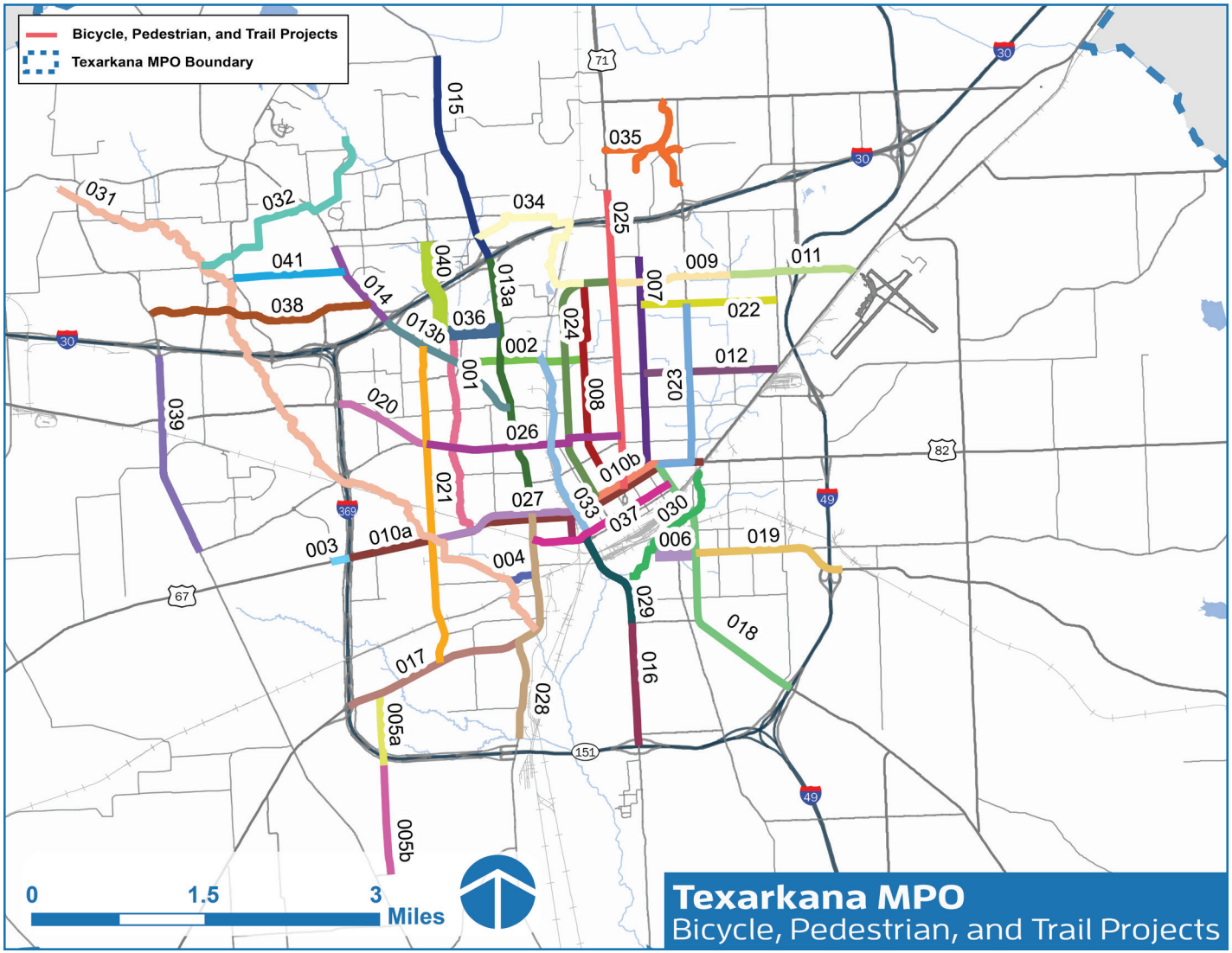
Project Identification

To complete the conceptual networks listed above, the project team developed a set of bicycle and pedestrian projects. Projects were developed using public input and the outcomes of the data analysis. Figure 5.4 shows all project extents. Table 5.1 lists each project individually and includes their Project ID and Project Name.

Table 5.1: Project List

PROJECT ID	PROJECT NAME
001	Cowhorn Creek Trail
002	College Dr. Sidewalk & Bicycle Lane
003	7th St. Sidewalk
004	North St. Sidewalk
005	Leopard Dr. Bicycle Lane & Sidewalks
006	Division St. Sidewalk
007	County Ave. Shared Lane
008	Olive St. Bicycle Infrastructure
009	Texas Blvd./Arkansas Blvd. Sidewalk
010A	7th St. Bicycle Infrastructure
010B	W Dr. MLK Jr Blvd. Bicycle Infrastructure
011	Arkansas Blvd. Bicycle Lane
012	E 24th Bicycle Infrastructure & Sidewalk
013A	Lake Dr./Summerhill Rd. Bicycle Lane & Sidewalk
013B	Richmond Rd. Bicycle Lane & Sidewalk
014	Richmond Rd. Bicycle Infrastructure
015	Summerhill Rd. Bicycle Infrastructure & Sidewalk
016	State Line Ave. Bicycle Lane
017	State Line Ave. Bicycle Lane Lake Dr. Bicycle Lane
018	Hickory St./East St. Bicycle Infrastructure
019	Division St. Bicycle Infrastructure
020	New Boston Rd. Bicycle Lane
021	Robison Rd. Sidewalk Improvements
022	E 35th St. Sidewalk Improvements
023	Jefferson Ave. Sidewalk Improvements
024	Texas Blvd. Sidewalk Improvements
025	N State Line Ave. Sidewalk Improvements
026	New Boston Rd. Sidewalk Improvements
027	US Hwy 67 Sidewalk Improvements
028	Old Buchanan Rd. Sidewalk Improvements
029	S State Line Ave. Sidewalk Improvements
030	Southeast Connector Trail
031	Wagner Creek Trail
032	Northwest Connector Trail
033	Swampoodle Creek Trail
034	North Connector Trail
035	Trinity Bike/Ped Trail
036	Kennedy Ln. Sidewalk
037	W 4th St. Bicycle Infrastructure & Sidewalk
038	Gibson Ln. Sidewalk
039	N Kings Hwy Bicycle Lane & Sidewalk
040	Cowhorn Creek Rd. Bicycle Lane & Sidewalk
041	McKnight Rd. Bicycle Lane & Sidewalk

Figure 5.4: Bicycle, Pedestrian, and Trail Projects



5 Project Identification and Prioritization

Project Prioritization

Once project details and extents were finalized, the Texarkana MPO held a project prioritization workshop on November 30, 2017. The prioritization workshop included members of the TMPO Technical Committee. At the workshop, the Technical Committee recommended several additional projects and several changes to projects. Once those additions and changes were made, the project team distributed revised scoring sheets to ensure updated projects were included in the Project Prioritization Process.

Evaluation Criteria

To prioritize the projects, the Technical Committee utilized a series of evaluation criteria that support the goals of the TRATMP. Evaluation criteria included:

- Provide Safe Routes to School for Children
- Create a connected network of bicycle and pedestrian paths and trails
- Build a complete network of on-road bike lanes
- Fill in sidewalk gaps to create a complete sidewalk network
- Create bicycle and pedestrian friendly communities to boost economic activity
- Create a transportation network for all ages/ability levels
- Provide access to transit stops using sidewalks and bike facilities
- Improve bicycle and pedestrian safety along roadways

Prior to scoring each project, the Technical Committee ranked the evaluation criteria based on their perceived importance to improving the Regional Active Transportation Network. Evaluation criteria were then weighted based on their perceived importance. Table 5.2 illustrates Evaluation Criteria/Goal importance and their final ranking/weight.

Table 5.2: Evaluation Criteria Weighting

GOAL	WEIGHT
Provide safe routes to school for children	1.6
Fill in sidewalk gaps to create a complete sidewalk network	1.5
Create a transportation network for all ages/ability levels	1.4
Provide access to transit stops using sidewalks and bike facilities	1.4
Improve bike/ped safety along roadways	1.4
Create bike/ped friendly communities to boost economic activity	1.3
Create a connected network of bike/ped paths and trails	1.2
Build a complete network of on-road bike lanes	1

Priority Ranking

Projects were ranked using the Evaluation Criteria. The following three Priority Ranking tables (Table 5.3 - 5.5) provide an Overall Ranking, Texas Priorities and Arkansas Priorities. Based on the weights listed above the lowest possible score a project could receive was 10.8, which would indicate that for each criterion, the

project was given a score of 1. The highest potential score was 54, meaning that for each criterion, the project was given a score of 5. The average score for all projects was approximately 36.

Table 5.3: TRATMP Overall Project Priority Ranking

RANK	PROJECT ID	PROJECT SCORE
1	025	44.98
2	023	44.34
3	024	43.18
4	037	42.61
5	021	42.45
6	013A	41.97
7	026	41.73
8	041	41.34
9	009	40.72
10	022	40.47
11	027	40.33
12	013B	39.92
13	010A	39.71
14	028	38.14
15	040	38.1
16	036	37.9
17	020	37.35
18	005	37.11
19	010B	37.05
20	011	36.95
21	008	36.84
22	001	36.28
23	007	36.20
24	038	35.89
25	002	35.82
26	034	35.71
27	006	35.23
28	017	35.20
29	031	35.15
30	012	34.99
31	039	34.76
32	019	33.49
33	015	33.31
34	033	31.90
35	032	31.87
36	014	31.64
37	018	31.53
38	029	31.40
39	016	31.02
40	030	30.69
41	035	30.29
42	003	28.84
43	004	24.10

Table 5.4: Arkansas Priority Ranking

RANK	PROJECT ID	PROJECT SCORE
1	025	44.98
2	023	44.34
3	037	42.61
4	009	40.72
5	022	40.47
6	010A	39.71
7	010B	37.05
8	011	36.95
9	007	36.20
10	006	35.23
11	012	34.99

5 Project Identification and Prioritization

RANK	PROJECT ID	PROJECT SCORE
12	019	33.49
13	018	31.53
14	029	31.4
15	016	31.02
16	030	30.69
17	035	30.29

Table 5.5: Texas Priority Ranking

RANK	PROJECT ID	PROJECT SCORE
1	025	44.98
2	024	43.18
3	037	42.61
4	021	42.45
5	013A	41.97
6	026	41.73
7	041	41.34
8	009	40.72
9	027	40.33
10	013B	39.92
11	010A	39.71
12	028	38.14
13	040	38.1
14	036	37.9
15	020	37.35
16	005	37.11
17	010B	37.05
18	008	36.84
19	001	36.28
20	038	35.89
21	002	35.82
22	034	35.71
23	017	35.20
24	031	35.15
25	039	34.76
26	015	33.31
27	033	31.90
28	032	31.87
29	014	31.64
30	029	31.40
31	016	31.02
32	035	30.29
33	003	28.84
34	004	24.10

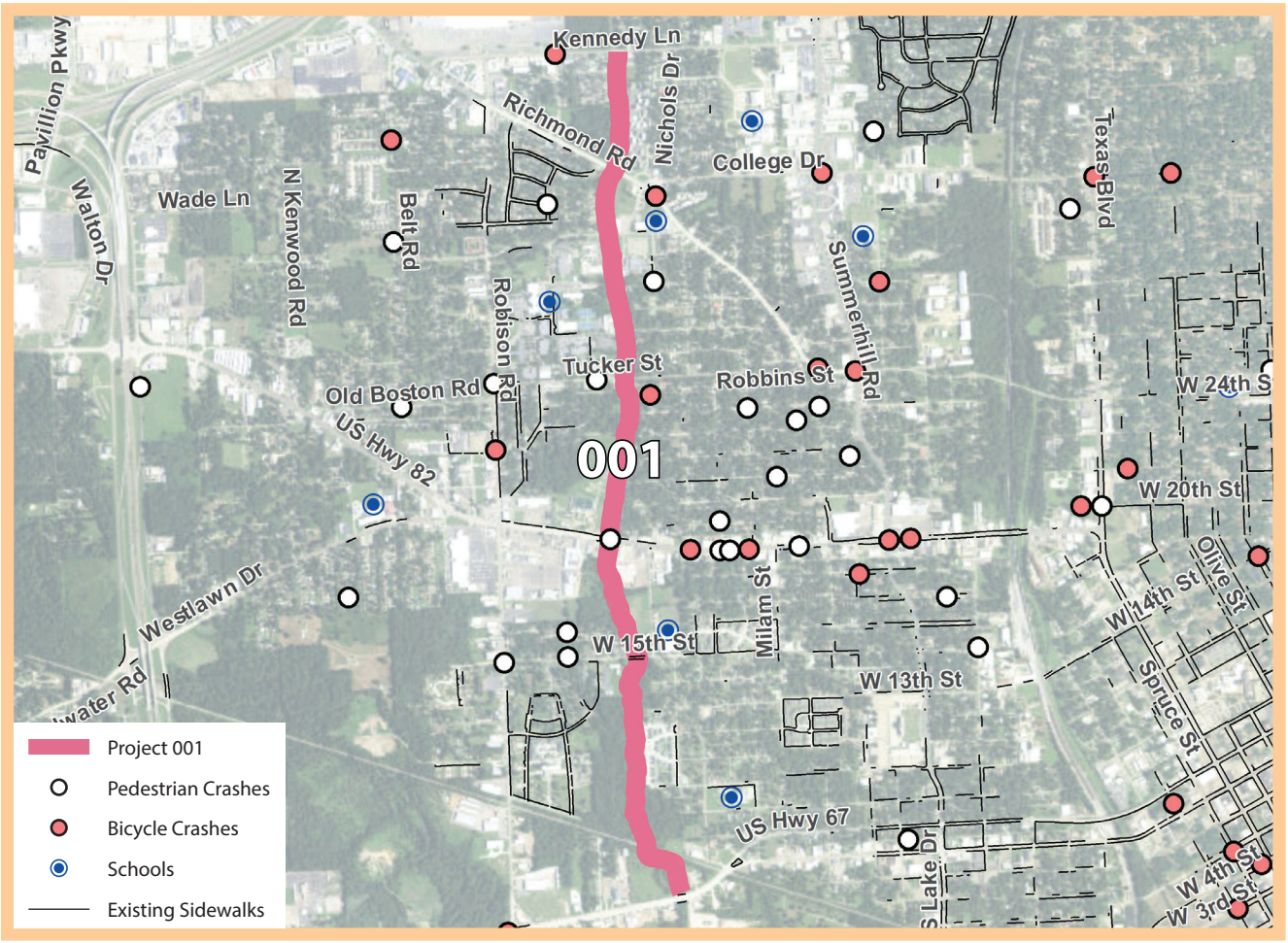
Project Details

The following section illustrates each project recommended as part of this active transportation master plan. Each project includes the following details:

- Project ID and Name
- Project Map with key details
- Project Descriptions
- Length of Project
- Project Extents
- Bicycle Level of Stress (near roadway projects only)
- Project Source
- Traffic Volumes along Project
- Posted Speed Limits along Project
- Crashes per Mile (2010-2017)
- Program Level Project Costs

PROJECT 001: COWHORN CREEK TRAIL

RANK: #22 OVERALL | #14 TEXAS **SCORE: 36.28**



Description: Construct bicycle and Pedestrian trail along Cowhorn Creek from Kennedy Lane to the proposed US Bike Route 84.

Length: 2.34 miles

Bicycle Level of Stress: N/A

Project Source: 2009 Plan, Public Open House

Traffic Volume (ADT): N/A

Posted Speed: N/A

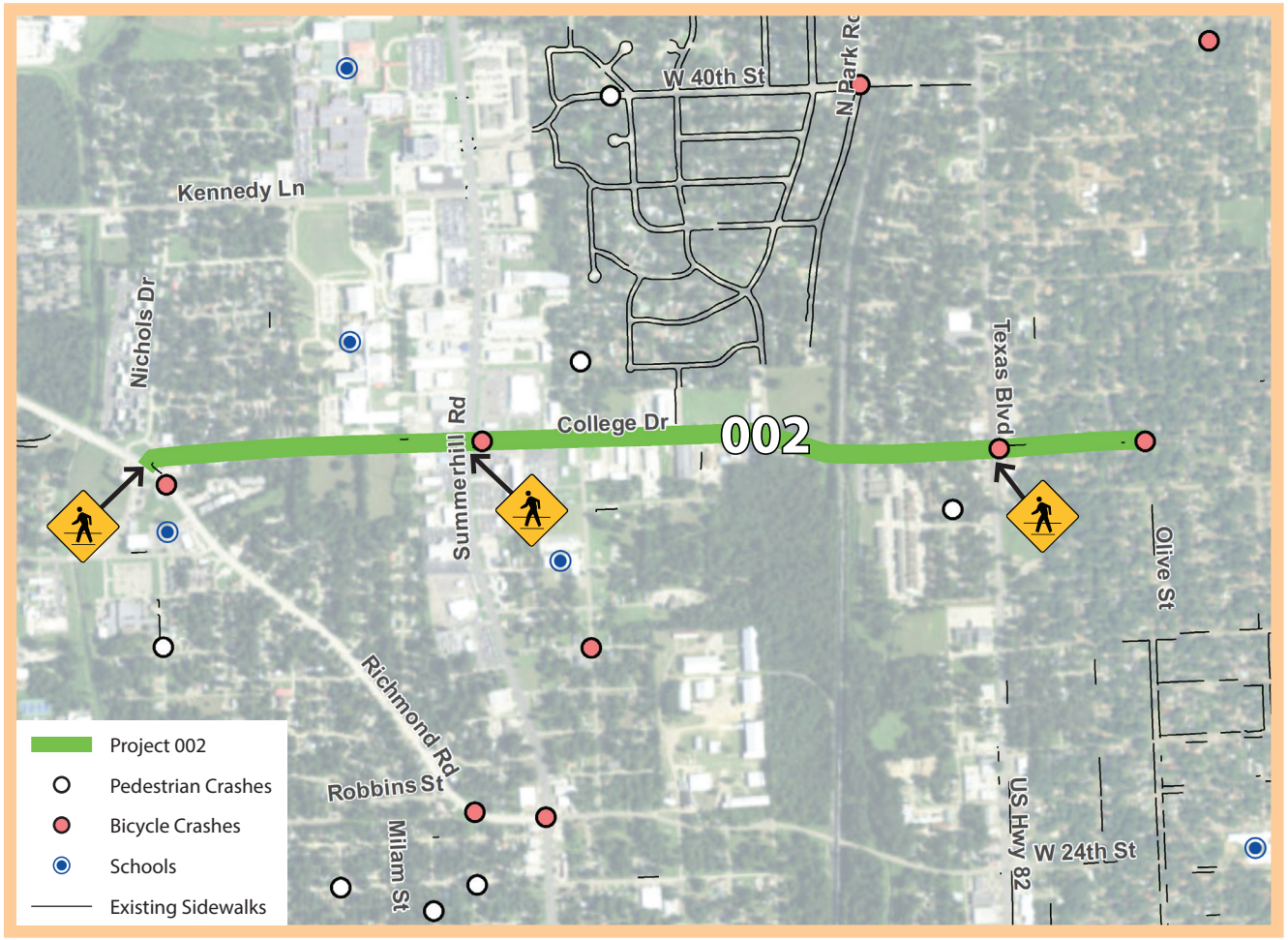
Crashes: N/A

Estimated Project Cost:
Project Element Cost: $1,125,000
Design: $73,100
Contingency/Management: $168,800
Total Project Costs: $1,367,400

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 002: COLLEGE DR SIDEWALK & BICYCLE LANE

RANK: #25 OVERALL | #16 TEXAS **SCORE: 35.82**



Description: Construct sidewalks along College Drive between Olive Street and Richmond Road. Improve pedestrian crossings at Texas Boulevard and tie into existing crossings at Summerhill Road and Richmond Road. Construct bicycle lanes along College Drive between Richmond Road and Olive Street.

Length: 1.38 miles

Bicycle Level of Stress: Moderate Stress / Comfort

Project Source: 2009 Plan, Sidewalk Connectivity Analysis, Public Open House, MPO / City Staff

Traffic Volume (ADT): 5,125

Posted Speed: 30 - 35 mph

Crashes: 230 per mile

Estimated Project Cost:
Project Element Cost: $562,700
Design: $56,300
Contingency/Management: $84,400
Total Project Costs: $703,400

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 003: 7TH ST SIDEWALK

RANK: #42 OVERALL | #25 TEXAS **SCORE: 28.84**

Description: Construct sidewalks along W 7th Street/US Hwy 67 from Wake Village Road to Robison Road. Install pedestrian crossings at W 7th Street and Wake Village Road, W 7th Street and Kilgore Road, and at W 7th Street and Robison Road.

Length: 1.15 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: MPO / City Staff

Traffic Volume (ADT): 13,779

Posted Speed: 45 mph

Crashes: 215 per mile

Estimated Project Cost:
Project Element Cost: $860,300
Design: $68,800
Contingency/Management: $129,000
Total Project Costs: $1,058,100

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 004: NORTH ST SIDEWALK

RANK: #43 OVERALL | #26 TEXAS **SCORE: 24.08**

Description: Construct sidewalks along North Street from Wagner Creek Trail (Project 03I) to S Lake Drive. Install pedestrian crossings at the intersection of the Trail with North Street.

Length: 0.34 miles

Bicycle Level of Stress: Low Stress / High Comfort

Project Source: 2009 Plan, MPO / City Staff

Traffic Volume (ADT): 501

Posted Speed: 30 mph

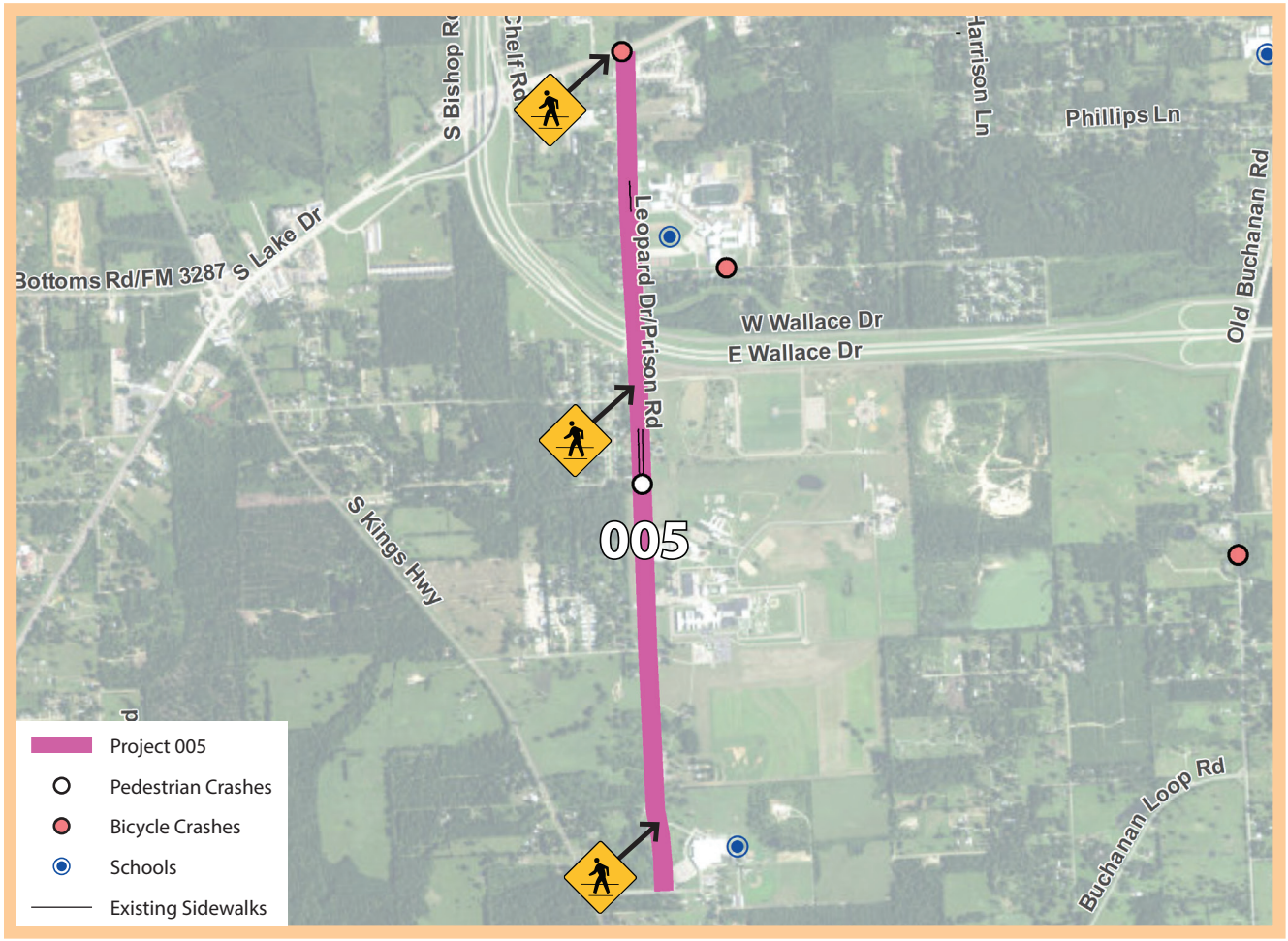
Crashes: 0 per mile

Estimated Project Cost:
Project Element Cost: $129,000
Design: $12,900
Contingency/Management: $19,400
Total Project Costs: $161,300

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 005: LEOPARD DR BICYCLE LANE & SIDEWALKS

RANK: #18 OVERALL | #12 TEXAS **SCORE: 37.11**



Description: Construct buffered bicycle lanes along Leopard Drive from S Lake Drive to Stipp Road. Construct sidewalks along Leopard Drive from S Lake Drive to Liberty-Eylau Middle School. Install pedestrian crossings at S Lake Drive and Leopard Drive, at Leopard Drive and Grady T Wallace Soccer Complex, and at the Liberty-Eylau Middle School entrance.

Length: 2.01 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: 2009 Plan, Bicycle Level of Stress Analysis

Traffic Volume (ADT): 2,365

Posted Speed: 30 - 45 mph

Crashes: 13 per mile

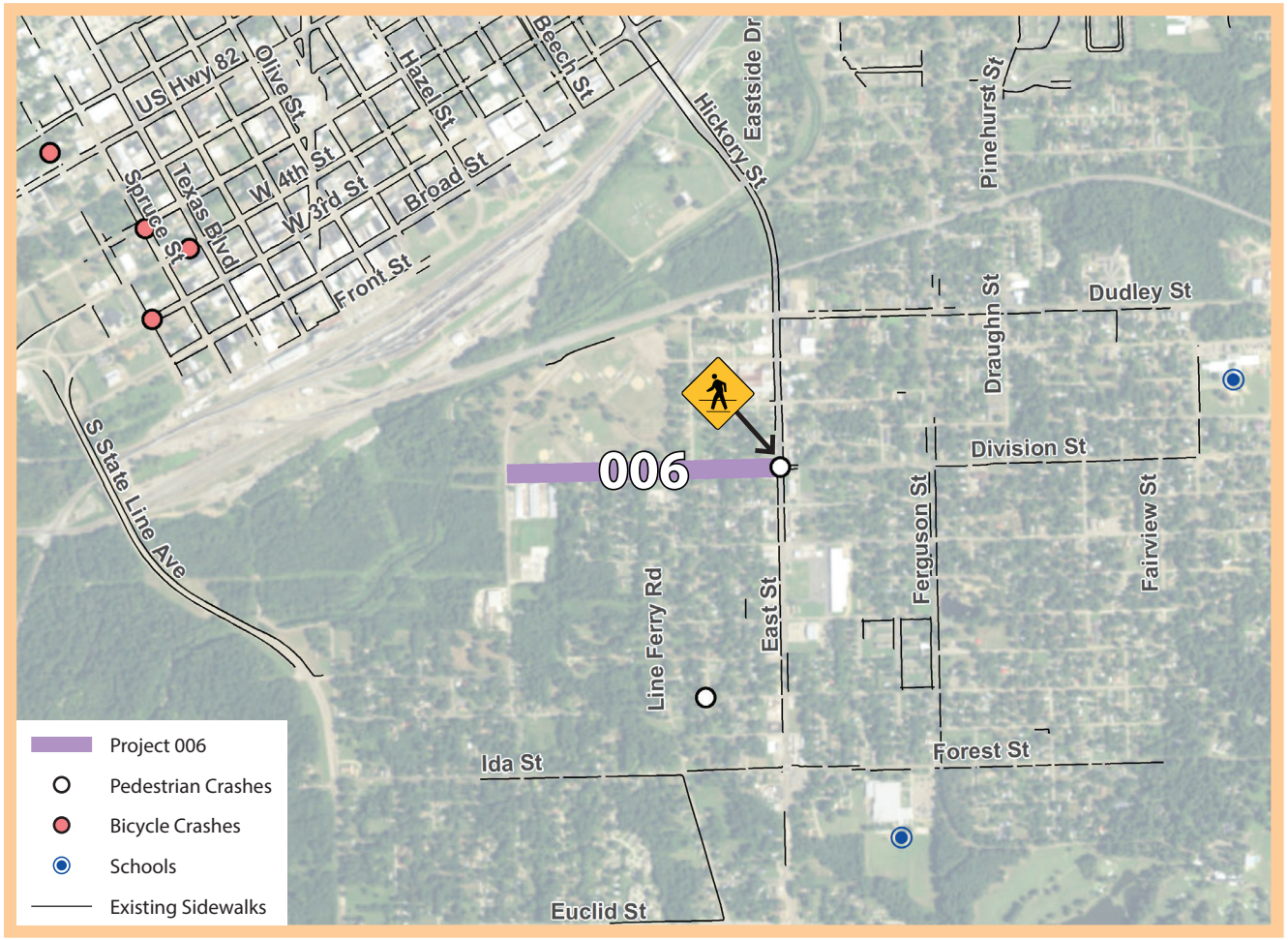
Estimated Project Cost:
Project Element Cost: $153,000
Design: $15,300
Contingency/Management: $23,000
Total Project Costs: $191,300

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 006: DIVISION ST SIDEWALK

RANK: #27 OVERALL | #5 ARKANSAS **SCORE: 35.23**



Description: Construct sidewalks along Division Street from Roberts Street to East Street. Install pedestrian crossings at Division Street and East Street.

Length: 0.45 miles

Bicycle Level of Stress: Moderate Stress / Comfort

Project Source: 2009 Plan, Public Open House

Traffic Volume (ADT): 3,200

Posted Speed: 30 mph

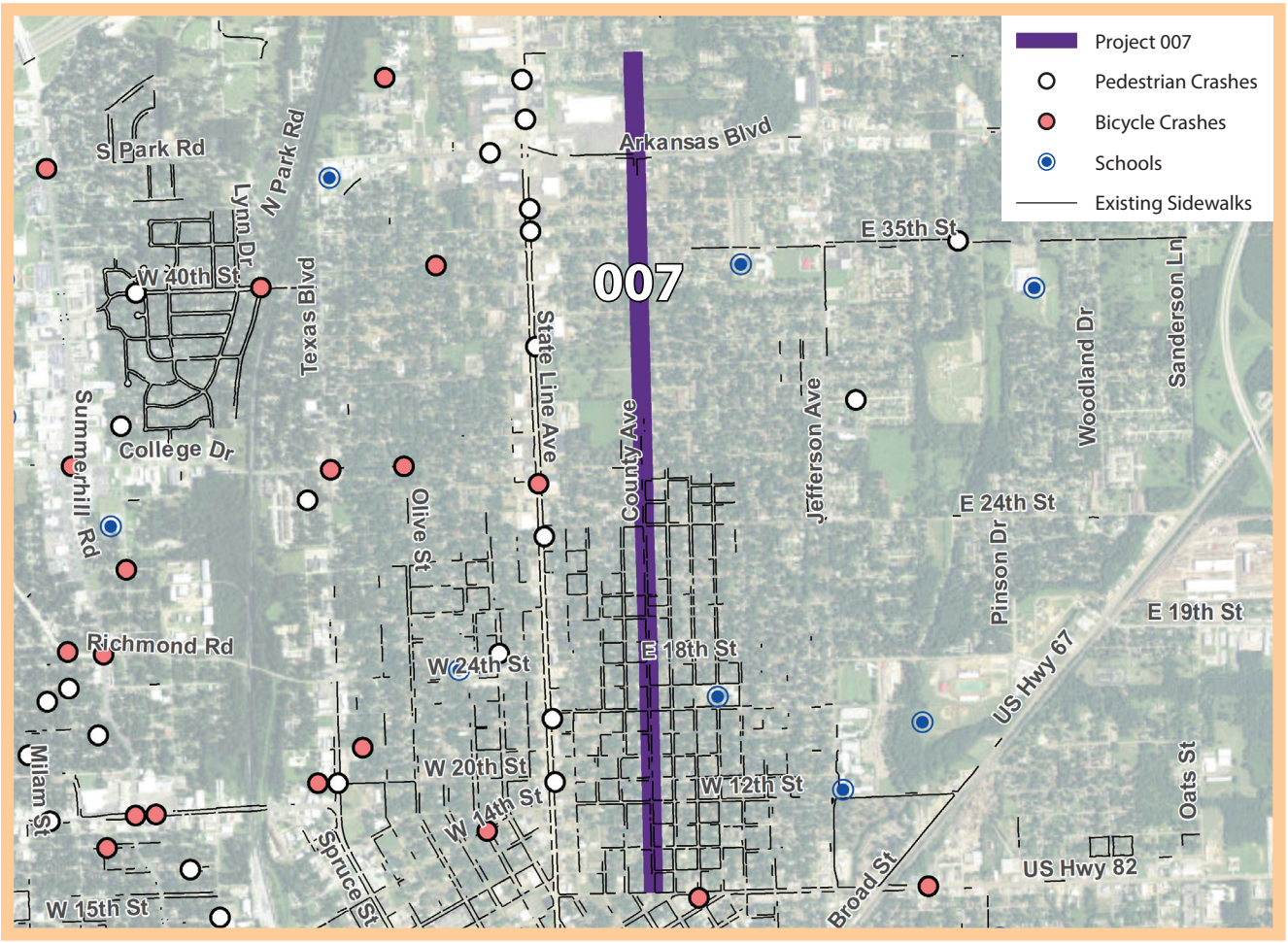
Crashes: 36 per mile

Estimated Project Cost:
Project Element Cost: $116,700
Design: $11,700
Contingency/Management: $17,500
Total Project Costs: $145,900

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 007: COUNTY AVE BIKE LANE

RANK: #23 OVERALL | #4 ARKANSAS **SCORE: 36.20**



Description: Create a bike lane along County Avenue from E 42nd Street to E 9th Street that provides a parallel bike route to State Line Ave on a lower stress roadway.

Length: 2.3 miles

Bicycle Level of Stress: Moderate Stress / Comfort

Project Source: 2009 Plan, Connectivity Analysis

Traffic Volume (ADT): 4,300

Posted Speed: 30 mph

Crashes: 10 per mile

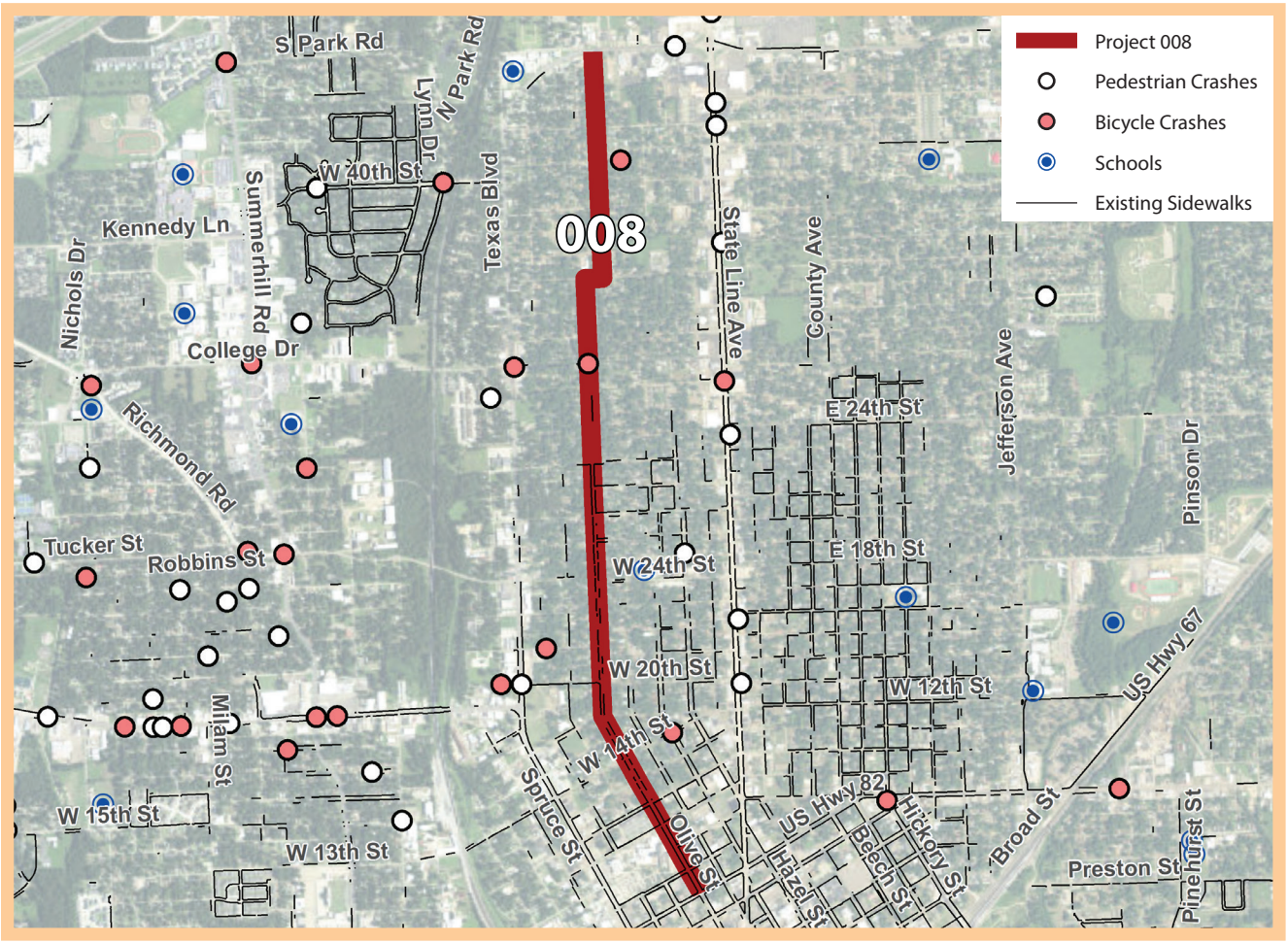
Estimated Project Cost:
Project Element Cost: $111,700
Design: $11,200
Contingency/Management: $16,800
Total Project Costs: $139,700

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 008: OLIVE ST BICYCLE INFRASTRUCTURE

RANK: #21 OVERALL | #13 TEXAS **SCORE: 36.84**



Description: Paint sharrows and install shared lane signage along Olive Street from Texas Boulevard to W Dr Martin Luther King Jr Boulevard. Although the speeds are high on this roadways, the recommended shared lane markings are due to the low volume of traffic.

Length: 2.39 miles

Bicycle Level of Stress: Moderate Stress / Comfort

Project Source: Public Open House, Connectivity Analysis

Traffic Volume (ADT): 276

Posted Speed: 30 mph

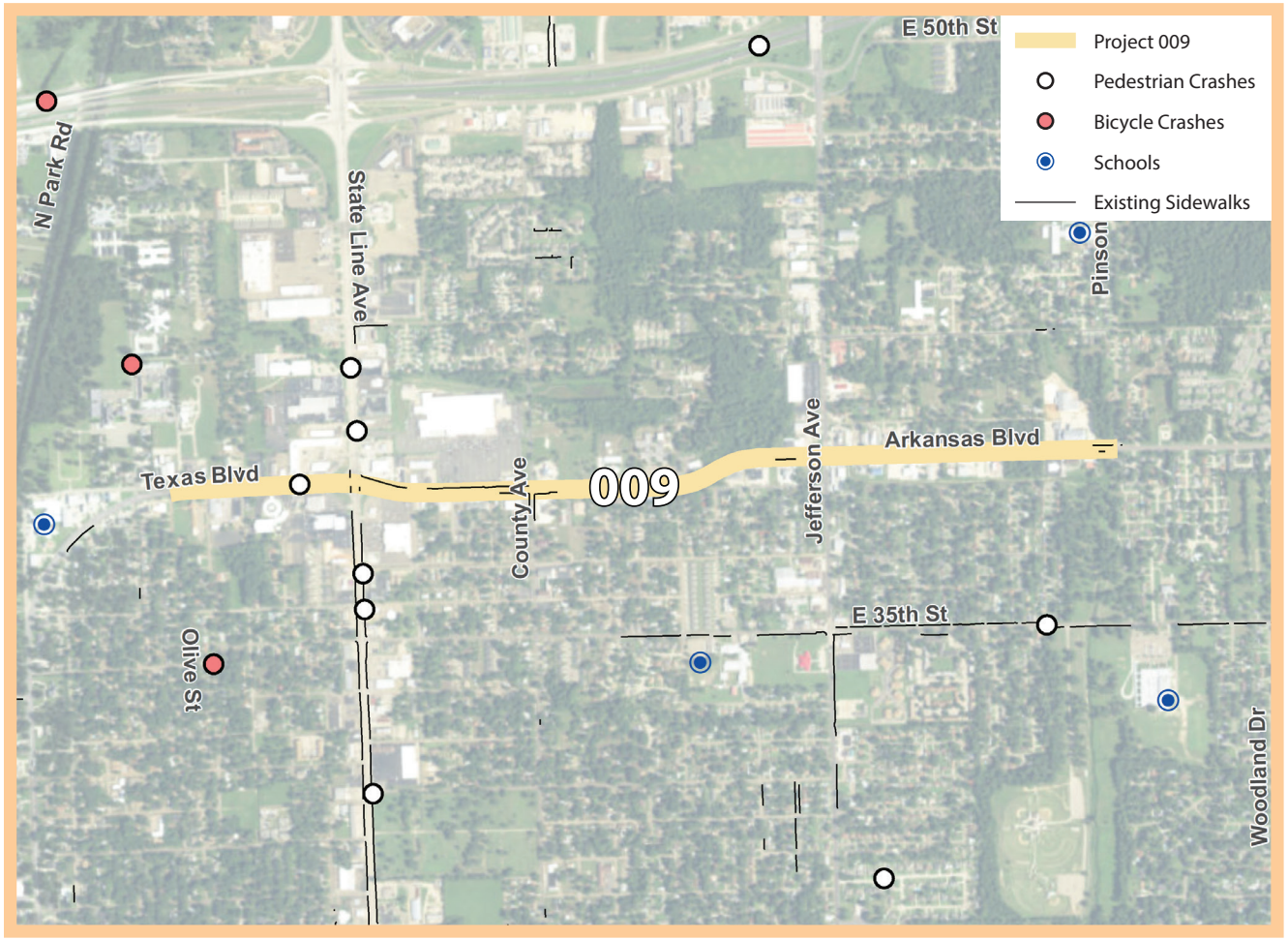
Crashes: 19 per mile

Estimated Project Cost:
Project Element Cost: $16,100
Design: $1,600
Contingency/Management: $2,400
Total Project Costs: $20,100

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 009: TEXAS BLVD / ARKANSAS BLVD SIDEWALK

RANK: #9 OVERALL | #3 TEXAS/ARKANSAS **SCORE: 40.72**



Description: Construct sidewalks and fill sidewalk gaps along Texas Boulevard and Arkansas Boulevard from Olive Street to Pinson Drive. Install pedestrian crossings at State Line Avenue. Improve crossings at County Avenue, Jefferson Avenue, and Pinson Drive.

Length: 1.63 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: MPO / City Staff

Traffic Volume (ADT): 13,903

Posted Speed: 40 mph

Crashes: 145 per mile

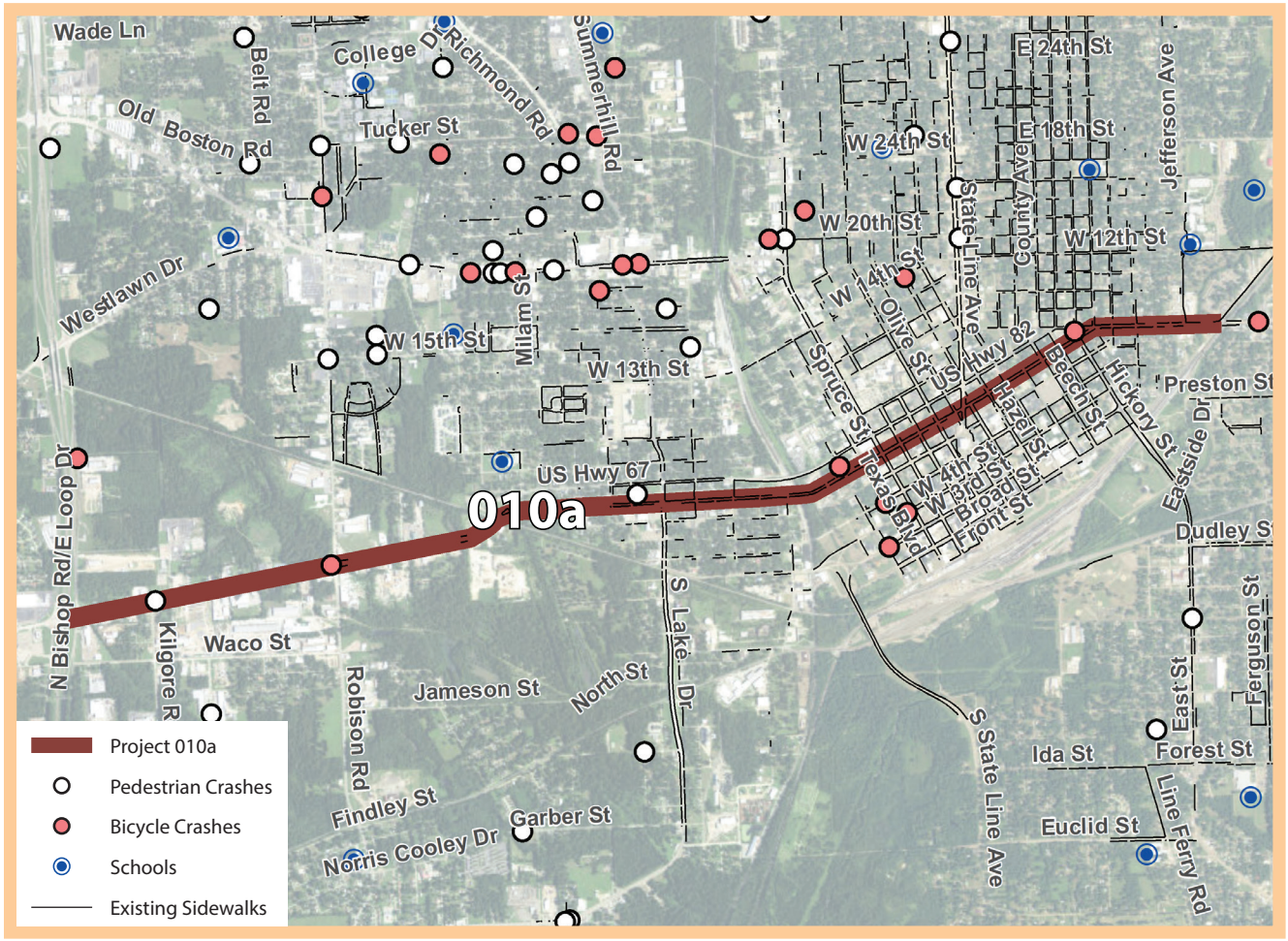
Estimated Project Cost:
Project Element Cost: $518,600
Design: $41,500
Contingency/Management: $77,800
Total Project Costs: $637,900

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 010A: 7TH ST BICYCLE INFRASTRUCTURE

RANK: #13 OVERALL | #4 TEXAS/ARKANSAS **SCORE: 39.71**



Description: Construct buffered bike lanes and signage along 7th Street and 9th Street from E Loop Drive to E Broad Street.

Length: 4.14 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis, Bicycle Level of Stress Analysis

Traffic Volume (ADT): 10,931

Posted Speed: 35 - 45 mph

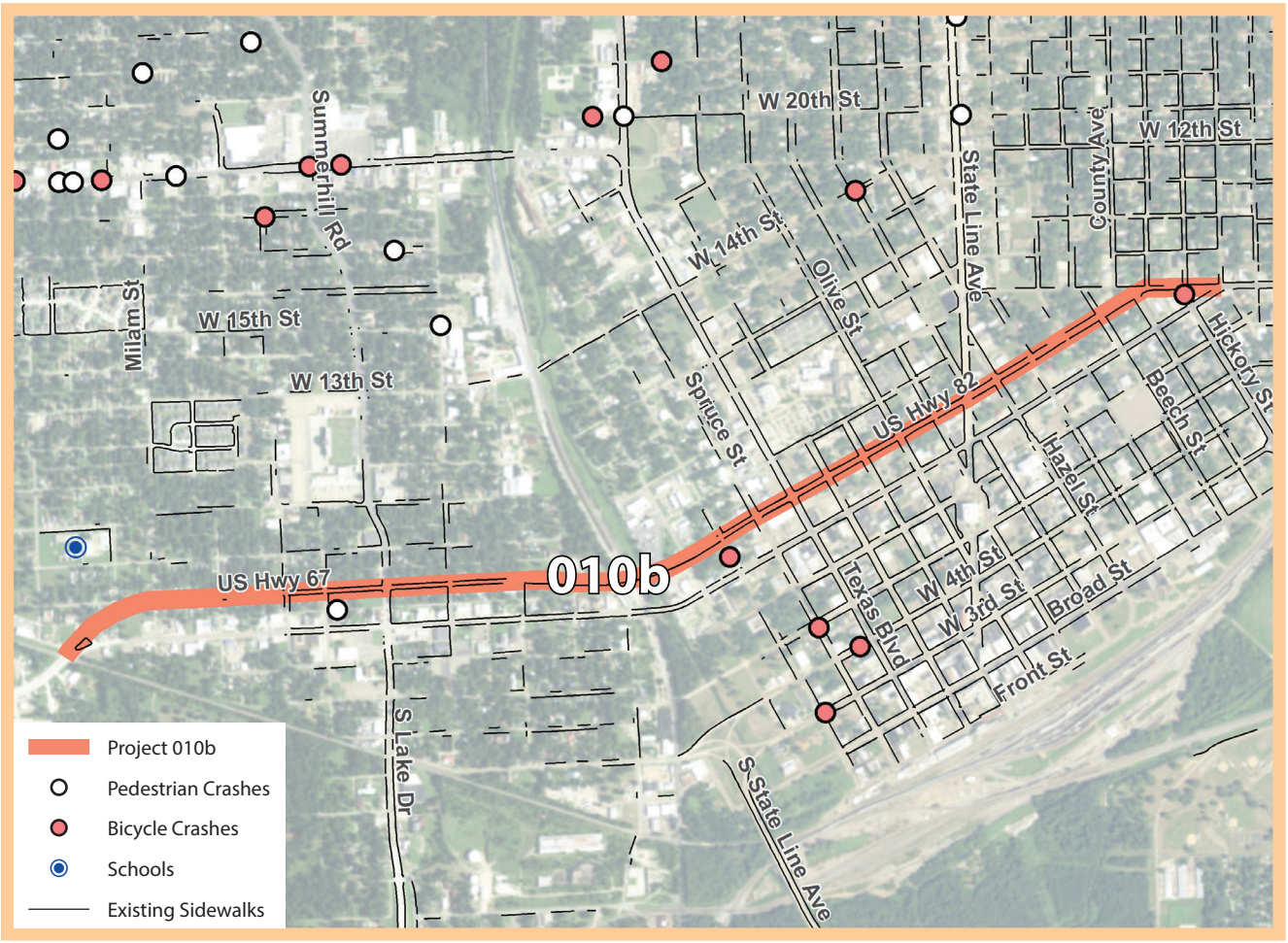
Crashes: 78 per mile

Estimated Project Cost:
Project Element Cost: $152,800
Design: $15,300
Contingency/Management: $22,900
Total Project Costs: $191,000

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 010B: W DR MLK JR BLVD BICYCLE INFRASTRUCTURE

RANK: #19 OVERALL | #5 TEXAS/ARKANSAS **SCORE: 37.05**



Description: Construct buffered bike lanes and install signage along W Dr Martin Luther King Jr Boulevard and 9th Street from W 7th Street to Locust Street.

Length: 2.21 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Project Team, Public Open House, Bicycle Level of Stress Analysis

Traffic Volume (ADT): 12,562

Posted Speed: 35 - 40 mph

Crashes: 15 per mile

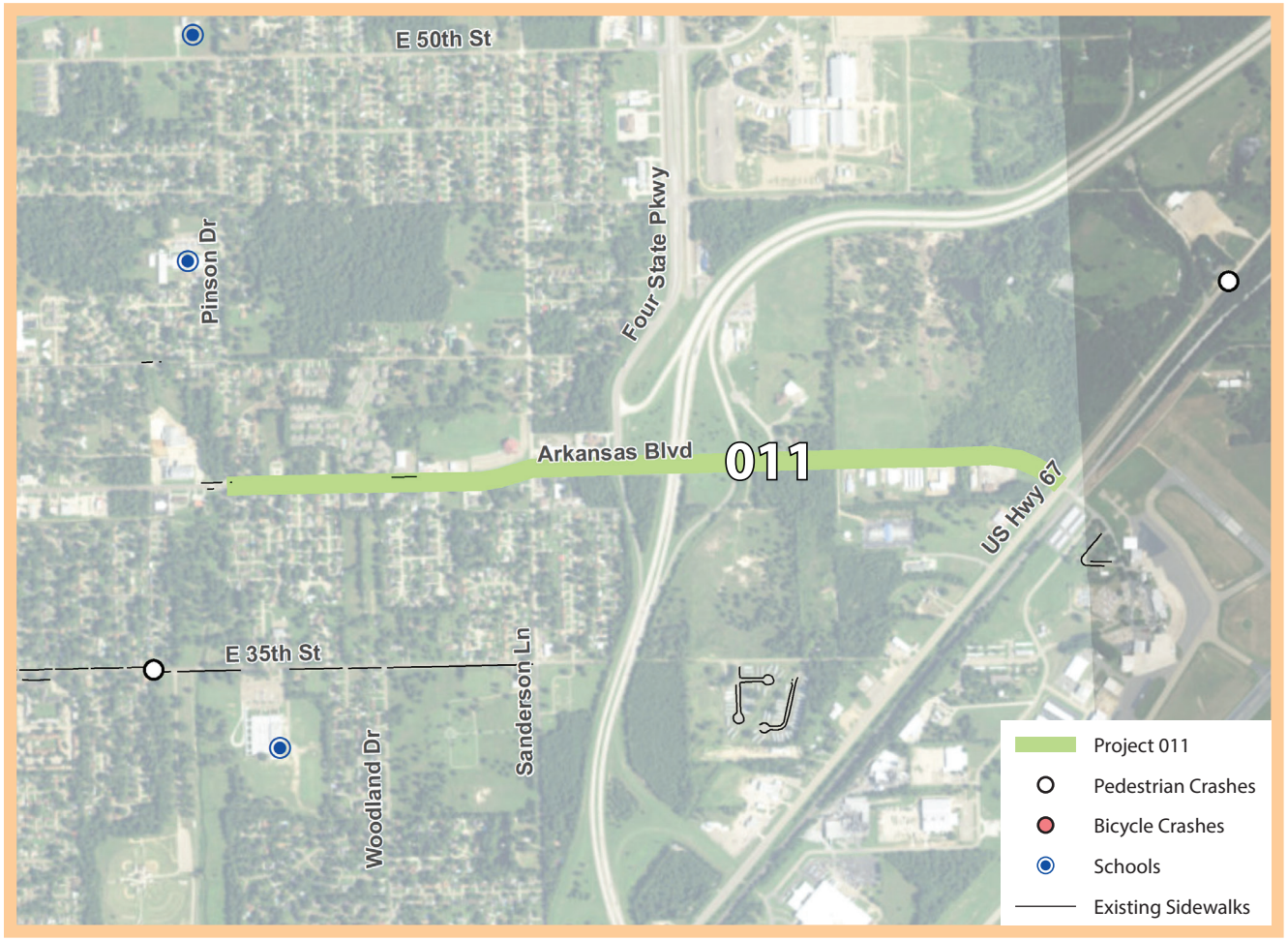
Estimated Project Cost:
Project Element Cost: $80,700
Design: $8,100
Contingency/Management: $12,100
Total Project Costs: $100,900

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 011: ARKANSAS BLVD BICYCLE LANE

RANK: #20 OVERALL | #3 ARKANSAS **SCORE: 36.95**



Description: Construct buffered bicycle lanes along Arkansas Boulevard from Pinson Drive to E Broad Street.

Length: 1.39 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Safety Analysis, Public Open House, Connectivity Analysis, MPO / City Staff

Traffic Volume (ADT): 7,715

Posted Speed: 40 mph

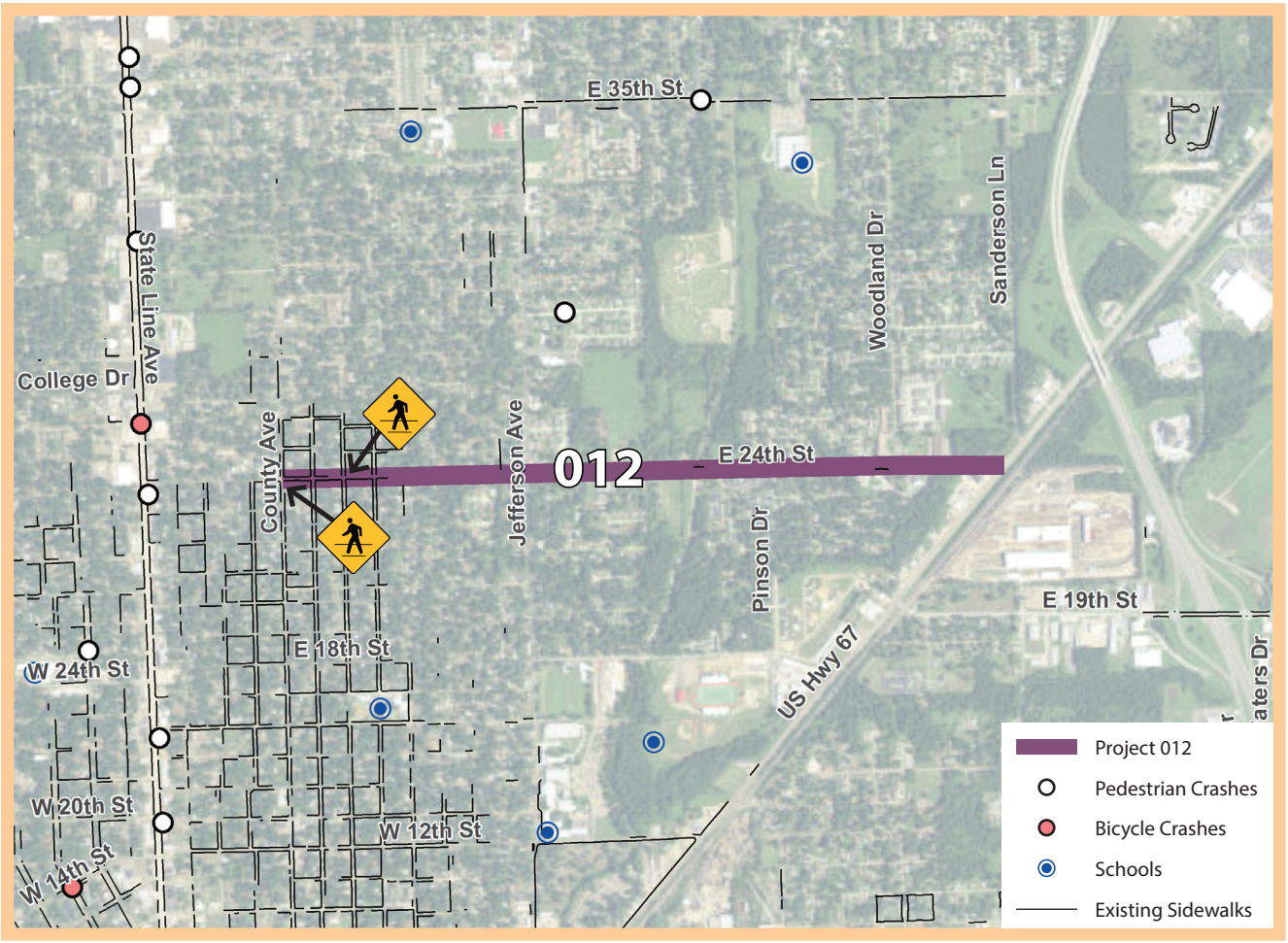
Crashes: 32 per mile

Estimated Project Cost:
Project Element Cost: $62,700
Design: $6,300
Contingency/Management: $9,400
Total Project Costs: $78,400

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 012: E 24TH ST BICYCLE INFRASTRUCTURE & SIDEWALK

RANK: #30 OVERALL | #6 ARKANSAS **SCORE: 34.99**



Description: Paint buffered bike lanes and install bicycle awareness signage, and construct sidewalks and fill sidewalk gaps along E 24th Street from E Broad Street to Jefferson Avenue. Construct sidewalks and fill sidewalk gaps along E 24th Street from Jefferson Avenue to County Avenue. Install pedestrian crossings at County Avenue and Hickory Street. Improve crossings at Jefferson Avenue.

Length: 1.48 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, School Connectivity Analysis, MPO / City Staff

Traffic Volume (ADT): 3,733

Posted Speed: 40 mph

Crashes: 9 per mile

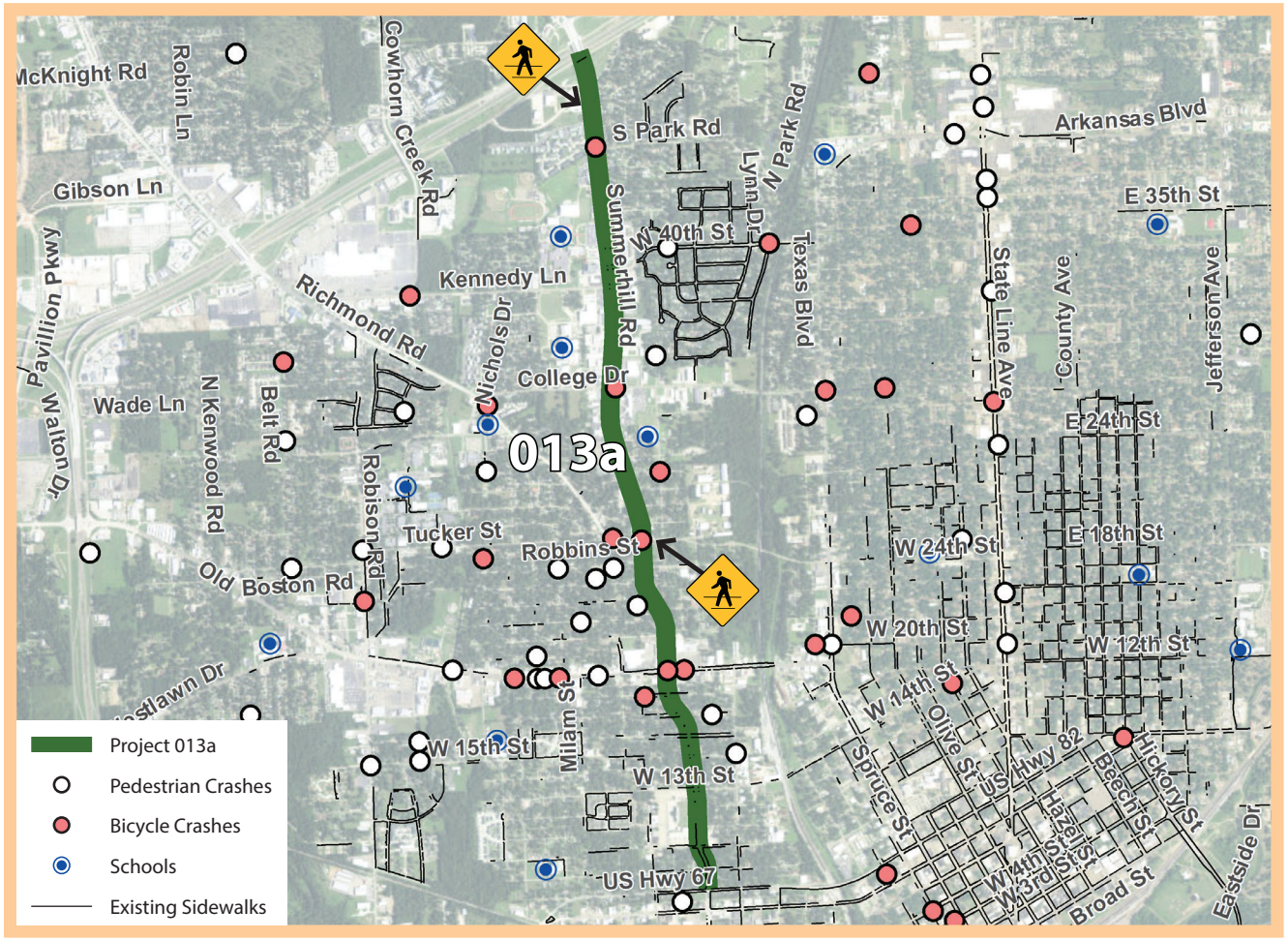
Estimated Project Cost:
Project Element Cost: $446,800
Design: $44,700
Contingency/Management: $67,000
Total Project Costs: $558,500

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 013A: LAKE DR / SUMMERHILL RD BICYCLE LANE & SIDEWALK

RANK: #6 OVERALL | #3 TEXAS **SCORE: 41.97**



Description: Construct buffered bicycle lanes and sidewalks along N Lake Drive and Summerhill Road from W Dr Martin Luther King Jr Boulevard to IH-30. Install pedestrian crossings at Richmond Road and at Mall Drive. Improve crossings at W Dr MLK Jr Boulevard, W 13th Street, New Boston Road, Parker Avenue, College Drive, Kennedy Lane, W 40th Street, and Summerhill Square. This project connects to Project 015.

Length: 2.9 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis, Bicycle Level of Stress Analysis, MPO / City Staff

Traffic Volume (ADT): 9,077

Posted Speed: 40 - 45 mph

Crashes: 191 per mile

Estimated Project Cost:
Project Element Cost: $1,165,400
Design: $75,700
Contingency/Management: $174,800
Total Project Costs: $1,415,900

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 013B: RICHMOND RD BICYCLE LANE & SIDEWALK

RANK: #12 OVERALL | #7 TEXAS **SCORE: 39.92**

Description: Construct buffered bicycle lanes and sidewalks and fill in sidewalk gaps along Richmond Road from Summerhill Road to IH-30. Install pedestrian crossings at Richmond Road and Summerhill Road, N Robison Road, Kennedy Lane, Belt Road, and Mall Drive. Improve crossings at College Drive.

Length: 1.71 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis, Bicycle Level of Stress, MPO / City Staff

Traffic Volume (ADT): 21,770

Posted Speed: 40 - 45 mph

Crashes: 148 per mile

Estimated Project Cost:
Project Element Cost: $703,000
Design: $56,200
Contingency/Management: $105,500
Total Project Costs: $864,700

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 014: RICHMOND RD BICYCLE INFRASTRUCTURE

RANK: #36 OVERALL | #24 TEXAS **SCORE: 31.64**

Description: Construct buffered bike lane and install bike lane signage along Richmond Road from IH-30 to Galleria Oaks Drive.

Length: 1.02 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis

Traffic Volume (ADT): 25,611

Posted Speed: 45 mph

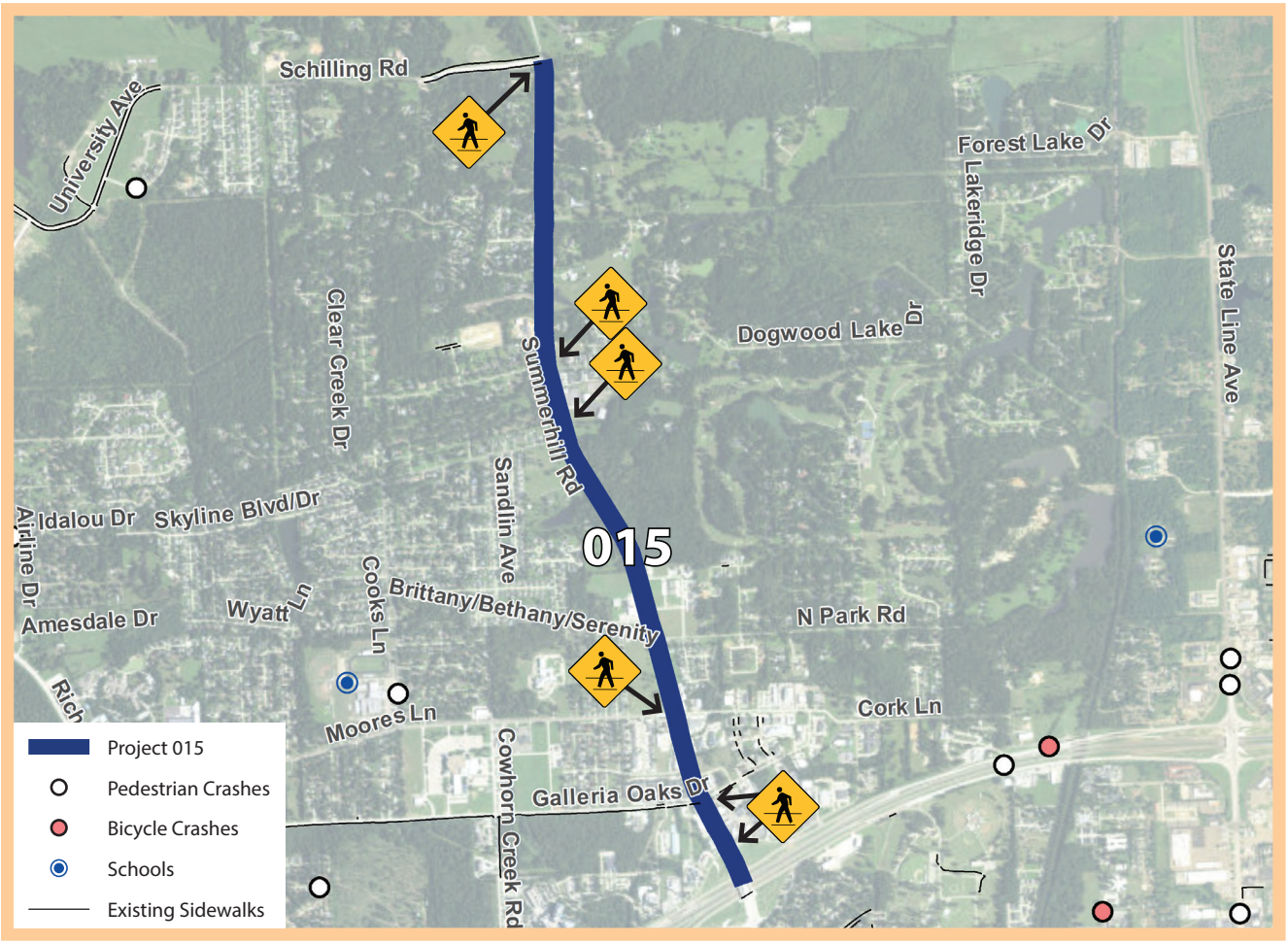
Crashes: 460 per mile

Estimated Project Cost:
Project Element Cost: $31,000
Design: $3,100
Contingency/Management: $4,700
Total Project Costs: $38,800

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 015: SUMMERHILL RD BICYCLE INFRASTRUCTURE & SIDEWALK

RANK: #33 OVERALL | #21 TEXAS **SCORE: 33.31**



Description: Construct buffered bike lanes or upgraded wide shoulders and install bicycle awareness signage and sidewalks along Summerhill Road from IH-30 to University Avenue/Schilling Road. Install pedestrian crossings at the northside IH-30 frontage, Galleria Oaks Drive, Moores Lane, Clear Creek Drive, Dogwood Lake Drive, and University Avenue/Schilling Road. This project provides a connection to the Texas A&M Campus.

Length: 2.36 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis, MPO / City Staff

Traffic Volume (ADT): 9,728

Posted Speed: 40 - 50 mph

Crashes: 65 per mile

Estimated Project Cost:
Project Element Cost: $952,600
Design: $76,200
Contingency/Management: $142,900
Total Project Costs: $1,171,700

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 016: STATE LINE AVE BICYCLE LANE

RANK: #39 OVERALL | #7 TEXAS/ARKANSAS **SCORE: 31.02**

Description: Construct buffered bicycle lanes along Lelia Street, W 4th Street, and S State Line Avenue from W 7th Street to Jarvis Parkway.

Length: 2.9 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis

Traffic Volume (ADT): 3,662

Posted Speed: 30 - 40 mph

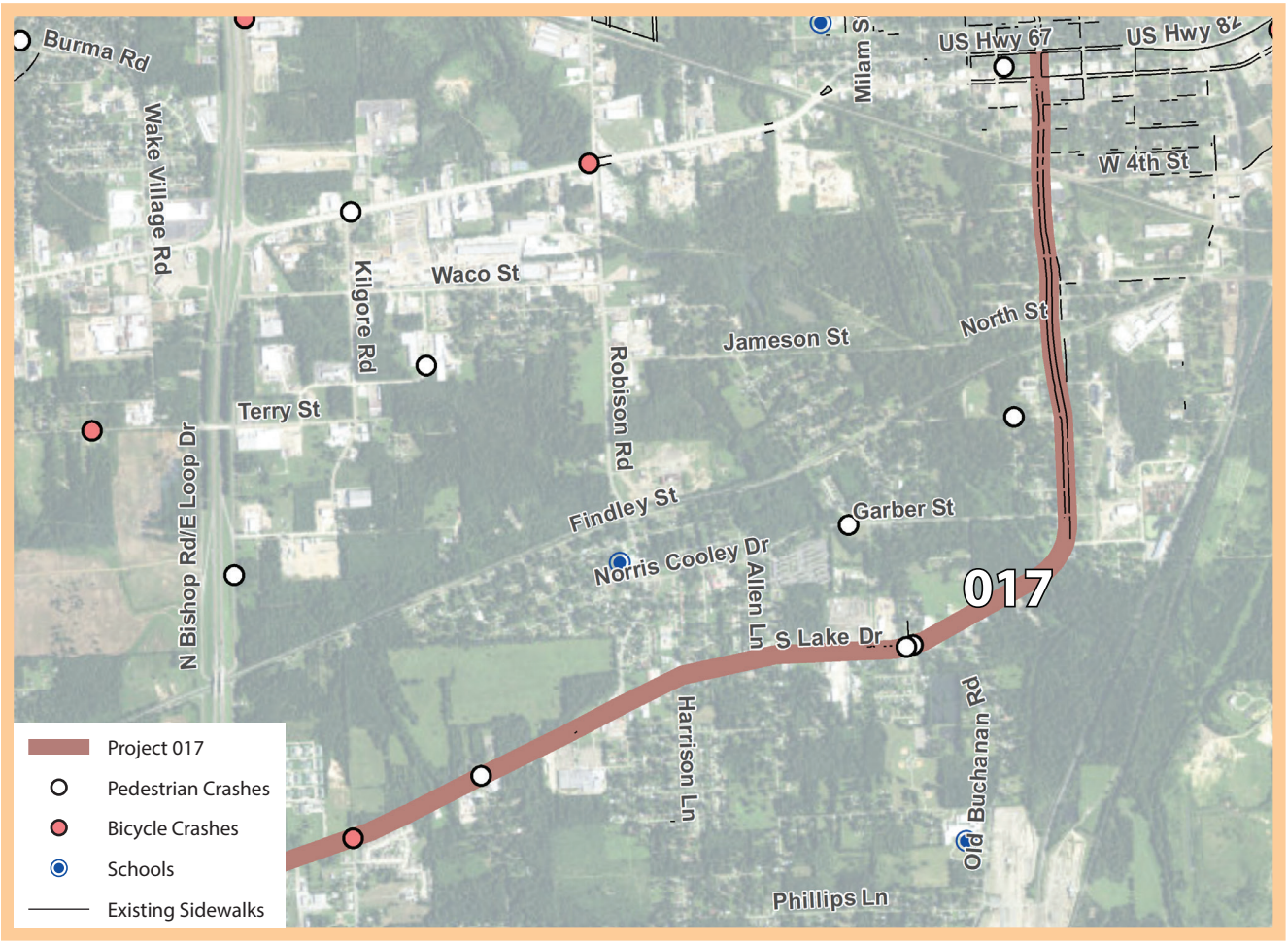
Crashes: 8 per mile

Estimated Project Cost:
Project Element Cost: $104,300
Design: $10,400
Contingency/Management: $15,600
Total Project Costs: $130,300

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 017: LAKE DR BUFFERED BICYCLE LANE

RANK: #28 OVERALL | #18 TEXAS **SCORE: 35.20**



Description: Construct buffered bicycle lanes along S Lake Drive from Jarvis Parkway to W Dr Martin Luther King Jr Boulevard. Note that a portion of this corridor contains existing suitable roadway shoulders. Additional signage and emblems for a bike lane would improve bicycle conditions along this segment of the roadway.

Length: 3.58 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Gaps Analysis, Connectivity Analysis

Traffic Volume (ADT): 7,717

Posted Speed: 40 - 50 mph

Crashes: 58 per mile

Estimated Project Cost:
Project Element Cost: $100,600
Design: $10,100
Contingency/Management: $15,100
Total Project Costs: $125,800

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 018: HICKORY ST / EAST ST BICYCLE INFRASTRUCTURE

RANK: #37 OVERALL | #8 ARKANSAS **SCORE: 31.53**

Description: Install buffered bicycle lanes along Hickory Street and East Street from E 9th Street to IH-49.

Length: 3.12 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis

Traffic Volume (ADT): 8,383

Posted Speed: 30 - 45 mph

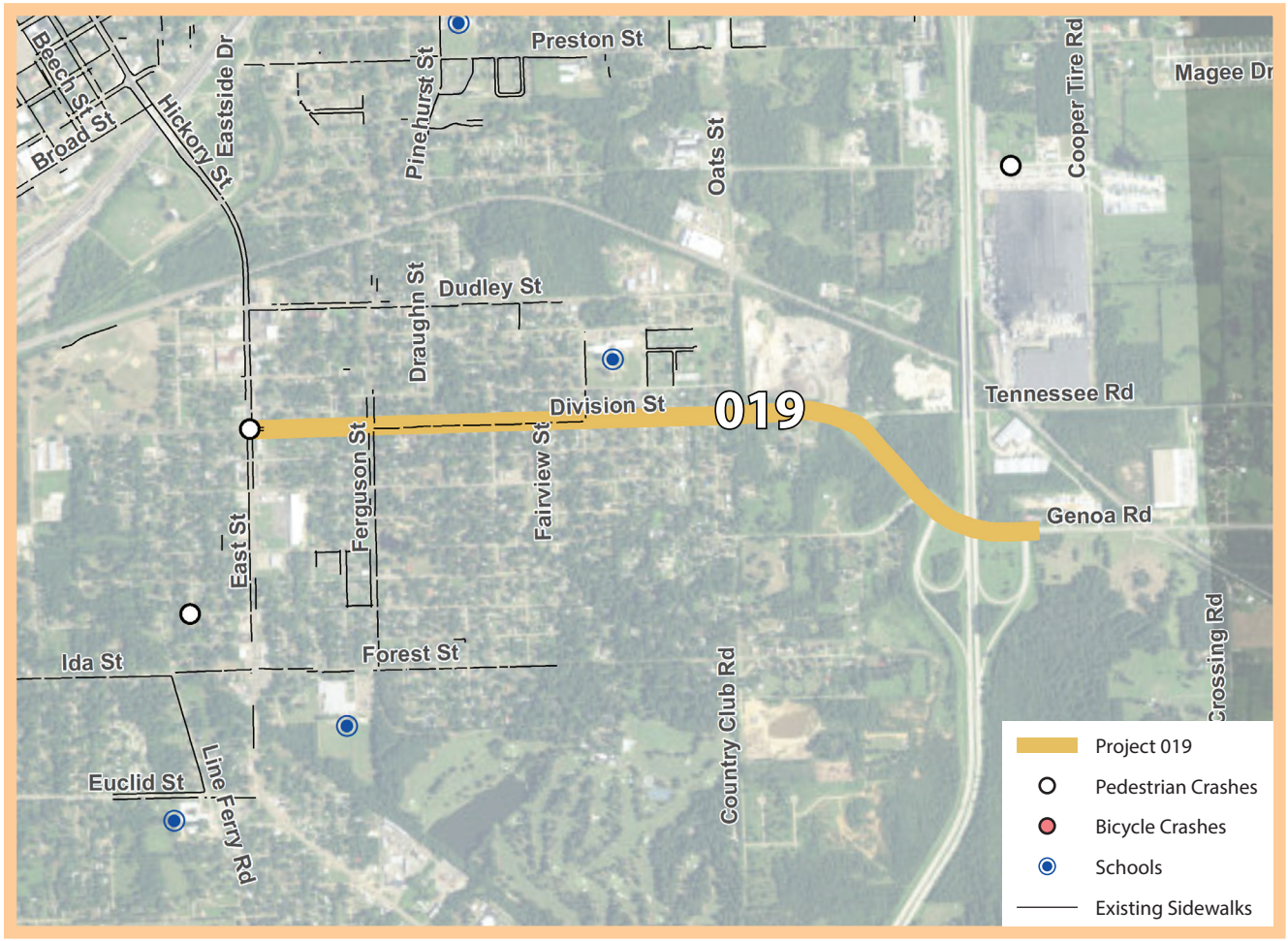
Crashes: 42 per mile

Estimated Project Cost:
Project Element Cost: $135,200
Design: $13,500
Contingency/Management: $20,300
Total Project Costs: $169,000

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 019: DIVISION ST BICYCLE INFRASTRUCTURE

RANK: #32 OVERALL | #7 ARKANSAS **SCORE: 33.49**



Description: Paint bicycle lane and install signage along Division Street from East Street to Genoa Road/IH-49 northbound entrance ramp.

Length: 1.71 miles

Bicycle Level of Stress: Moderate Stress / Comfort

Project Source: Gaps Analysis, Level of Stress Analysis

Traffic Volume (ADT): 2,950

Posted Speed: 30 mph

Crashes: 12 per mile

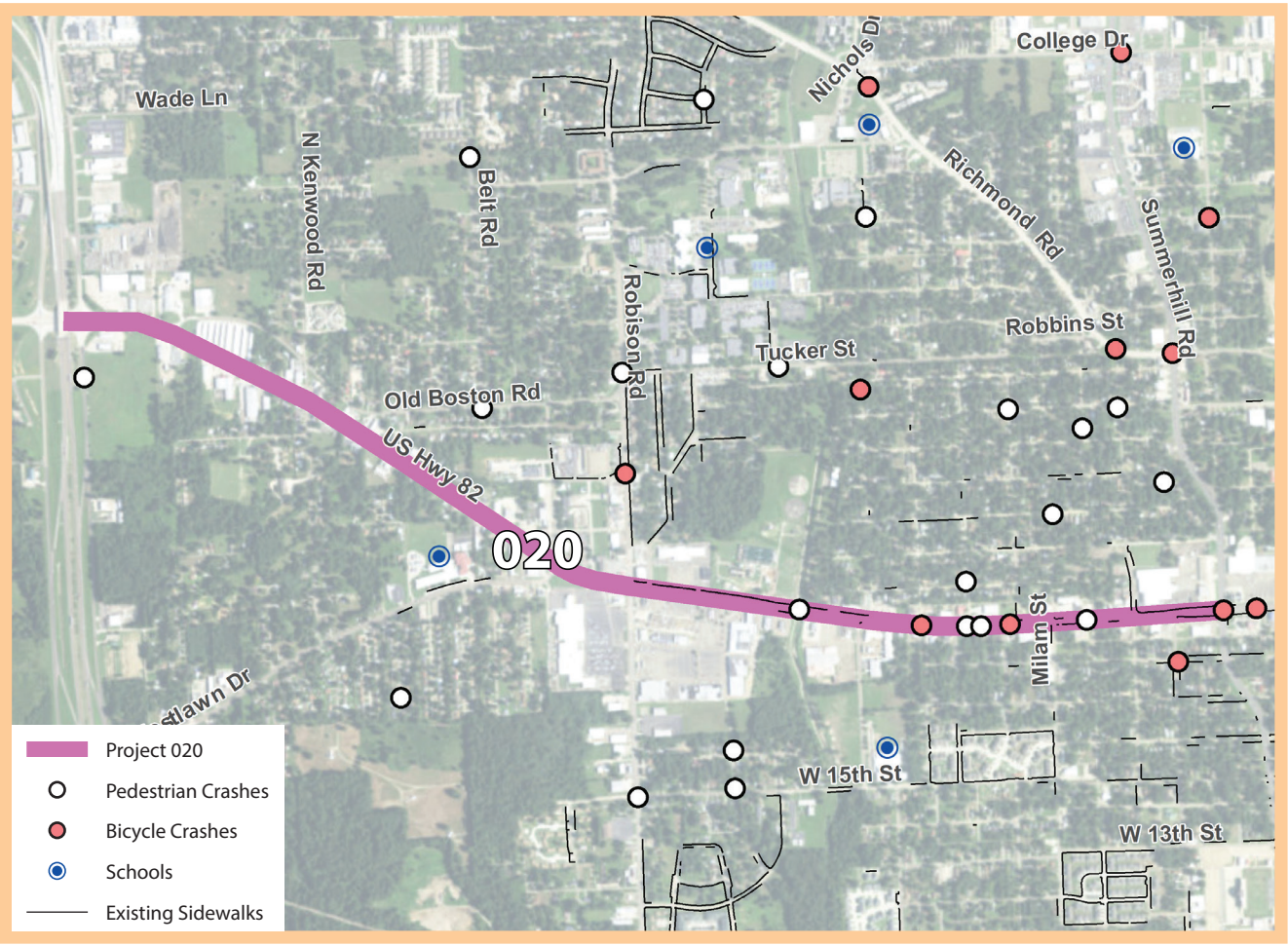
Estimated Project Cost:
Project Element Cost: $76,900
Design: $7,700
Contingency/Management: $11,500
Total Project Costs: $96,100

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 020: NEW BOSTON RD BICYCLE LANE

RANK: #17 OVERALL | #11 TEXAS **SCORE: 37.35**



Description: Construct buffered bicycle lanes along New Boston Road from IH-369/US-59 to Summerhill Road.

Length: 2.11 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Level of Stress Analysis, Public Open House

Traffic Volume (ADT): 9,906

Posted Speed: 40 - 45 mph

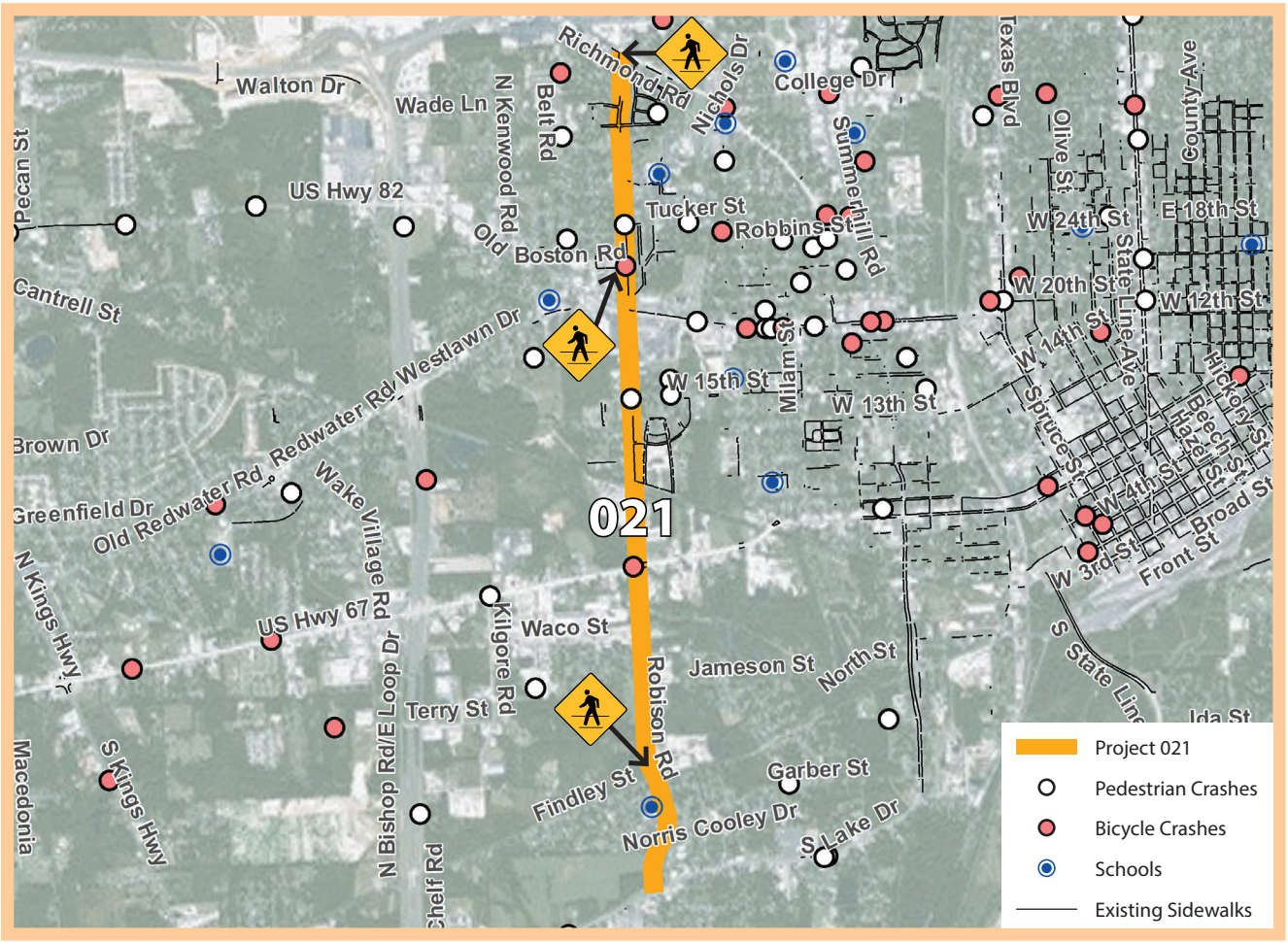
Crashes: 185 per mile

Estimated Project Cost:
Project Element Cost: $61,500
Design: $6,100
Contingency/Management: $9,200
Total Project Costs: $76,800

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 021: ROBISON RD SIDEWALK IMPROVEMENTS

RANK: #5 OVERALL | #2 TEXAS **SCORE: 42.45**



Description: Construct sidewalks and fill sidewalk gaps along Robison Road from Richmond Road to S Lake Drive. Install pedestrian crossings at Robison Road and Findley Street, New Boston Road, and Richmond Road, and improve crossings at W 7th Street.

Length: 3.54 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Sidewalk Analysis, Gaps Analysis, Connectivity Analysis

Traffic Volume (ADT): 7,439

Posted Speed: 30 - 40 mph

Crashes: 58 per mile

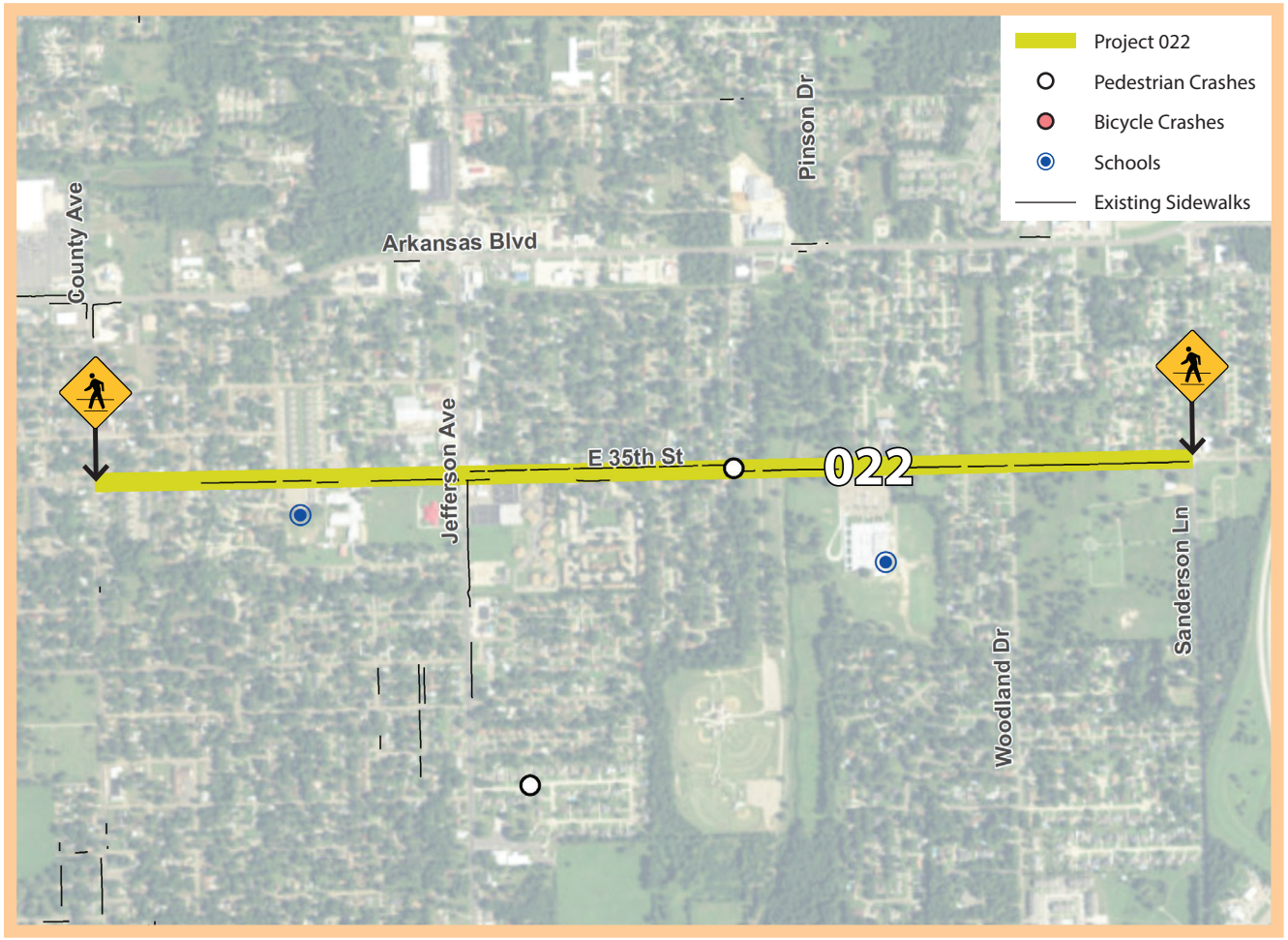
Estimated Project Cost:
Project Element Cost: $1,321,500
Design: $85,900
Contingency/Management: $198,200
Total Project Costs: $1,605,600

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 022: E 35TH ST SIDEWALK IMPROVEMENTS

RANK: #10 OVERALL | #2 ARKANSAS **SCORE: 40.47**



Description: Complete sidewalk network and fill sidewalk gaps along E 35th Street from County Avenue to Sanderson Lane. Install pedestrian crossings at E 35th Street at County Avenue and E 35th Street at Sanderson Lane. Improve existing pedestrian crossings at Jefferson Avenue.

Length: 1.5 miles

Bicycle Level of Stress: Moderate Stress / Comfort

Project Source: Public Open House, 2009 Plan, Connectivity Analysis

Traffic Volume (ADT): 4,000

Posted Speed: 30 mph

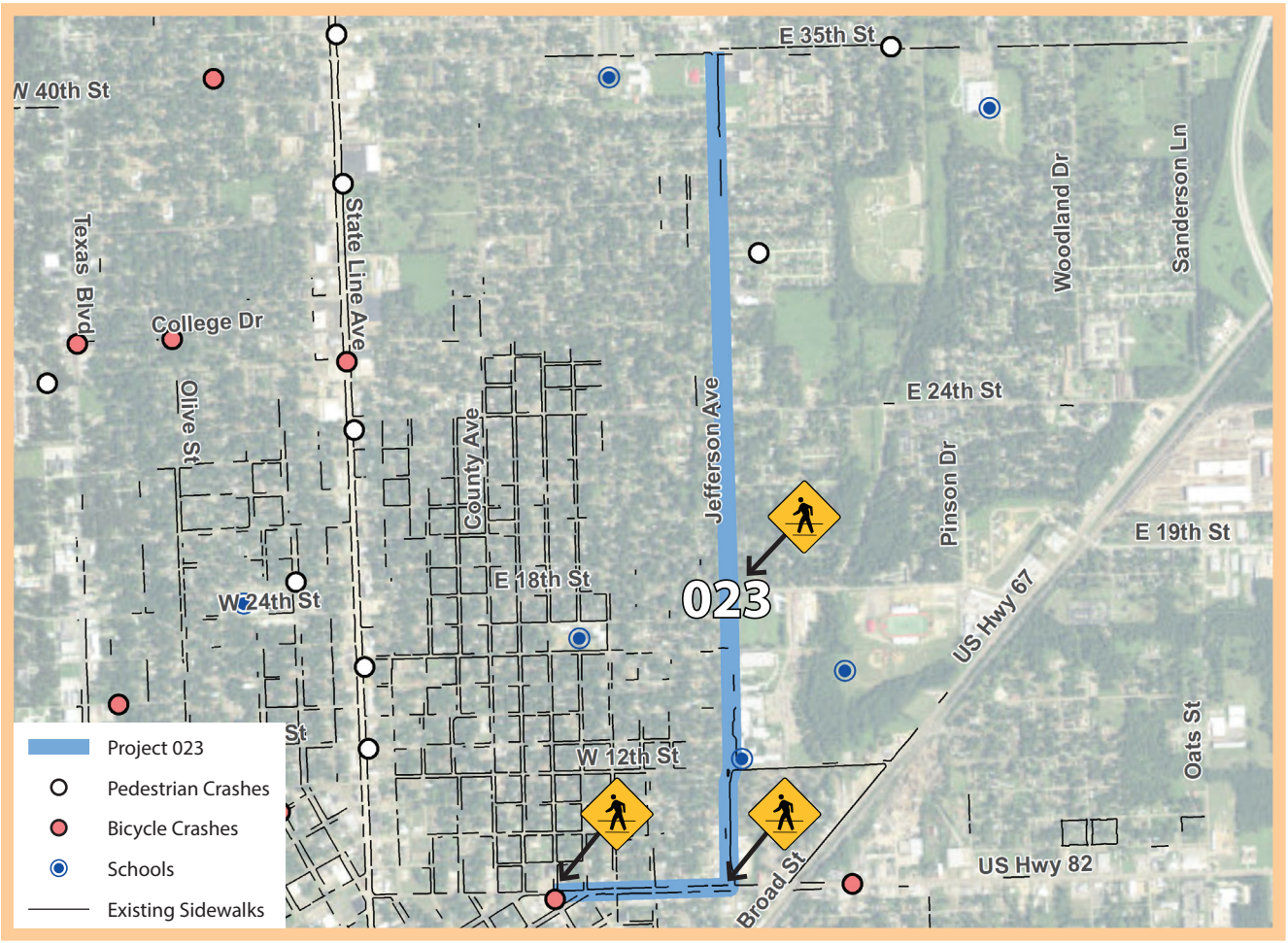
Crashes: 11 per mile

Estimated Project Cost:
Project Element Cost: $385,600
Design: $38,600
Contingency/Management: $57,800
Total Project Costs: $482,000

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 023: JEFFERSON AVE SIDEWALK IMPROVEMENTS

RANK: #2 OVERALL | #1 ARKANSAS **SCORE: 44.34**



Description: Complete sidewalk network and fill sidewalk gaps along Jefferson Avenue and E 9th Street from E 35th Street to Hickory Street. Install pedestrian crossings at Jefferson Avenue and E 18th Street, Jefferson Avenue and E 9th Street, and E 9th Street and Hickory Street. Improve crossings at Jefferson Avenue at E 24th Street and at E 12th Street.

Length: 2.13 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: School Connectivity Analysis, Public Open House

Traffic Volume (ADT): 6,707

Posted Speed: 30 - 40 mph

Crashes: 41 per mile

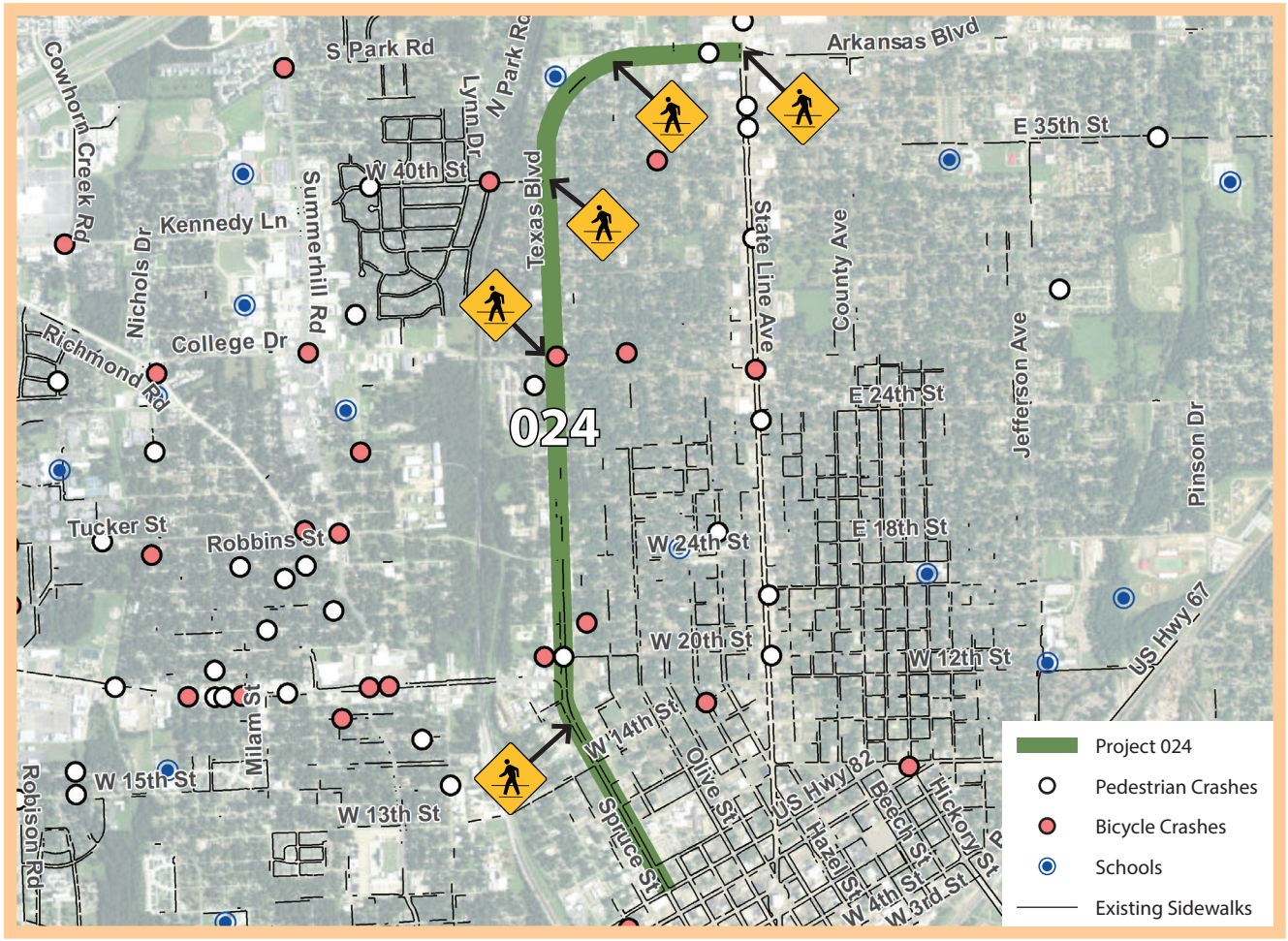
Estimated Project Cost:
Project Element Cost: $547,900
Design: $43,800
Contingency/Management: $82,200
Total Project Costs: $673,900

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 024: TEXAS BLVD SIDEWALK IMPROVEMENTS

RANK: #3 OVERALL | #1 TEXAS **SCORE: 43.18**



Description: Complete sidewalk network and fill sidewalk gaps along Texas Boulevard from N State Line Avenue to W Dr Martin Luther King Jr Boulevard. Install pedestrian crossings at the intersections of Texas Boulevard and N State Line Avenue, Elizabeth Street, W 40th Street, College Drive, New Boston Road, and W 16th Street. Improve crossings at Texas Boulevard at W 14th Street and at W 24th Street.

Length: 2.9 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Safety Analysis, Connectivity Analysis

Traffic Volume (ADT): 13,413

Posted Speed: 40 mph

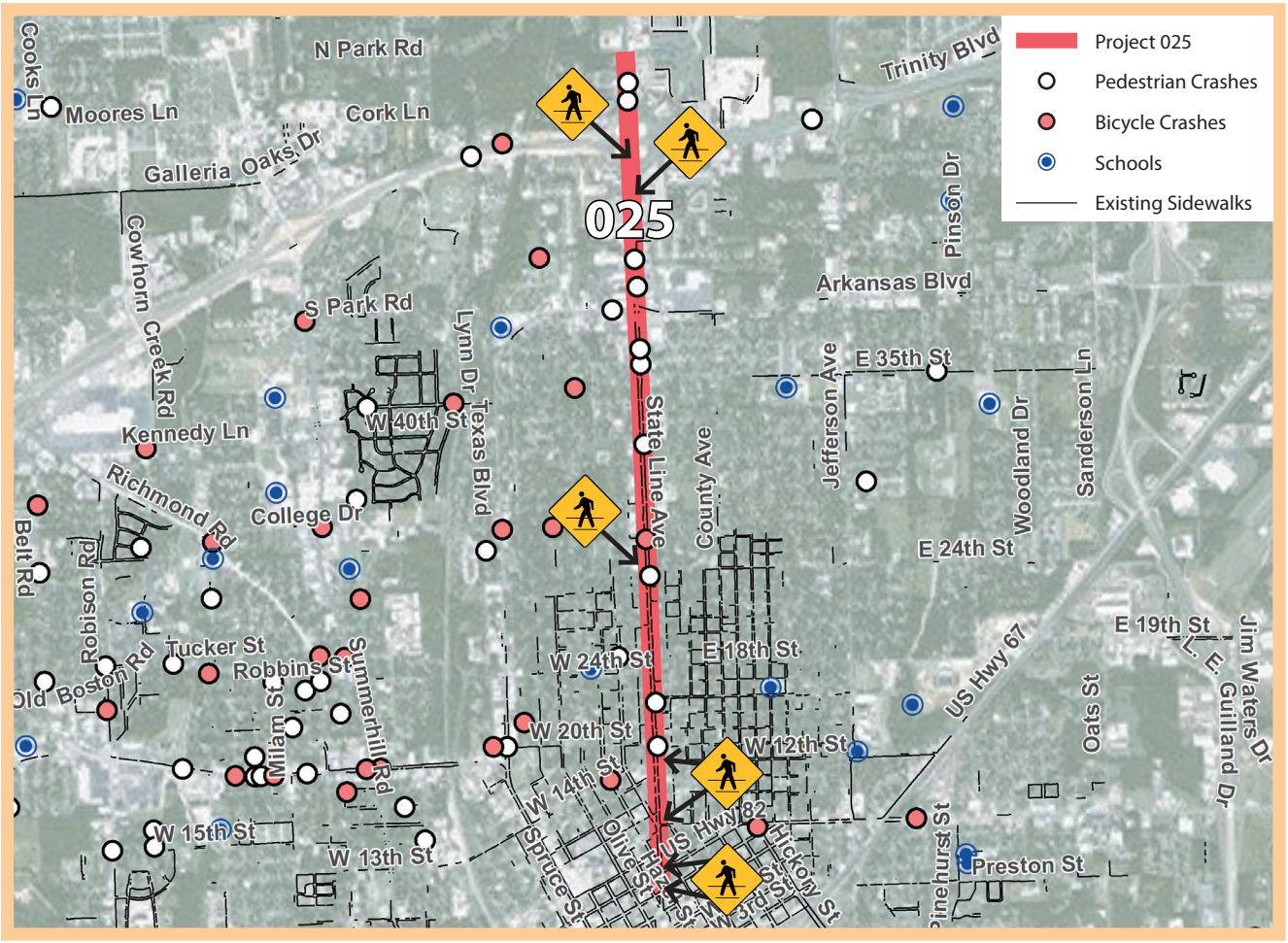
Crashes: 81 per mile

Estimated Project Cost:
Project Element Cost: $1,093,600
Design: $71,100
Contingency/Management: $164,000
Total Project Costs: $1,328,700

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 025: N STATE LINE AVE SIDEWALK IMPROVEMENTS

RANK: #1 OVERALL | #1 TEXAS/ARKANSAS **SCORE: 44.98**



Description: Complete sidewalk network and fill sidewalk gaps, enhance crosswalks, and enhance ADA connectivity along State Line Avenue from Holcombe to W 7th Street. Install pedestrian crossings at State Line Avenue and IH-30 frontage, W 52nd Street, Texas/Arkansas Boulevards, E 24th Street, W 19th Street, E 9th Street, Dr Martin Luther King Jr Boulevard, and 7th Street. Improve crossings on State Line Avenue at E 35th Street and College Drive.

Length: 3.32 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Safety Analysis, Connectivity Analysis

Traffic Volume (ADT): 20,816

Posted Speed: 30 - 45 mph

Crashes: 130 per mile

Estimated Project Cost:
Project Element Cost: $1,052,600
Design: $68,400
Contingency/Management: $157,900
Total Project Costs: $1,278,900

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 026: NEW BOSTON RD SIDEWALK IMPROVEMENTS

RANK: #7 OVERALL | #4 TEXAS **SCORE: 41.73**

Description: Complete sidewalk network and fill sidewalk gaps along New Boston Road, Texas Boulevard, and W 20th Street from N Robison Road to N State Line Avenue. Install pedestrian crossings at New Boston Road and N Robison Road, N Boston Road and Texas Boulevard, Texas Boulevard and W 20th Street, and W 20th Street at N State Line Avenue. Improve crossings at Milam Street, Summerhill Road, and Spruce Street.

Length: 2.23 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Safety Analysis, Connectivity Analysis

Traffic Volume (ADT): 12,376

Posted Speed: 40 mph

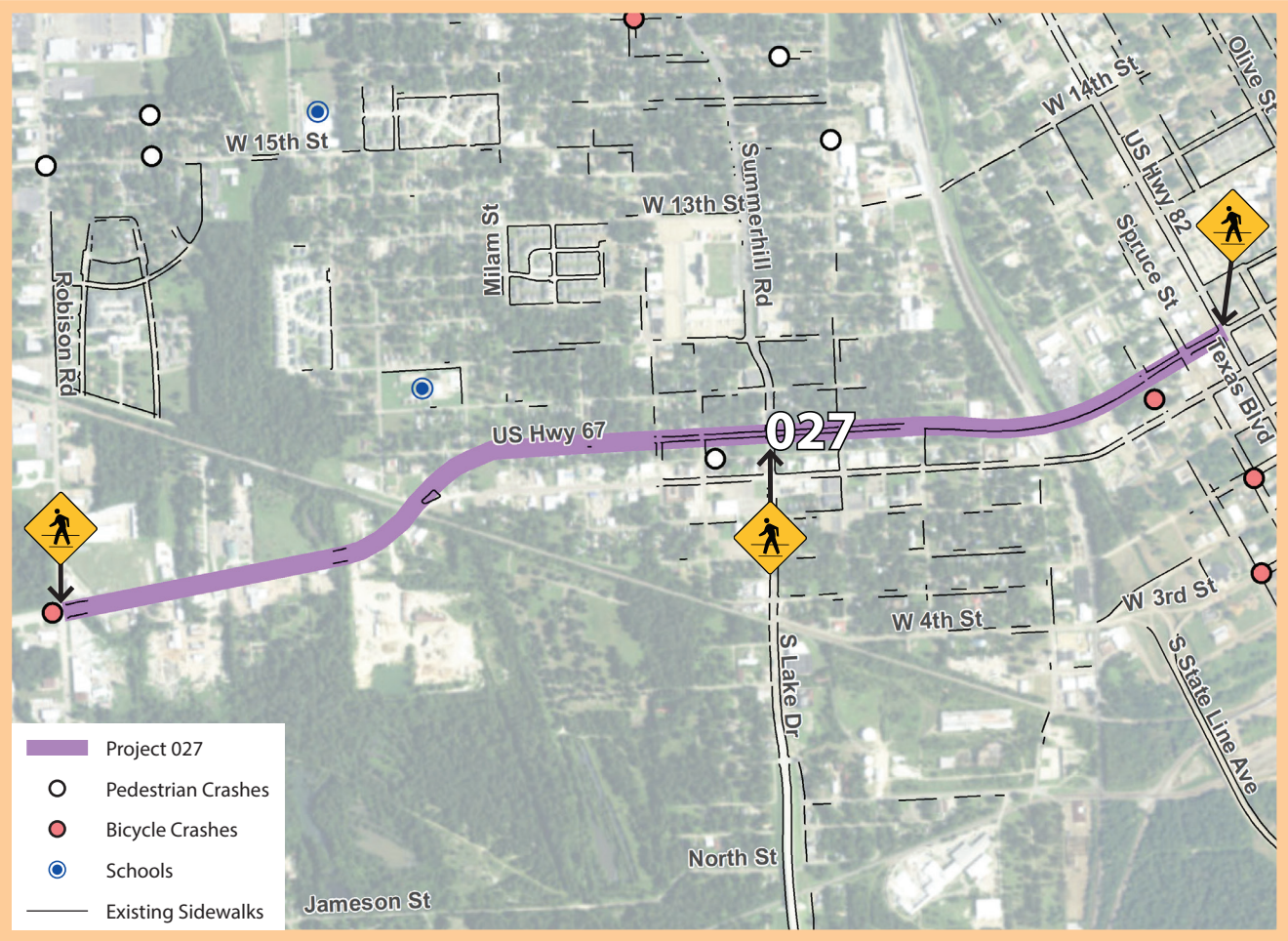
Crashes: 167 per mile

Estimated Project Cost:
Project Element Cost: $908,200
Design: $72,700
Contingency/Management: $136,200
Total Project Costs: $1,117,100

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 027: US HWY 67 SIDEWALK IMPROVEMENTS

RANK: #11 OVERALL | #6 TEXAS **SCORE: 40.33**



Description: Complete sidewalk network and fill sidewalk gaps along US Hwy 67 (W Martin Luther King Jr Boulevard and W 7th Street) from N Robison Road to Texas Boulevard. Improve pedestrian crossings at N Robison Road, N Lake Drive, and Texas Boulevard.

Length: 1.93 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis

Traffic Volume (ADT): 14,416

Posted Speed: 40 - 45 mph

Crashes: 11 per mile

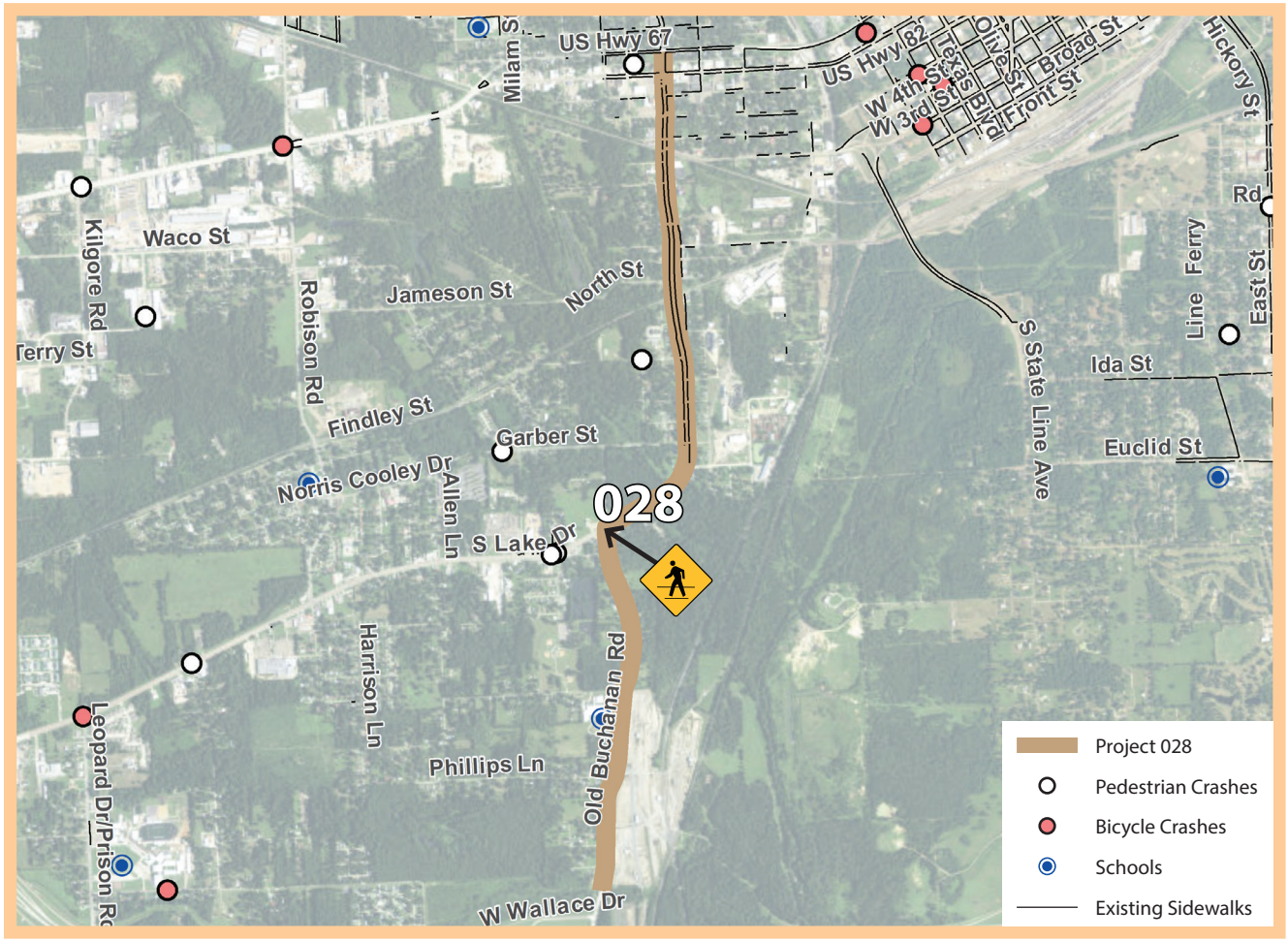
Estimated Project Cost:
Project Element Cost: $725,000
Design: $58,000
Contingency/Management: $108,700
Total Project Costs: $891,700

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 028: OLD BUCHANAN RD SIDEWALK IMPROVEMENTS

RANK: #14 OVERALL | #8 TEXAS **SCORE: 38.14**



Description: Complete sidewalk network and fill sidewalk gaps along Old Buchanan Road and S Lake Drive from Corral Creek to W Dr Martin Luther King Jr Boulevard. Install pedestrian crossings at S Lake Drive and Old Buchanan Road. Improve crossings at W 7th Street and W 4th Street.

Length: 2.64 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis

Traffic Volume (ADT): 5,302

Posted Speed: 40 - 45 mph

Crashes: 58 per mile

Estimated Project Cost:
Project Element Cost: $979,600
Design: $78,400
Contingency/Management: $146,900
Total Project Costs: $1,204,900

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 029: S STATE LINE AVE SIDEWALK IMPROVEMENTS

RANK: #38 OVERALL | #6 TEXAS/ARKANSAS **SCORE: 31.40**

Description: Complete sidewalk network and fill sidewalk gaps along State Line Avenue from W 4th Street to Euclid Street. Install pedestrian crossings at State Line Avenue and Ida Street and at State Line Avenue and Euclid Street.

Length: 1.18 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Connectivity Analysis, Public Open House

Traffic Volumes: 3,208

Posted Speed: 30 - 40 mph

Crashes: 4 per mile

Estimated Project Cost:
Project Element Cost: $375,000
Design: $37,500
Contingency/Management: $56,200
Total Project Costs: $468,700

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 030: SOUTHEAST CONNECTOR TRAIL

RANK: #40 OVERALL | #9 ARKANSAS **SCORE: 30.69**

Description: Construct new trail segments and fill in gaps between existing trails from just east of S State Line Avenue between Division Street and Ida Street and ending at Broad Street.

Length: 1.05 miles*

*Length represents new trail segments only

Bicycle Level of Stress: N/A

Project Source: 2009 Plan

Traffic Volumes: N/A

Posted Speed: N/A

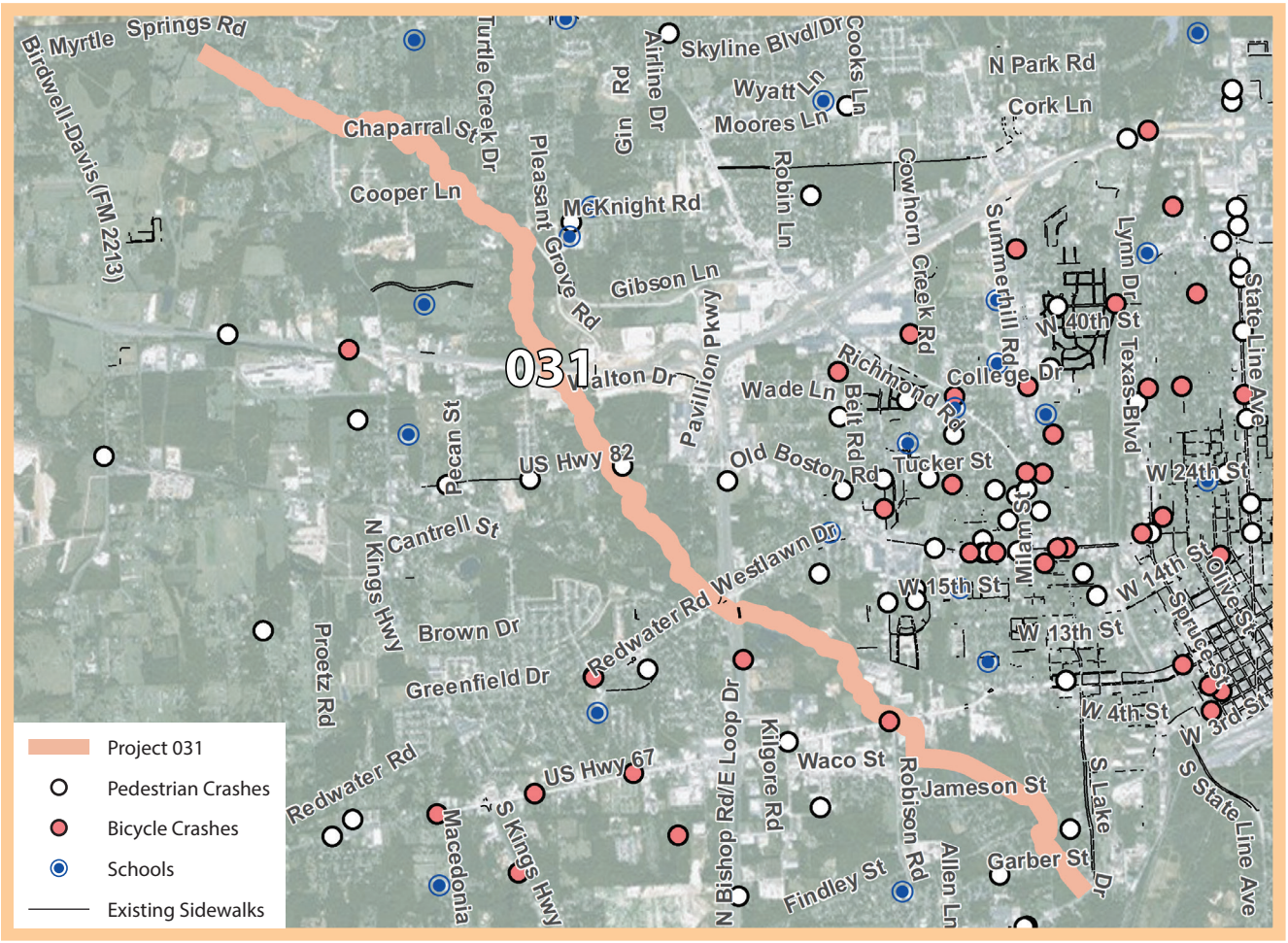
Crashes: N/A

Estimated Project Cost:
Project Element Cost: $505,000
Design: $40,400
Contingency/Management: $75,800
Total Project Costs: $621,200

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 031: WAGNER CREEK TRAIL

RANK: #29 OVERALL | #19 TEXAS **SCORE: 35.15**



Description: Construct new trail along Wagner Creek from just south of Myrtle Springs Road just west of N Kings Hwy to S Lake Drive Projects 004 and 021 connect to this trail project.

Length: 8.92 miles

Bicycle Level of Stress: N/A

Project Source: 2009 Plan

Traffic Volumes: N/A

Posted Speed: N/A

Crashes: N/A

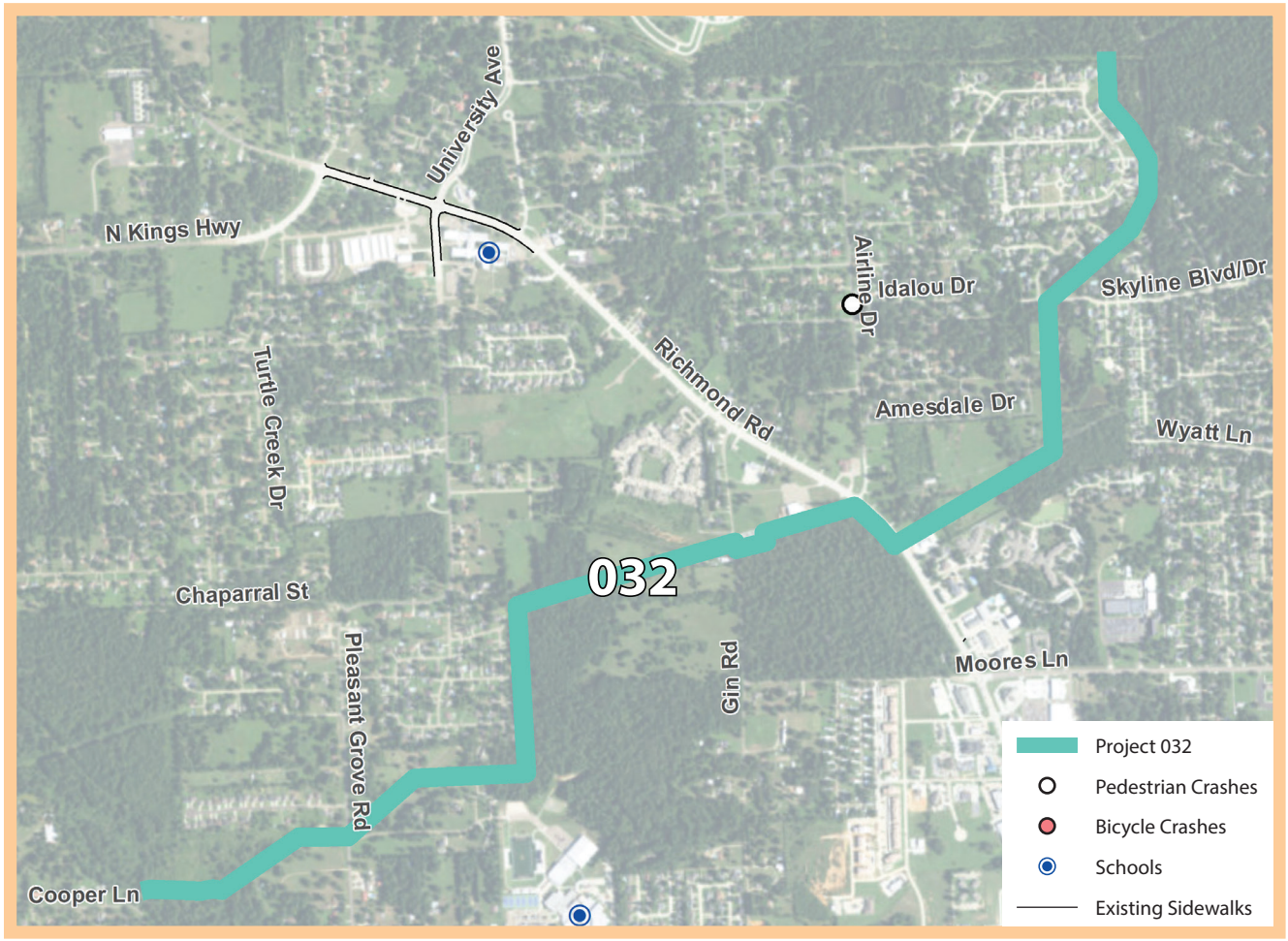
Estimated Project Cost:
Project Element Cost: $4,290,500
Design: $278,900
Contingency/Management: $643,600
Total Project Costs: $5,213,000

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 032: NORTHWEST CONNECTOR TRAIL

RANK: #35 OVERALL | #23 TEXAS **SCORE: 31.87**



Description: Construct new trail from Bringle Lake Trail to proposed Project 031 (Wagner Creek Trail). This project connects to the Texas A&M Campus via Bringle Lake Trail.

Length: 2.78 miles

Bicycle Level of Stress: N/A

Project Source: 2009 Plan, Connectivity Analysis

Traffic Volumes: N/A

Posted Speed: N/A

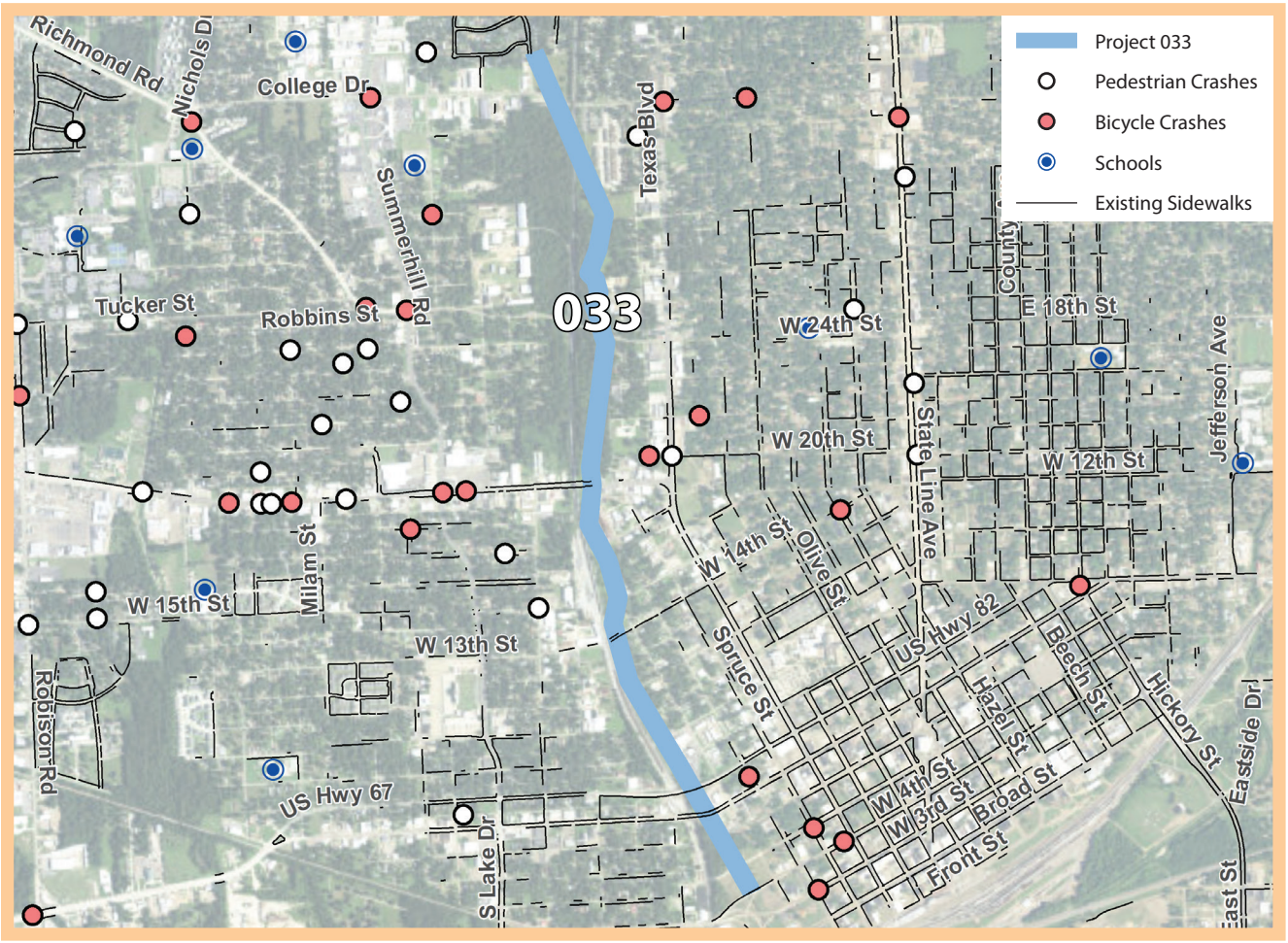
Crashes: N/A

Estimated Project Cost:
Project Element Cost: $1,337,200
Design: $86,900
Contingency/Management: $200,600
Total Project Costs: $1,624,700

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 033: SWAMPOODLE CREEK TRAIL

RANK: #34 OVERALL | #22 TEXAS **SCORE: 31.90**



Description: Construct new trail along Swampoodle Creek from Potomac Avenue north of College Drive to W 4th Street.

Length: 2.19 miles

Bicycle Level of Stress: N/A

Project Source: 2009 Plan, Connectivity Analysis

Traffic Volumes: N/A

Posted Speed: N/A

Crashes: N/A

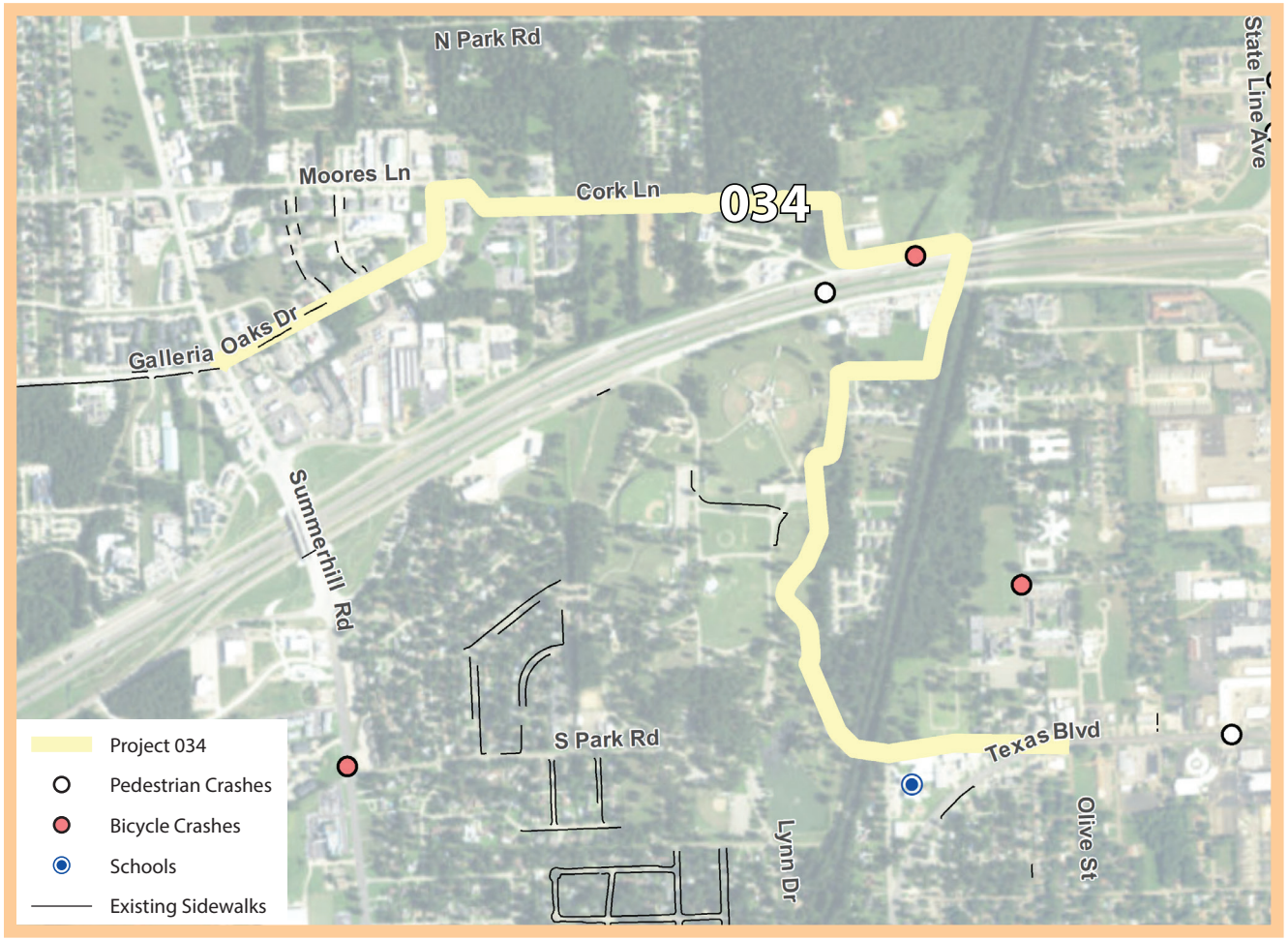
Estimated Project Cost:
Project Element Cost: $1,053,400
Design: $68,500
Contingency/Management: $158,000
Total Project Costs: $1,279,900

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 034: NORTH CONNECTOR TRAIL

RANK: #26 OVERALL | #17 TEXAS **SCORE: 35.71**



Description: Construct new trail segments and fill in gaps between existing trails from Morris Lane to Texas Boulevard.

Length: 1.22 miles*

*Length represents new trail segments only

Bicycle Level of Stress: N/A

Project Source: 2009 Plan, Connectivity Analysis

Traffic Volumes: N/A

Posted Speed: N/A

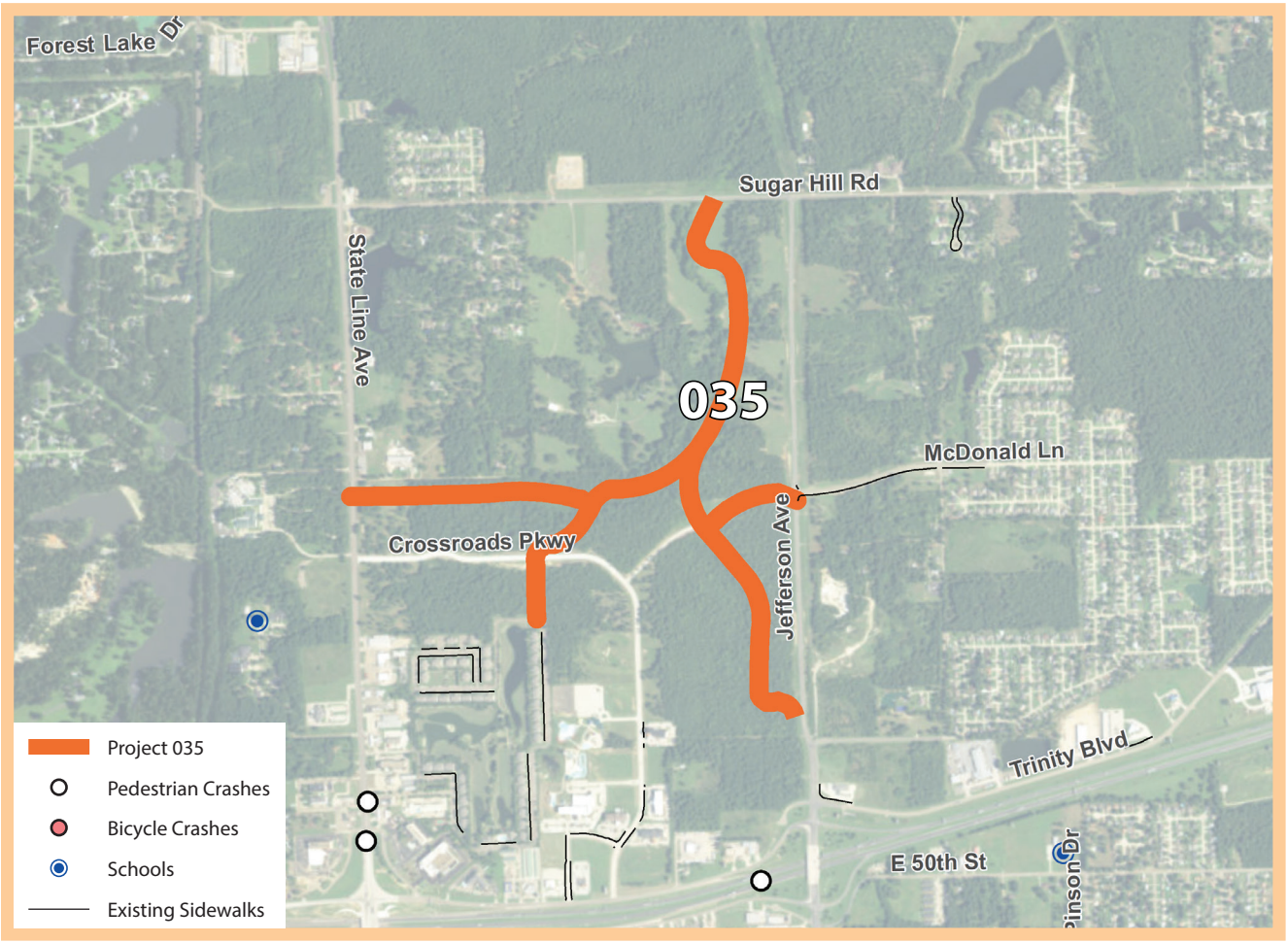
Crashes: N/A

Estimated Project Cost:
Project Element Cost: $586,800
Design: $46,900
Contingency/Management: $88,000
Total Project Costs: $721,700

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 035: TRINITY BIKE / PED TRAIL

RANK: #41 OVERALL | #8 TEXAS/ARKANSAS **SCORE: 30.29**



Description: Construct new trail in the Trinity area between State Line Avenue, Jefferson Avenue, IH-30, and Sugar Hill Road.

Length: 2.26 miles

Bicycle Level of Stress: N/A

Project Source: 2009 Plan, Connectivity Analysis

Traffic Volumes: N/A

Posted Speed: N/A

Crashes: N/A

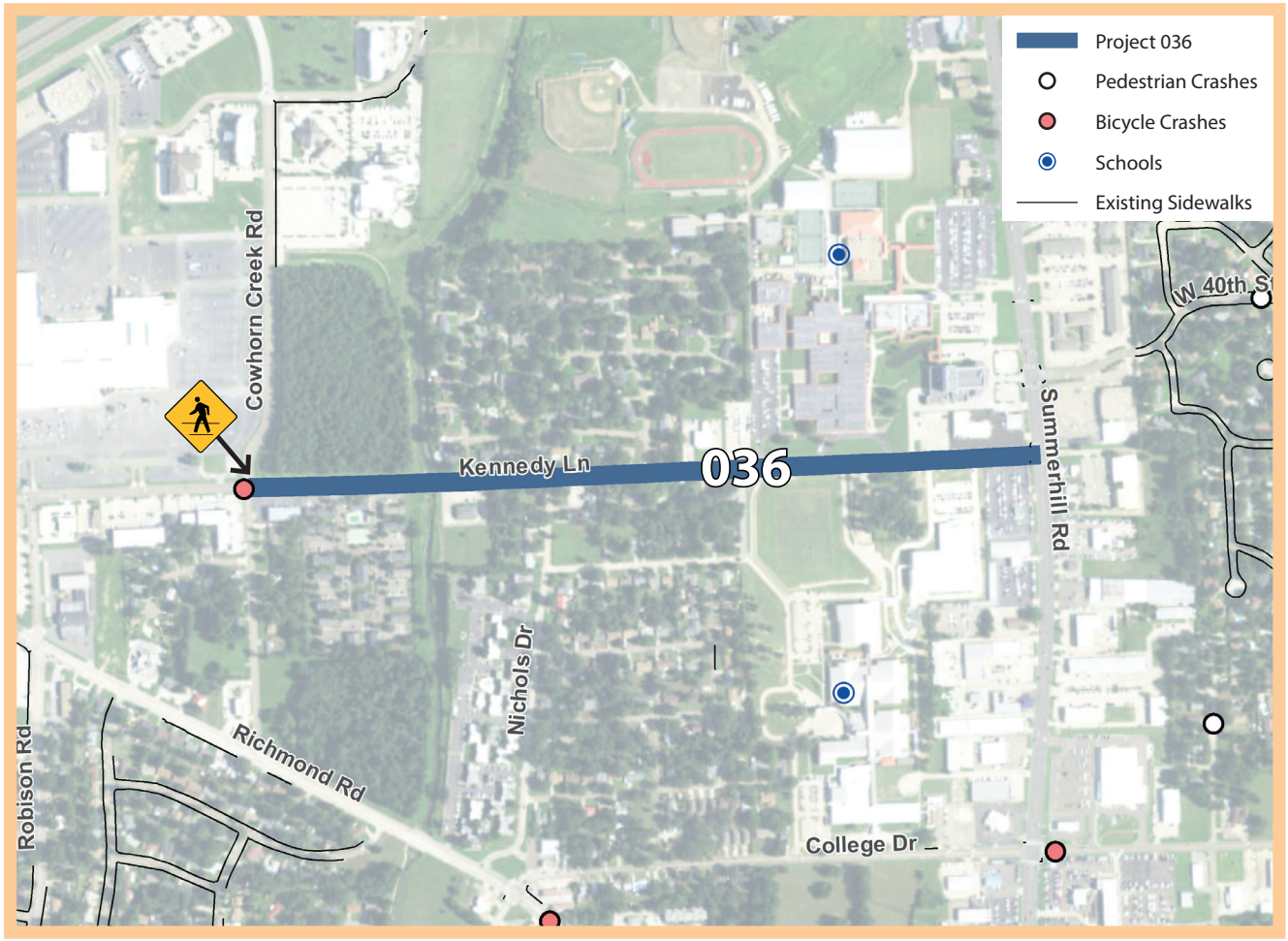
Estimated Project Cost:
Project Element Cost: $1,087,000
Design: $70,700
Contingency/Management: $163,100
Total Project Costs: $1,320,800

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 036: KENNEDY LN SIDEWALK

RANK: #16 OVERALL | #10 TEXAS **SCORE: 37.90**



Description: Construct sidewalks along Kennedy Lane from Summerhill Road to Cowhorn Creek Road. Install pedestrian crossings at Cowhorn Creek Road. Improve crossings at Summerhill Road and east of Pineknoll Street connecting Texas High School and Texas Middle School.

Length: 0.68 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: MPO / City Staff

Traffic Volumes: 7,977

Posted Speed: 40 mph

Crashes: 170 per mile

Estimated Project Cost:
Project Element Cost: $255,200
Design: $25,500
Contingency/Management: $38,300
Total Project Costs: $319,000

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 037: W 4TH ST BICYCLE INFRASTRUCTURE & SIDEWALK

RANK: #4 OVERALL | #2 TEXAS/ARKANSAS **SCORE: 42.61**

Description: Construct/install bicycle infrastructure and complete sidewalk network along W 4th Street from S Lake Drive to Hickory Street. Install pedestrian crossings at Lelia Street, Spruce Street, Texas Boulevard, Main Street, Pine Street, N State Line Avenue, and Hickory Street. Improve crossings at S Lake Drive, Elm Street, Wood Street, and Walnut Street.

Length: 1.7 miles

Bicycle Level of Stress: Low Stress / High Comfort

Project Source: MPO / City Staff

Traffic Volumes: 2,160

Posted Speed: 30 mph

Crashes: 66 per mile

Estimated Project Cost:
Project Element Cost: $333,000
Design: $33,300
Contingency/Management: $50,000
Total Project Costs: $416,300

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 038: GIBSON LN SIDEWALK

RANK: #24 OVERALL | #15 TEXAS **SCORE: 35.89**

Description: Complete sidewalk network and fill sidewalk gaps along Gibson Lane from Richmond Road to N Kings Hwy. Construction of sidewalks will depend on the completion of Gibson Lane between the two extents listed for this project. When appropriate, install pedestrian crossings at Richmond Road, Pavilion Parkway, Pleasant Grove Road (both east and west of Wagner Creek), and N Kings Hwy.

Length: 2.52 miles

Bicycle Level of Stress: Moderate Stress / Comfort

Project Source: MPO / City Staff

Traffic Volumes: 5,514

Posted Speed: 45 mph

Crashes: 37 per mile

Estimated Project Cost:
Project Element Cost: $950,800
Design: $76,100
Contingency/Management: $142,600
Total Project Costs: $1,169,500

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 039: N KINGS HWY BICYCLE LANE & SIDEWALK

RANK: #31 OVERALL | #20 TEXAS **SCORE: 34.76**

Description: Construct buffered bicycle lanes and sidewalks along N Kings Hwy from IH-30 to Redwater Road. Install pedestrian crossings at the southside IH-30 frontage, W New Boston Road, Chapelwood United Methodist/ Chapelwood Memorial Garden, and Redwater Road. Improve crossings at Burton Street and at Akin Street/BWI Companies, Inc.

Length: 2.27 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: MPO / City Staff

Traffic Volumes: 9,948

Posted Speed: 30 - 50 mph

Crashes: 113 per mile

Estimated Project Cost:
Project Element Cost: $501,000
Design: $40,100
Contingency/Management: $75,100
Total Project Costs: $616,200

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

5 Project Identification and Prioritization

PROJECT 040: COWHORN CREEK RD BICYCLE LANE & SIDEWALK

RANK: #15 OVERALL | #9 TEXAS **SCORE: 38.10**

Description: Construct buffered bicycle lanes and sidewalks along Cowhorn Creek Road from Kennedy Lane to Galleria Oaks Drive. Install pedestrian crossings at Kennedy Lane, the Central Mall street across from the Texarkana Convention Center, S Cowhorn Creek Loop, and N Cowhorn Creek Loop. Improve crossings at Galleria Oaks Drive.

Length: 1.05 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: MPO / City Staff

Traffic Volumes: 8,785

Posted Speed: 40 mph

Crashes: 87 per mile

Estimated Project Cost:
Project Element Cost: $243,300
Design: $24,300
Contingency/Management: $36,500
Total Project Costs: $304,100

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.

PROJECT 041: McKNIGHT RD BICYCLE LANE & SIDEWALK

RANK: #8 OVERALL | #5 TEXAS **SCORE: 41.34**

Description: Construct buffered bicycle lanes and sidewalks along McKnight Road from Richmond Road to Pleasant Grove Road (Pleasant Grove Road turns into University Avenue). Install pedestrian crossings at Richmond Road, Pleasant Grove High School, and Pleasant Grove Road.

Length: 1.23 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: MPO / City Staff

Traffic Volumes: 4,849

Posted Speed: 45 mph

Crashes: 52 per mile

Estimated Project Cost:
Project Element Cost: $279,700
Design: $28,000
Contingency/Management: $42,000
Total Project Costs: $349,700

Note: Program-level project costs are estimates. Actual project costs depend on market conditions, and will not be finalized until the time of design and construction.


Texarkana

Chapter 6
Implementation and Funding

6 Implementation and Funding

Introduction

The creation of an interconnected network of bicycle and pedestrian facilities will require the coordinated efforts of multiple public entities within the TMPO study area. The development and implementation of programs, policies, ordinances, and facilities will likewise require sustained effort from public and private partners.

Implementation Roles

Interagency coordination is essential for establishing a transportation system which appropriately implements non-motorized vehicle facilities. These public agencies, alongside the private sector, combine to become the driving force behind active transportation planning in the Texarkana Region. The following lists several entities that will need to plan an active role in implementing goals, objectives and projects.

Public Entities

Texarkana MPO (TMPO)

- Prioritize and implement bicycle/pedestrian projects which emphasize regional and local connectivity throughout the region
- Prepare plans (i.e. Metropolitan Transportation Plans) in accordance with federal guidelines to ensure competitiveness for necessary federal funding
- Coordinate with state (TxDOT, ArDOT) and other regional agencies to include active transportation infrastructure into project lists and to ensure regional connectivity
- Assist local government in targeting and applying for grant programs, therefore encouraging active transportation implementation
- Provide local governmental agencies with technical expertise when necessary

TxDOT/ArDOT

- Include bicycle/pedestrian amenities in state roadway projects when applicable and where appropriate
- Implement context-sensitive active transportation infrastructure and follow statewide, regional and local guidelines where appropriate
- Maintain non-motorized vehicle infrastructure included in state infrastructure facilities

Bowie/Miller County

- Develop thoroughfare/corridor plans which dovetail regional/statewide bicycle and pedestrian system initiatives and plans
- Include bicycle/pedestrian amenities in county roadway projects when applicable
- Locate and target public rights-of-way such as utility easements, canals, etc. that can be used to complete multi-use pathways
- Help maintain infrastructure when possible

Individual Communities

- Develop plans specific to bicycle/

pedestrian and trail infrastructure, and ensure other multi-use plans incorporate active transportation amenities
- Coordinate with TMPO and TxDOT/ ArDOT to ensure regional and statewide planning efforts align with local priorities
- Implement ordinances which enforce active transportation infrastructure inclusion in the form of complete streets programs/polices, overlays, etc.
- Proactively plan for active transportation funding

Transit Authorities

- Provide amenities for non-motorized transportation on fleet vehicles
- Interdepartmental coordination to develop adequate transit facility standards along public right-of-way

Private Entities

Developers

- Implement bicycle/pedestrian infrastructure and amenities in conjunction with primary design
- Include multi-use pathways on-site where applicable
- Use local policy and ordinances to guide inclusive transportation design

Local Institutions

- Actively seek public programs which incentivize active transportation development
- Participate and support programs designed to encourage/educate the community about active transportation benefits

Advocacy Organizations

- Help local agencies with data collection to increase awareness and knowledge
- Host/lead bicycle and pedestrian awareness/education events for the community
- Participate in local government outreach activities

Project Goals and Objectives

The following goals were developed through a comprehensive review of local and state planning efforts, the initial user survey, public involvement efforts, discussions with stakeholders and an identification of best practices in active transportation planning. Each following goal has an associated description, as well as key objectives that will help the MPO and local agencies develop a more connected and accessible Texarkana regional active transportation network.

Create an all ages and abilities network

Creating a network that allows those limited by general transportation facilities (children, elderly, mobility impaired) to remain connected to their surroundings while also contributing to personal and community health. Active transportation is proven to lower health care costs due to increases in walking and biking activity.

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Key Objectives:

- Implement projects that prioritize multi-generational accessibility and use
- Ensure project concepts/designs incorporate and focus on ADA guidelines
- Provide funding for projects that include non-motorized vehicle transportation infrastructure

Provide safe routes to school for children

Children are significantly impacted by poor sidewalk facilities, particularly in low-income, zero car household communities. Providing families with safe routes to school through neighborhoods and along busy roadways is integral to providing safe transportation options.

Key Objectives:

- Identify and fill major sidewalk gaps impacting school connectivity to transportation infrastructure
- Implement bicycle and pedestrian infrastructure projects which create safe, state of the art active transportation facilities in school/ neighborhood areas

Maintain and repair sidewalks to improve overall sidewalk conditions

Maintained sidewalks contribute to increased mobility and accessibility (namely for disabled populations), add to the aesthetic of an urban/rural area, and may encourage more active lifestyles with increased serviceability.

Key Objectives:

- Target areas within the sidewalk inventory with a substantial lack in connectivity/facility quality and improve quality and connectivity
- Monitor and upgrade sidewalks to meet ADA standards within TMPO

Build a complete network of on road bike lanes

Complete bicycle networks and dedicated bicycle lanes reduce bicycle-automobile crashes and increase safety, serve as a traffic calming device and create more transit stop opportunities, and encourage healthier lifestyles.

Key Objectives:

- Identify all currently available roadways with adequate bicycle right-of-way (existing facilities and shoulder widths) and prioritize their design
- Identify low volume roadways and create bicycle sharrows and bicycle boulevards to strengthen bicycle network/awareness in the short term

Provide access to transit stops using sidewalks and bike facilities

Making it easier for people to access transit via walking or biking improves access to jobs, government services and other major destinations, as well as helps

people live healthier lifestyles, reduce transportation costs and increase the number of options that each person can utilize to travel throughout the region.

Key Objectives:

- Prioritize projects which aim to create/enhance active transportation infrastructure near T-Line transit stops
- Share sidewalk inventory data and transit connectivity analysis with T-Line to develop stop investment priorities

Create a connected network of bicycle/pedestrian paths and trails

A connected network of bicycle/pedestrian paths and trails improves the ability for people to seamlessly travel between the different facilities without having to traverse major roadways to reach other destinations. In addition, connected trails provide a great boost to tourism and bring additional revenues to the region.

Key Objectives:

- Implement projects which are separated from roadway right-of-way enhancing non-motorized vehicle connectivity and the region's recreational options for all ages and abilities
- Target areas offering connectivity options to existing trail/pathway facilities

Fill in sidewalk gaps to create a complete sidewalk network

Contiguous sidewalk networks increase pedestrian mobility/accessibility and contribute to healthier communities, while also reducing pedestrian-automobile crashes and increasing the city's overall safety.

Key Objectives:

- Implement projects that aim to connect existing sidewalk inventory (in and around urbanized Texarkana) to perimeter areas in the TMPO region
- Ensure individual entities have access and understand sidewalk inventory data

Promote public health through active transportation

Active transportation promotes human energy as a means of transportation and connectivity, which inherently encourages healthier communities as a whole; not only does active transportation impact physical health but also positively impacts cognitive functioning.

Key Objectives:

- Utilize public outreach during project phase implementation to educate the community on the innate benefits of active transportation
- Implement educational components on existing/future active transportation facilities
- Continue MPO involvement in Healthy Active Arkansas (HAA)

Improve bicycle and pedestrian safety along roadways

By planning and investing in appropriate bicycle and pedestrian projects that are context sensitive, communities can see a

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measurable improvement in pedestrian and bicycle collisions, as well as overall comfortability along roadways throughout the region.

Key Objectives:

- Implement projects with in depth knowledge of safety concerns created by traffic for a given roadway segment; understand each individual project's safety concerns and design accordingly

Develop a designated regional bicycle route system

Raising awareness of regional bicycle facilities to current and future bicyclists in the area, while also increasing intermodal connectivity between urban and rural areas in the MPO region can lead to a more informed and active network of bicyclists.

Key Objectives:

- Ensure projects connect to surrounding regional bicycle trails and roadway shoulders to connect the TMPO study area to surrounding areas
- Locate and target rural areas with existing trail and bike/pedestrian infrastructure to connect to

Create bicycle and pedestrian friendly communities to boost economic activity

Increased bicycle and foot traffic boost metropolitan economic activity for several reasons. Recent research shows bicyclists and pedestrians tend to spend the most money at local businesses, and that active transportation counters costs from externalities such as pollution, poor health, and gas consumption.

Key Objectives:

- Implement projects that connect people to key destinations and commercial centers
- Prioritize projects which connect activity/employment nodes within the TMPO Region

Create complete streets policies that are ready for community adoption

Allows for communities to seamlessly benefit from complete streets policies, including but not limited to better accessibility/mobility, increased urban activity, decreased automobile dependence, increased city aesthetic, and overall healthier community lifestyles.

Key Objectives:

- Develop complete streets language (See Appendix)
- Adopt complete streets policy language (each community)
- Create Complete Streets or Bicycle/ Pedestrian Advisory Committees (regional and local)

Educate the community on the benefit of active transportation investments

Knowledge and information are effective tools for positive change. Educating

communities on the benefits of active transportation investments allows for a city/region to realize and achieve such goals sooner rather than later, in turn creating a healthier and more cohesive community.

Key Objectives:

- Utilize interdepartmental coordination to pool resources towards educating the public on the importance of active transportation
- Use existing public platforms to raise active transportation awareness
- Utilize public-private partnerships, gaining support of local interest groups to spread the word on active transportation benefits

Monitoring Project Success and Measuring Performance

The purpose of the projects, goals, and objectives outlined in this plan is to create a more accessible, sustainable, and connected active transportation system in the Texarkana region. It is critical to understand the impacts of investment in active transportation facilities. To do so, the MPO should continuously monitor performance of the active transportation system. The following performance metrics should be continuously monitored to understand the quantitative and qualitative impacts of investment in active transportation facilities. The following list is an example of generally accepted performance measures that the MPO should explore in their upcoming Metropolitan Transportation Planning process. The MPO should work with TxDOT, ArDOT, and local communities to set coordinated performance targets to achieving a safer and more connected multimodal transportation network. Performance measures should be included in the MPO and statewide long range plans.

Safety Measures

Safety measures provide the region with measurements aiming to help reduce crashes involving bicyclists and pedestrians. It is critical to document the relationship between non-motorized and motorized vehicle accidents, to illustrate crash interactions between the two. Bicycle and pedestrian crash data should be utilized to gauge a region's overall active transportation safety.

Accessibility Measures

Accessibility in this case refers to the convenience of bicycle and pedestrian facilities as a transportation option, and how they connect to transit services and school zones.

Transit Access

Active transportation connectivity to transit services is important as those who utilize transit also typically use bike/pedestrian infrastructure. This is especially true in areas that fall outside of a transit line's service area. Transit access metrics should focus on active transportation infrastructure's location and proximity to transit service areas, which in this study have been defined as a quarter-mile buffer

(the distance one is typically willing to walk/bike to reach transit).

School Access

A large portion of the region's transit dependent population (TDP) is a part of the region's pre-kindergarten through high school population. Because of this, it is critical to examine how well existing active transportation facilities serve the region's schools. This can be done by measuring current bike/pedestrian facilities and roadways within school buffer zones, and examining the systems connectivity between schools.

Project Implementation

Prioritizing and scheduling project implementation allows a region to visualize active transportation facility enhancements. By creating a list of projects ranked by importance and need to the community, initial project phasing/scheduling can be implemented to give the community an idea of which projects have been completed and when improvements will take place. Project implementation should be documented to track progress towards achieving Plan outcomes.

Sidewalk Coverage

It is important for a community and region to quantify and strive to advance existing sidewalk coverage. The following metrics aim to help indicate whether the region has expanded sidewalk coverage, implemented safe and equitable design, and built sidewalk infrastructure where it is most necessary.

Sidewalk Miles

Sidewalk mileage is one of the most common active transportation performance metrics used by municipalities. Creating an inventory of sidewalk facility mileage creates a base figure to compare future inventories, marking a region's overall/pace of progress.

Gaps Completed

Increasing sidewalk mileage can in theory benefit a region's active transportation network, however additional mileage must be implemented in areas of need. These areas, also known as gap areas, must be targeted and prioritized prior to project implementation to ensure overall connectivity is increased.

ADA Crosswalks Installed

Another key component of sidewalk coverage is accessibility, or how equitably connected a region's activity nodes are. Creating an inventory of existing ADA crosswalks allows a region to understand which areas do not provide all types of users access to the active transportation system.

Potential Funding Sources for the Plan

A critical component to implementing bicycle and pedestrian infrastructure improvements includes identifying funding sources and potential partners. Since local funds for specific bicycle and pedestrian infrastructure can be limited, it is crucial to identify and explore opportunities through various funding sources, such as the federal government, national bicycle and pedestrian organizations, the State of Texas (TxDOT), the State of Arkansas (ArDOT) and alternative local cost-sharing strategies. This section outlines the most applicable federal, state, and local funding opportunities TMPO jurisdictions should leverage to fund bicycle and pedestrian infrastructure investment in the region.

Summary of Federal Funding Sources

Many federal government funding sources are available to assist with the implementation and construction of bicycle and pedestrian infrastructure improvements; however, many of those sources require a local match or percentage share of the total cost. There are various funding through the Federal Highway Administration (FHWA), Department of Transportation (DOT), and the Federal Transit Authority (FTA) is provided to TxDOT each year. TxDOT and ArDOT coordinate closely with local MPOs to prioritize local transportation projects and administer federal funding accordingly. FHWA funds distributed to each state are divided among individual apportioned programs—such as the National Highway Performance Program (NHPP), Surface Transportation Block Grant Program (STBG), and the Highway Safety Improvement Program (HSIP)—and then distributed to municipalities[1]. This section highlights the most relevant federal funding sources for bicycle and pedestrian infrastructure improvements and summarizes program guidelines, key eligibility requirements, and types of eligible projects.

Transportation Investment Generating Economic Recovery Discretionary Grant Program (TIGER)[2]

TIGER grants are competitive/discretionary grants that can be utilized to fund surface transportation infrastructure capital investments. TIGER grants primarily focus on projects that provide both economic benefits and improve access to reliable, safe and affordable transportation options. TIGER grants may be used for, but not limited to, bicycle lanes, cross walks, lighting, and bridges. Capital funds provided through the TIGER program are unique in that individual municipalities, counties, and MPOs can receive them directly from the federal government, as opposed to most federal funds that are distributed at the State or transit agency level and then allocated to

[1] Additional information on state level program apportionment under the FAST Act can be found at: http://www.fhwa.dot.gov/fastact/funding.cfm

[2] More information, funded project descriptions, application materials, and additional eligibility requirements can be accessed at the U.S. Department of Transportation website: https://www.transportation.gov/tiger/about

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individual municipalities. It is important to note that many bicycle and pedestrian projects will only be competitive if they are part of a larger project with proven economic benefits. To date, the TIGER program has provided nearly $5.1 billion dollars of investment to support 421 projects[3]. $500 million in TIGER funding was recently secured for the 2016 fiscal year through the 2020 fiscal year.

Federal Transit Administration (FTA)[4]

The FTA provides funds for bicycle and pedestrian investment as they relate to transit investment. FTA funds may be used to fund appropriate bicycle and pedestrian infrastructure improvements such as bicycle lanes, bicycle parking, bus shelters/benches, sidewalks, and lighting among others. To qualify for FTA funds, projects must provide or improve access to existing or planned transit facilities such as stops and stations. Multiple FTA grant programs exist that can assist with funding bicycle and pedestrian infrastructure. Those applicable to TMPO jurisdictions include, the Metropolitan & Statewide and Non-metropolitan Transportation Planning Program, the Urbanized Area Formula Program, Fixed Guideway Capital Investment Grants, Bus and Bus Facilities Formula Grants, Enhanced Mobility of Seniors and Individuals with Disabilities program, Formula Grants for Rural Areas, and Transit Oriented Development (TOD) Planning Pilot Grants.

Fixing America's Surface Transportation (FAST Act)[5]

The FAST Act, enacted in late 2015 and administered by the FHWA, provides secure surface transportation program funding for 2016 through 2020. The FAST Act is meant to improve mobility, enhance economic growth, and accelerate project delivery by providing funding for roadway improvements. The FAST Act requires MPOs to consider all users when designing and constructing transportation infrastructure projects and provides flexibility to use funds for bicycling and walking improvements. Individual programs under the FAST Act have varying requirements and eligible projects.

The FAST Act authorizes funding to each State in a lump sum for all apportioned programs. Programs related to bicycle and pedestrian infrastructure include the Surface Transportation Block Grant Program (STBG), Congestion Mitigation and Air Quality Improvement Program (CMAQ), Highway Safety Improvement Program (HSIP), and National Highway Performance Program (NHPP).

Surface Transportation Block Grant Program (STBG)[6]

As the most flexible federal funding program, the STBG Program—redesigned from the traditional Surface Transportation

[3] Source: https://www.transportation.gov/tiger

[4] More information can be found at the Federal Transit Administration website on bicycle and transit funding: https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/livable-sustainable-communities/fta-program-bicycle

[5] Information on the FAST Act can be acquired through the FAST Act website: http://www.fhwa.dot.gov/fastact

Program—provides funds that are eligible for use on nearly all projects that include bicycle and pedestrian improvements. Typically, STBG funds are not used on local or rural minor collectors; however, bicycle/pedestrian projects are exceptions to that standard. STBG funds are sub-allocated to the local level based on a municipality's relative share of the state's population and classification as one of the following: an urbanized area with population greater than 200,000, urbanized area with population greater than 5,000 but no more than 200,000, or areas with population less than 5,000. TxDOT and ArDOT prioritize projects and administer STBG funds.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)[7]

CMAQ funds are lump sum, state-apportioned funds available through the FHWA as a continuing program under the FAST Act. CMAQ funding availability is a proportion of the overall apportionment for each state. CMAQ funds are meant to assist in funding projects that improve air quality and relieve congestion. Eligible projects are likely to contribute to the attainment of air quality standards and reduce air pollution, and the projects must be included in an MPO's Transportation Improvement Program (TIP). CMAQ funds may be used on, but not limited to, the following transportation improvements: bicycle lanes, separated bicycle lanes, sidewalks, shared use paths, and signage. In Texas, CMAQ funds are included within TxDOT's Category 5 funding. Arkansas is expecting $13 Million in CMAQ funding during the next fiscal year. According to the U.S. Environmental Protection Agency (EPA), the TMPO area is currently classified as an attainment area and, thus, would not typically qualify for CMAQ funds. However, States do have authority to spend a portion of its CMAQ funds on projects in areas currently classified as attainment areas that assist in maintaining the state's attainment status. Should the TMPO area become classified as a non-attainment area per the U.S. EPA, bicycle and pedestrian projects would qualify directly for CMAQ funding. As such, the matrix pairing projects with optimal funding sources does not currently include CMAQ as a category.

Highway Safety Improvement Program (HSIP)[8]

Continued under the recently enacted FAST Act, the HSIP aims to assist public agencies in improving safety along public roadways. Specifically, HSIP funds are dedicated to projects that reduce conflicts between pedestrian/bicycles and automobiles, such as pedestrian hybrid-beacons and roadway improvements that provide separated facilities (e.g. medians or pedestrian islands). As part of the

[6] Additional information on the redesigned Surface Transportation Block Grant Program can be found here: http://www.fhwa.dot.gov/fastact/factsheets/stbgfs.cfm
[7] More information can be found at the Federal Highway Administration's FAST Act website: http://www.fhwa.dot.gov/fastact/
[8] Additional information on the eligible projects and requirements for HSIP funds can be found here: http://www.fhwa.dot.gov/fastact/factsheets/hsipfs.cfm

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HSIP, a performance-based approach is used to determine funding projects. To be eligible for HSIP funds, projects must be consistent with State level strategic highway safety plans (SHSP) and must specifically address a hazardous location or safety concern. HSIP funds are administered within Texas by TxDOT and within Arkansas by ArDOT.

National Highway Performance Program (NHPP)[9]

NHPP funding availability is continued through the FAST Act and provides funding for the construction of new facilities on the National Highway System (NHS). NHPP funds can be utilized to fund bicycle lanes, bicycle parking, curb cuts and ramps, separated bicycle facilities, and shared use paths, among others. NHPP funds are administered by TxDOT in Texas and ArDOT in Arkansas.

Transportation Alternatives Set-Aside (TA Set-Aside Program)[10]

TA funding is a set-aside of the STBG Program. All bicycle and pedestrian projects previously eligible for TA funding under the Moving Ahead for Progress in the 21st Century Act (MAP-21) continue their eligibility in the revised TA from the FAST Act. Projects that are small-scale in nature typically qualify for TAP funding. TAP funding is a competitive process and now requires states and MPOs to provide annual reports on applications for funding and awarded funds.

Safe Routes to School (SRTS)

SRTS is continued under the FAST Act as a set-aside program under the STBG Program. SRTS funds are meant to assist local municipalities in funding projects that improve connectivity and access to schools. Eligible bicycle and pedestrian projects include bicycle lanes, crosswalks, separated bicycle lanes, and signed bicycle routes, among others.

Recreational Trails Program (RTP)[11]

The RTP was reauthorized under the FAST Act and is now a set-aside of funds from the TAP. The RTP is administered in Texas by the Texas Parks and Wildlife Department, who also receives the grant applications. In Arkansas, the program is administered by the Arkansas Department of Transportation, who also receives the grant applications. Eligible projects include maintenance and restoration of existing facilities, construction of new trails, acquisition of easements or property for trails, and the development and rehabilitation of trailside/trailhead facilities and trail linkages. Additional eligibility requirements specific to Texas can be found under the Texas Parks and Wildlife (TPWD) Recreational Trails Grants section while additional eligibility

[9] Additional guidelines for NHPP funds can be found here: http://www.fhwa.dot.gov/fastact/factsheets/nhppfs.cfm
[10] Additional information can be found here: http://www.fhwa.dot.gov/fastact/factsheets/transportationalternativesfs.cfm
[11] Additional information can be found here: http://www.fhwa.dot.gov/environment/recreational_trails/overview/program_summary/

requirements specific to Arkansas, can be found under the Arkansas State Highway and Transportation Department Recreational Trails Program section.

Community Development Block Grants (CDBG) Entitlement Program – Department of Housing and Urban Development (HUD)[12]

The CDBG Entitlement Program, administered through the Department of Housing and Urban Development, provides funds to entitlement communities (of which Texarkana is a grantee) on a formula basis to develop viable urban communities. As such, funds available through the CDBG Entitlement Program would likely only be eligible for bicycle and pedestrian projects within the City of Texarkana. These grants can be used to fund an array of community development projects, including public facilities and improvements that enhance the quality of life for residents of low- to moderate-income communities. Specifically, the construction or improvement of streets is an approved activity. Eligible projects could include sidewalk improvements, streetscape enhancements that promote economic development, and community-based active transportation facilities[13]. The grantee must develop and follow a detailed citizen participation plan during the design and implementation of any funded project. Additional eligibility requirements can be found on the CDBG Entitlement Program website.

Section 108 – Loan Guarantee Program – Department of Housing and Urban Development (HUD)[14]

Nestled under the CDBG program, the Section 108 - Loan Guarantee Program allows local governments to transform a small portion of their allotted CDBG funds into federally guaranteed loans to pursue revitalization projects for neighborhoods. These loans can be utilized by either the public entity receiving the funds or loaned to a third party to construct community projects. Guidelines and eligible projects under the Section 108 – Loan Guarantee Program match those under the CDBG program.

Transportation Infrastructure Finance and Innovation Act (TIFIA)[15]

The TIFIA program provides financial assistance in the form of secured loans, loan guarantees, and lines of credit to finance surface transportation projects. Specific TIFIA requirements and project cost thresholds can be found at the FAST Act website.

[12] Additional information can be found here: https://www.hudexchange.info/programs/cdbg-entitlement/cdbg-entitlement-program-eligibility-requirements/

[13] Additional information and funding strategies can be found at the Pedestrian and Bicycle Information Center website: http://www.pedbikeinfo.org/planning/funding_government.cfm

[14] Specific program eligibility requirements can be found here: https://www.hudexchange.info/programs/section-108/section-108-program-eligibility-requirements/

[15] Additional information on financing projects through TIFIA can be found here: https://www.fhwa.dot.gov/fastact/factsheets/tifiafs.cfm

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Additional Grant Programs

There are numerous national advocacy groups that promote bicycle/pedestrian awareness and education, and in some cases, these groups provide funding through grant programs.

Private Grants – Robert Wood Johnson Foundation[16]

The Robert Wood Johnson Foundation invests in grantees (e.g., public agencies, universities, and public charities) that are working to improve the health of all Americans. Current or past projects in the topic area "walking and biking" include greenway plans, trail projects, advocacy initiatives, and policy development.

Community Grants – People for Bikes[17]

Community Grants, available through the People for Bikes organization, provide funding for projects that leverage federal funding and increase awareness for bicycling projects across the United States. Eligible projects include bike paths and trails.

Summary of State Funding Programs

Texas Department of Transportation (TxDOT)

TxDOT administers the State's apportionment of FAST Act funds provided by the FHWA. TxDOT sub-allocates these funds to the local level using twelve funding categories. Relevant bicycle and pedestrian funding categories include:

- Category 1: Preventative Maintenance and Rehabilitation
- Category 2: Metropolitan and Urban Corridor Projects
- Category 4: Statewide Connectivity Corridor Projects
- Category 5: Congestion Mitigation and Air Quality Improvement
- Category 7: Metropolitan Mobility and Rehabilitation
- Category 8: Highway Safety Improvement Program
- Category 9: Transportation Enhancements
- Category 9: Transportation Alternatives Program
- Category 10: Texas Parks and Wildlife Department
- Category 10: Curb Ramp Program
- Category 10: Supplemental Transportation Projects (Federal and Non-Federal)
- Category 11: District Discretionary
- Category 12: Strategic Priority (Economic Development)

Apart from federal funding, TxDOT finances transportation infrastructure projects through a variety of revenue sources, including State Highway Funds, bond proceeds, Texas Mobility Fund, General Revenue Fund, and concession fees.

[16] Additional program guidelines can be found here: http://www.rwjf.org/en/how-we-work/grants-and-grant-programs.html[17] Additional information can be found here: http://www.fhwa.dot.gov/fastact/factsheets/transportationalternativesfs.cfm

[17] Additional program guidelines can be found here: http://www.peopleforbikes.org/pages/community-grants

Arkansas Department of Transportation (ArDOT)[18]

ArDOT administers the State's apportionment of FAST Act funds provided by the FHWA. Applications for TAP funds are accepted and reviewed by the TAP Advisory Committee (TAPAC). Recreational Trails Program (RTP) applications are reviewed by the Arkansas Recreational Trails Program Advisory Committee (ARTAC).

In addition to the above opportunities, regions/MPOs are required to update and maintain a short range Transportation Improvement Plan (TIP), which identifies upcoming transportation projects. TIPs are then accepted into the Statewide Transportation Improvement Program (STIP) for staged implementation and funding. The projects listed in the TIP and STIP are encouraged to include bicycle and pedestrian accommodations as appropriate and when funds exist.

Texas Parks and Wildlife – Recreational Trails Grants[19]

The Texas Parks and Wildlife Division (TPWD) administers the Recreational Trails Program in the state of Texas through funds provided by the FHWA, which receives its funding from a federal gas tax paid on fuel for non-highway recreational vehicles. Grants cannot exceed 80% of the project cost and have a $200,000 limit.

Local Funding Opportunities

Although Federal and State programs provide the bulk of funding for bicycle and pedestrian projects, local municipalities are responsible for any remaining project costs not covered through these funding sources. This responsibility for municipalities to pay for project costs in excess of Federal and State funding is referred to as a local match and varies per Federal or State program. As local funding mechanisms continue to be limited, it is integral to identify and utilize a variety of different funding opportunities, including property taxes, sales taxes, user fees, and private sources. This section highlights typical local funding sources, as well as several alternative sources, that may be utilized to fund bicycle and pedestrian projects as either stand-alone projects or as part of larger projects.

Property Taxes

Property taxes are, historically, the primary source for local revenue and contribute to a city's general fund. These funds may be used at the discretion of each municipality—subject to local policies, procedures, and availability—to assist in the funding of bicycle and pedestrian infrastructure improvements. Property tax increases can be enacted through a public voting process to assist in the funding of specific bicycle and pedestrian projects.

Sales Taxes

Local sales taxes are another source for

[18] Additional information and application guidelines can be found here: www.arkansashighways.com/tap/tap.aspx; www.arkansashighways.com/stip/stip.aspx

[19] Additional information and application guidelines can be found here: http://tpwd.texas.gov/business/ grants/recreation-grants/recreational-trails-grants

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local revenue. Like property taxes, these funds may be used at the discretion of each municipality to fund bicycle and pedestrian infrastructure improvements. Sales taxes are typically a uniform percentage of the selling price and vary between local jurisdictions within Texas. Local sales tax is in addition to statewide sales tax. While sales taxes are typically distributed into the general fund, municipalities may vote to increase sales taxes as an option to fund bicycle and pedestrian projects.

Local Capital Improvement Programs

Capital Improvement Programs (CIPs) are utilized by local municipalities as a framework for financing future capital projects. Using a variety of local funding sources, including property taxes and sales taxes, municipalities can systematically determine which projects should be funded each year based on their anticipated revenues versus operating expenses. The process of developing a CIP allows municipalities to reasonably predict when funds will be available to construct capital improvement projects, as well as prioritize specific projects. The TMPO should coordinate with local jurisdictions to ensure that projects identified within the TIP are included within local CIPs to leverage additional funding opportunities.

User Fees

User fees are fees that are collected from those who utilize a facility. These fees are collected to pay for the cost of a facility, finance operations, and produce additional revenue. Typically, user fees are charged for the use of specific public utilities/services, such as public parks, water and sewer services, transit systems, and waste facilities. User fees are meant to directly charge those who use a facility, so as to not burden non-users with the additional charges to operate and maintain a service they do not use. User fees may be applicable for off-road facilities and recreational trails.

Bonds

Either general obligation or revenue bonds may be utilized to fund bicycle and pedestrian facilities. These bonds require approval from the voting public and must be paid back to investors throughout the duration of the bond. Revenues generated from property and sales taxes are generally used to pay off bonds.

Impact/Developer Fees

Development impact fees are an additional funding source that may be utilized at the local level to fund infrastructure improvements. Developer fees are generally collected and administered differently between jurisdictions. Developer fees require policy changes at the local level if no such fee currently exists. Developer fees are meant to ensure that developers pay their fair share of improvements along the transportation system where the development is impacting the system. The use of developer fees to fund bicycle and pedestrian improvements ensures that, as development occurs in an area, pedestrian and bicycle amenities/facilities are able to support the growth.

Special Assessments

A special assessment is a method of generating funds for public infrastructure improvements, of which the cost is directly collected from those who benefit from the project. For example, neighborhoods could coordinate to ensure that a portion of their property tax or an additional fee is used to help fund bicycle and pedestrian improvements along their streets.
A specific example of a special assessment is a tax-increment financing district where properties are taxed at an additional rate above the base tax rate to fund specific improvements within a designated area. The difference between the additional rate and the base tax rate (i.e. the increment) is typically used to fund those improvements.

Crowd Funding

Crowd funding is an innovative and increasingly attractive option to fund bicycle and pedestrian infrastructure improvements. Crowd funding allows individuals to donate money to collectively fund a specific project. While crowd funding can help fund projects, it can also serve as a tool to raise community awareness for bicycle and pedestrian needs and, in turn, potentially attract additional donors and community support for continued investment in bicycle and pedestrian facilities.

Partnerships

Partnerships with local and regional businesses can be integral to securing additional funding for bicycle and pedestrian projects, particularly when local funding is not readily available. Additionally, institutions such as hospitals or universities may be interested in sponsoring bicycle and pedestrian facility improvements near their campuses to promote public health benefits associated with active transportation. Public/private partnerships are becoming increasingly popular as the economic benefits of walkable, pedestrian-friendly environments are being realized at the local level. Active transportation improvements can also revitalize and enhance business corridors by providing better accessibility. Additional partnerships between neighboring communities can lead to increased funding potential for projects that cross municipal boundaries.

Facility Maintenance

As projects are constructed throughout the life of this plan, it is crucial to continue ongoing maintenance of new and existing facilities. Providing adequate maintenance will provide safe and accessible facilities. The MPO should coordinate with each local entity to ensure that existing and future facilities are given appropriate considerations and funding to provide ongoing maintenance. Maintenance for bicycle and pedestrian facilities differs slightly.

Pedestrian Facility Maintenance

Regular maintenance to pedestrian facilities creates an equitable network for all ages and abilities. “Fair” to “poor” sidewalk conditions may seem passable to some, while may be completely unusable to others. Facilitating a consistent maintenance program can

be the difference as to whether certain demographic/socioeconomic groups use other modes than the automobile.

Sidewalk Repair

Sidewalk condition impacts a region's network accessibility, health, and even aesthetic appeal. Poor sidewalk condition largely limits those who can use the facility, and creates an eye-sore for the city.

Current practice in the Texarkana Region allows the jurisdiction to evaluate and implement sidewalk improvements. Development costs are placed on land/property owners adjacent to the sidewalk facility, however assessment costs must be "under any procedure not prohibited by state law". Because of this, it is crucial for local agencies in charge of sidewalk repair to keep the public educated and involved in the process.

Sidewalk Debris Removal

Loose gravel and debris creates hazardous conditions for both bicyclists on roadways and sidewalk users. In order to keep sidewalks clear of debris and litter, local agencies should monitor sidewalk cleanliness to provide the safest sidewalks possible for the community. Sidewalk debris should not be swept into the roadway as this just pushes the problem into roadway areas frequented by bicyclists.

Line of Sight

It is important for public agencies to maintain pedestrian's line of sight by preventing any design or amenity additions that could block a user's view of immediate surroundings, including bushes and tree branches. This is especially important for the disabled and youth, as their line of sight may be more easily obstructed due to height restrictions, positioning, etc.

Bicycle Facility Maintenance

Bicycle safety and comfortability differs from pedestrians and automobiles in that bicycles ride on narrow, high pressure tires. What may pass as adequate for other vehicles presents dangerous roadway for bicycles.

Striping and Signage

Striped lanes and lane markings must be a standard width of 4" and should be clearly visible to automobile users. Signs and markings also must align with the Texas or Arkansas Manual of Uniform Traffic Control Devices (MUTCD). To ensure safety of users, it is crucial for a region to schedule restriping and sign maintenance when necessary.

Street Repairs and Overlays

Street repairs/overlays provide opportunity to maintain and improve bicycle facilities. It is important to equally distribute pavement to the areas bicycles use: the outside lane or shoulder of the road. Overlays also present opportunity to restripe bicycle lanes onto existing roadway infrastructure.

It is important to raise inlet grates, manholes, and valve covers to within 6 mm (1/4”) of the pavement surface. Paving gravel driveways at least 4.5 m (15’) from the street edge prevents loose gravel from spilling onto active transportation infrastructure. Grates should be perpendicular to the sidewalk/ roadway along bike routes so bicycle tires do not get caught in the gaps.

Regarding rural and recreational routes subject to water runoff, it is important to schedule a maintenance program for erosion. Local ordinances should be enacted allowing local roadway authorities to maintain vegetation originating from private property. It is common for jurisdictions to require landowners to maintain vegetation, with neglect resulting in some form of citation.

Debris Removal

Bicycle lanes and shoulders containing loose gravel and other debris create hazardous facilities for users. It is important to not sweep sidewalk debris onto the roadway for this reason. It is crucial that localities implement street sweeping programs to consistently rid of street debris and trash. Regulations for covering freight and decreasing accident response times may also help decrease roadway debris.


Texarkana

Appendix

Appendix

Complete Streets Planning and Design

As part of this planning process, the Texarkana MPO emphasized a complete street and complete network approach to planning for bicycle and pedestrian infrastructure. The following section highlights the purpose of a Complete Streets Policy and provides example language that each individual community can utilize to develop and adopt their own Complete Streets Policy.

What are Complete Streets/ Networks?

Complete Streets is the process of planning and designing for the safe and efficient travel of all modes (bike/ped/auto) along each roadway (where appropriate). A Complete Network approach ensures that ample bicycle and pedestrian accommodation is provided through complete streets throughout the entire transportation system, providing increased safety and mobility for users of all ages and abilities.

What is the Purpose of Complete Streets Policies?

Complete Streets Policies, if adopted at the local level, ensure that communities consider complete streets principles and elements during the planning and design phase for each roadway project or residential/commercial development.

What Elements are Included in a Complete Street Policy?

Complete Streets Policies include a community defined vision and commitment to plan and design for complete streets, best practice and complet street background information, and implementation and design guidance.

Texarkana MPO Complete Streets Model Language

The following section includes model language that communities within the Texarkana MPO Study Area may simply adopt or adapt/adjust to match their individual community needs prior to adopting to ensure complete streets principles and elements are considered during the planning and design phase for roadway projects.

The model language development process included a review of Complete Streets best practices nationwide and a review of adopted model ordinances of similar communities throughout the nation.

Model Complete Street Policy Language

[Resolution Format]

WHEREAS, [city or town name] envisions its transportation system as one that will adequately serve the needs of all users regardless of mode of transportation, age, ability, race, ethnicity, income, or geographic location within [city or town name] jurisdiction; and

WHEREAS, [city or town name] will

accomplish this vision by implementing a Complete Streets Policy applicable to currently planned and future transportation projects; and

WHEREAS, complete streets efforts will create a transportation system that provides safety, comfort, convenience, mobility, and accessibility to all users, including motor vehicle users, bicyclists, pedestrians, transit-users, the mobility-impaired (e.g. wheelchair users, blind users, deaf users, etc.), freight and commercial vehicle drivers, and other unspecified users; and

WHEREAS, complete streets have public health benefits by encouraging and enabling the use of active transportation modes and transit, and safety benefits for people choosing to walk or ride a bicycle, particularly children traveling to and from schools; and

WHEREAS, the Complete Streets Policy will complement, strengthen, and improve upon any existing transportation plans, projects, and initiatives applicable to or having effect on [city or town name] streets, including plans, projects, and initiatives imposed by other governing entities such as county, regional, and state entities;

NOW, THEREFORE, BE IT RESOLVED BY THE [CITY COUNCIL OR OTHER GOVERNING BODY] **OF** [CITY OR TOWN NAME], [STATE], that [city or town name] commits to a complete streets policy which has the following elements:

- Any effort applicable to a roadway in [city or town name] which is to be newly constructed, reconstructed, rehabilitated, retrofitted, resurfaced, or maintained shall
  - A) Consider the needs, safety, comfort, and convenience of all transportation users along the specified roadway; and
  - B) Accomplish needed complete streets efforts through the appropriate construction of new facilities, redesign or improvement of existing facilities, and maintenance of new and existing facilities.
- Any approved complete streets effort shall be based on
  - A) The surrounding context and character of the physical environment, neighborhood, or community to appropriately apply the elements and design standards of a complete streets policy approach to maintain a balance when addressing user needs; and
  - B) Proportionality of the scope of work required to create a complete street compared to the scope of work required to maintain the complete street facilities once they are in place; and
  - C) The necessity of the proposed facility based on
    1. current and projected need or use for the facility; and
    2. current and projected desire for the facility.
- Any exception to applying this Complete Streets Policy shall meet the following requirements
  - A) Any exception must be based on acceptable barriers to implementation including but not

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limited to

1. A lack of need or demand for the facility; or
2. Legal restrictions on particular modes along roadways, in which case accommodations for such modes will be made on other nearby roadways; or
3. Restrictive characteristics of the physical environment; or
4. Undue burden created by the implementation of the policy on a specific project; and

- B) Any exception must be approved and documented by [specified regulatory or advisory body] with the reasoning for the exception and its approval; and
- C) Any exception not meeting the acceptable barriers described under 3A may be approved on a case by case basis at the discretion of [specified regulatory or advisory body].

AND BE IT FURTHER RESOLVED BY [CITY COUNCIL OR OTHER GOVERNING BODY] **OF** [CITY OR TOWN NAME], [STATE], that this Complete Streets policy shall apply to each stage of a project, from scoping to construction and maintenance.

AND BE IT FURTHER RESOLVED BY [CITY COUNCIL OR OTHER GOVERNING BODY] **OF** [CITY OR TOWN NAME], [STATE], that specified departments of [city or town name] shall review any existing plan documents and design guidelines, and shall make updates to applicable documents and procedures as necessary, to ensure that they contain the most up-to-date design standards and best practices regarding complete streets as outlined in the Texarkana Regional Active Transportation Master Plan, and shall review updates to design standards over time as necessary to ensure that the most up-to-date design standards are continually incorporated into complete streets policy updates and efforts, and shall allow such design standards to incorporate flexibility to account for project context.

AND BE IT FURTHER RESOLVED BY [CITY COUNCIL OR OTHER GOVERNING BODY] **OF** [CITY OR TOWN NAME], [STATE], that specified departments of [city or town name] shall review any existing policies, procedures, resolutions, and ordinances, and shall make updates to applicable documents and procedures as necessary, to ensure that they comply with the most recently adopted Complete Streets Policy, and shall continue to incorporate the most recently adopted Complete Streets Policy into new or future versions of such policies, procedures, resolutions, and ordinances.

AND BE IT FURTHER RESOLVED BY [CITY COUNCIL OR OTHER GOVERNING BODY] **OF** [CITY OR TOWN NAME], [STATE], that the responsibility for implementation of the Complete Streets Policy will be assigned to [specified administrative body], which shall report on an annual basis to the [city council or other governing body] on the progress of Complete Streets Policy implementation and performance.

AND BE IT FURTHER RESOLVED BY [CITY COUNCIL OR OTHER GOVERNING BODY]

OF [CITY OR TOWN NAME], [STATE], that [specified administrative body] shall determine performance measures to ensure successful implementation of the Complete Streets Policy and shall make complete streets data and assessments of performance of complete streets efforts available for public consumption.

AND BE IT FURTHER RESOLVED BY [CITY COUNCIL OR OTHER GOVERNING BODY] **OF** [CITY OR TOWN NAME], [STATE], that [city or town name] shall acquire public input related to complete streets efforts and shall promote and encourage, through appropriate means, public education on the importance of complete streets.

AND BE IT FURTHER RESOLVED BY [CITY COUNCIL OR OTHER GOVERNING BODY] **OF** [CITY OR TOWN NAME], [STATE], that [specified city or town department] shall be responsible for developing the necessary policies, procedures, resolutions, and ordinances for funding the Complete Streets Policy and shall identify any complete streets needs and recommend a plan to meet such needs within [city or town name] jurisdiction.

AND BE IT FURTHER RESOLVED BY [CITY COUNCIL OR OTHER GOVERNING BODY] **OF** [CITY OR TOWN NAME], [STATE], that [city or town name] shall work to coordinate complete streets policies and efforts with those of neighboring communities to ensure intraregional consistency and connectedness of complete streets facilities.

AND BE IT FURTHER RESOLVED BY [CITY COUNCIL OR OTHER GOVERNING BODY] **OF** [CITY OR TOWN NAME], [STATE], that [city council or other governing body] commits to including Complete Streets Policy in all future [City/Town] plans.

Appendix

User Survey

The following survey was created and distribted to community members. Additional information and results can be found in Chapter 4.

Regional Active Transportation Master Plan

Active Transportation User Survey

The Texarkana MPO is in the process of updating the Regional Active Transportation Master Plan. We would appreciate if you took a few minutes to answer the following questions related to bicycling and walking in the Texarkana region. Thank you for your participation!

1. **How do you typically commute?**

   ☐ Walk ☐ Personal vehicle ☐ Bike ☐ Bus ☐ Other_____

2. **Do you ride a bike? If so, how often do you ride?**

   ☐ I do not ride a bike ☐ Yes, at least once a week ☐ Yes, at least once a summer

   ☐ Yes, several times a week ☐ Yes, at least once a month ☐ Other_____

3. **If you do not bike in the region, why not?**

   ☐ Lack of wayfinding and signage ☐ It is not efficient to get to my destination

   ☐ Lack of bicycle facilities ☐ Biking takes too long

   ☐ Traffic volumes/speeds along roadways ☐ The bike network is not well connected

   ☐ Lack of trails ☐ Other_____

4. **If you do bike, why do you typically bike in the region?**

- ☐ Recreation/Leisure
- ☐ Exercise
- ☐ Access to parks
- ☐ Access to healthcare
- ☐ Access to work
- ☐ I do not have access to a vehicle
- ☐ Access to other parts of the community
- ☐ Shopping, dining, or entertainment
- ☐ Other_____

5. **If you do bike, where do you typically travel to?**

- ☐ Grocery/shopping
- ☐ Relative or friend's home
- ☐ Park, field, or path
- ☐ Work
- ☐ School
- ☐ Recreational areas
- ☐ Other_____

6. **Do you walk as a form of transportation? If so, how often do you walk?**

- ☐ I do not walk
- ☐ Yes, several times a week
- ☐ Yes, at least once a week
- ☐ Yes, at least once a month
- ☐ Yes, at least once a summer
- ☐ Other_____

7. **If you do not walk in the region, why not?**

- ☐ Poor sidewalk conditions
- ☐ Lack of wayfinding and signage
- ☐ Traffic volumes/speeds along roadways
- ☐ Lack of sidewalks
- ☐ It is not efficient to get to my destination
- ☐ It takes too long to walk between destinations
- ☐ Sidewalks are not well connected
- ☐ Other_____

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8. **If you do walk, why do you typically walk?**

☐ Recreation/Leisure ☐ Access to Healthcare ☐ Access to other parts of the community
☐ Exercise ☐ Access to work ☐ Shopping, dining, or entertainment
☐ Access to parks ☐ I do not have access to a vehicle ☐ Other_____

9. **Do you use transit? If so, how often?**

☐ No ☐ Several times a week ☐ Several times a month ☐ Other_____
☐ Every day ☐ Once a week ☐ One or fewer times a month

10. **If you do not use transit, why not?**

☐ It is inefficient ☐ There are no transit stops nearby ☐ It takes too long
☐ Unpredictable schedules ☐ The bus does not come often enough ☐ Other_____

11. **How do you access your nearest transit stop?**

☐ Walk ☐ Bike ☐ Get a ride ☐ Other_____

12. **Are there sidewalks connecting you to your transit stop?** ☐ Yes ☐ No

13. **What kind of improvements would increase your likelihood to ride a bike or walk more often in the Texarkana region?**

☐ Better sidewalks ☐ Better lighting on paths and sidewalks ☐ Better connected sidewalks
☐ More sidewalks ☐ Better bike and pedestrian safety policies ☐ Separated hike and bike trails
☐ More wayfinding ☐ Bike lanes or protected bike lanes ☐ Other_____
☐ Designated bike routes ☐ Bike/Pedestrian paths and trails within 5 minutes of my house

Please provide answers to the following personal information questions below.
Note that this information is voluntary and will be kept anonymous.

What is your age? ☐ < 16 ☐ 16-19 ☐ 20-24 ☐ 25-34 ☐ 35-49 ☐ 50-64 ☐ 65+

What is your race or ethnicity?

☐ White ☐ African American ☐ Asian ☐ Native Hawaiian or Pacific Islander

☐ American Indian or Alaska Native ☐ Two or More ☐ Other_____

Are you currently employed? ☐ Yes ☐ No

What is your estimated annual household income?

☐ < $15K ☐ $15-25K ☐ $25-35K ☐ $35-50K ☐ $50-75K ☐ $75K+

Do you have a mobility impairment that impacts your ability to walk or bike? If so, does the current sidewalk network adequately serve your needs?

☐ I do not have any mobility impairments

☐ Yes I have a mobility impairment and the sidewalk network meets my needs

☐ Yes I have a mobility impairment and the sidewalk network does not adequately meet my needs

☐ Other_____

What zip code do you live in? _____

Appendix

Initial Open House Boards

The following boards were presented at the inital open house. Additional information can be found in Chapter 4.

Regional Active Transportation Master Plan

VISIONING OPEN HOUSE

INTRODUCTION

The Texarkana Metropolitan Planning Organization (MPO), with the help of Alliance Transportation Group and Data Transfer Solutions, is developing a Texarkana Regional Active Transportation Master Plan (TRATMP) for the Texarkana region.

The TRATMP will include projects and recommendations that will feed into the next Metropolitan Transportation Plan update that will be completed by the Texarkana MPO.

Active Transportation refers to the use of physical activity for the purpose of transporting people and sometimes goods. This includes forms of travel such as walking, bicycling, and using a wheel chair.

PURPOSE

The primary purpose of the TRATMP is to plan for the future of active transportation in the Texarkana region based on the community's needs, goals, vision, and federal guidelines. A completed plan will generally result in a set of prioritized projects, performance measures, and policy recommendations that will guide the MPO to make improvements and take actions that reflect the goals set out at the beginning of the planing process.

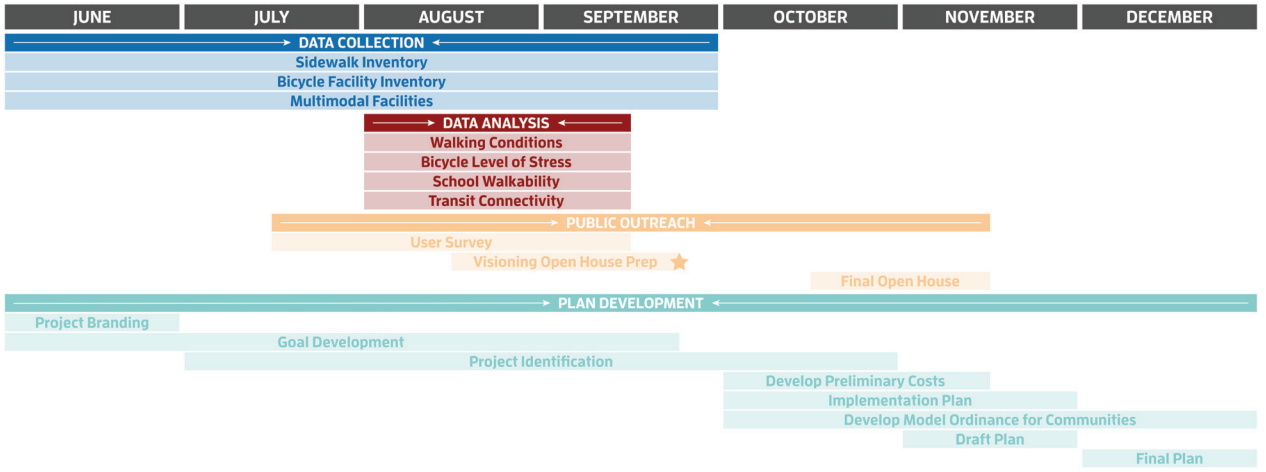
The purpose of this Open House is to inform the community on TRATMP progress and data analysis results, gather feedback, and foster open discussion between community members and the TRATMP project team on what Texarkana's future active transportation network should look like.

FEDERAL GUIDELINES

"The Department Of Transportation policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide – including health, safety, environmental, transportation, and quality of life – transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes."

Several Federal statutes require that bicycle and pedestrian transportation facilities must be considered throughout the planning process to receive Federal funding for roadways.

PROCESS & TIMELINE



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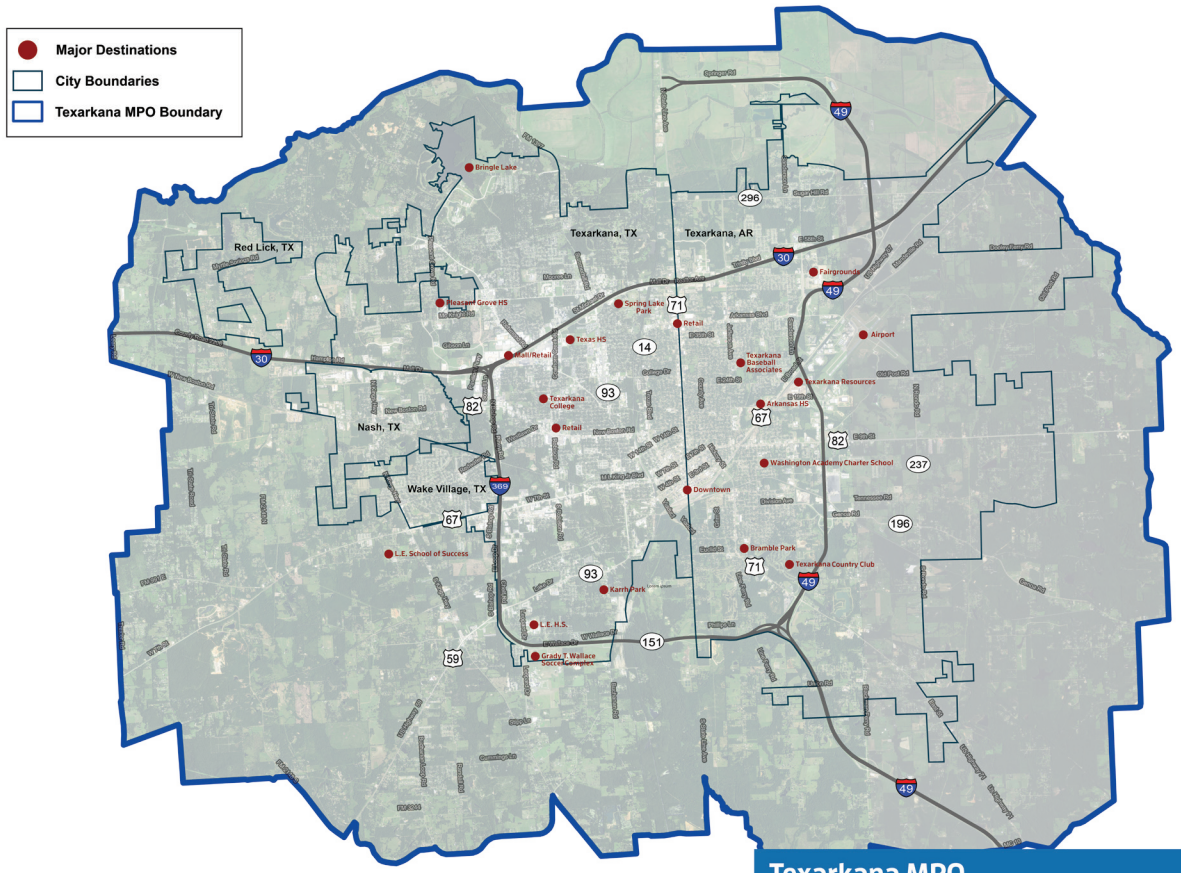
Regional Active Transportation Master Plan

VISIONING OPEN HOUSE

LIVE, WORK, PLAY

To help the Texarkana MPO and its regional planning partners plan for a comprehensive active transportation system, please tell us where you Live, Work and Play. Orange, blue, and green dots have been provided to complete this activity. **Use the instructions to the right to place your dots on the map below.**



Live

Place an **ORANGE** dot in the area or neighborhood where you live.

Work

Place a **BLUE** dot in the area where you work or another major destination you access each day (i.e. government services, healthcare facilities, shelters)

Play

Place up to three (3) **GREEN** dots in the areas where you travel most frequently for leisure (i.e. parks, trails, schools, shopping, etc.)

Regional Active Transportation Master Plan

VISIONING OPEN HOUSE

PRELIMINARY USER SURVEY RESULTS

The following graphic shows preliminary results of the Texarkana Regional Active Transportation User Survey. The survey is still in progress and the final plan document will include the final results. If you have not had the opportunity to access the survey, we have hard copies available at this meeting, as well as a computer where you can access the website.

How do you commute?

- 7%
- 13%
- 4%
- 72%
- 3% OTHER

Bicycling

18% of respondents ride a bike several times per week.

17% of respondents ride a bike at least once per week.

Why do you ride a bike?

- 85% Exercise
- 63% Recreation & Leisure
- 25% Access to Other Parts of the Community

What are your typical destinations when biking?

Park, Field, or Path; Recreational Areas; Relative's or Friend's Home; Grocery or Shopping Stores; 100%

What prevents you from biking in the region?

Not Efficient; Lack of Trails; Traffic/Speeds on Roadways; Lack of Bicycle Facilities; Bike Network Not Well-Connected; Other; 100%

Walking

36% of respondents walk several times per week.

15% of respondents walk at least once per week.

Why do you walk?

- 77% Exercise
- 49% Recreation & Leisure
- 32% Access to Other Parts of the Community

What prevents you from walking in the region?

Lack of Sidewalks; Not Efficient; Traffic/Speeds on Roadways; Poor Sidewalk Conditions; 100%

Transit

8% of respondents use transit several times per week.

5% of respondents use transit one or fewer times per month.

How do you access your nearest transit stop?

90% Walk; 5% Bike; 5% Get a Ride

Are there sidewalks connecting you to your transit stops?

Yes 4%; No 59%

What prevents you from using transit in the region?

No Transit Stops Nearby; Other; Not Efficient; Bus Does Not Come Frequently Enough; 100%

Improvements

What kinds of improvements would encourage you to bike or walk more?

- 60% More Sidewalks
- 57% Better Connected Sidewalks
- 52% Better Condition of Sidewalks
- 52% On-Road Bike Lanes or Protected Bike Lanes
- 46% Bike/Ped. Paths and Trails within 5 Min. of Home
- 44% Better Lighting on Paths and Sidewalks
- 43% Designated Bike Routes
- 39% Separated Hike and Bike Trails
- 38% Better Bike/Ped. Safety Policies
- 18% Better Wayfinding Signage
- 6% OTHER

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Regional Active Transportation Master Plan

VISIONING OPEN HOUSE

PRELIMINARY PROJECT GOALS

The following goals were developed through a comprehensive review of local and state planning efforts, the initial user survey and an identification of best practices in active transportation planning. To finalize and prioritize the goals listed below, the Texarkana MPO is asking you to select the three goals you think are most important to consider when planning for active transportation in the Texarkana Region. **Place up to three (3) dots in the space provided below that correspond to the goals you feel are most important.**

Place dots here

Create an all ages and abilities active transportation network

Creating a network that allows those limited by general transportation facilities (children, elderly, mobility impaired) to remain connected to their surroundings while also contributing to personal and community health. Active transportation is proven to lower health care costs due to increases in walking and biking activity.

Provide safe routes to school for children

Children are significantly impacted by poor sidewalk facilities, particularly in low-income, zero car household communities. Providing families with safe routes to school through neighborhoods and along busy roadways is integral to providing safe transportation options.

Maintain and repair sidewalks to improve overall sidewalk conditions

Maintained sidewalks contribute to increased mobility and accessibility (namely for disabled populations), add to the aesthetic of an urban/rural area, and may encourage more active lifestyles with increased serviceability.

Build a complete network of on road bike lanes

Complete bicycle networks and dedicated bicycle lanes reduce bicycle-automobile crashes and increase safety, serve as a traffic calming device and create more transit stop opportunities, and encourage healthier lifestyles.

Provide access to transit stops using sidewalks and bike facilities

Making it easier for people to access transit via walking or biking improves access to jobs, government services and other major destinations, as well as helps people live healthier lifestyles, reduce transportation costs and increase the number of options that each person can utilize to travel throughout the region.

Create a connected network of bicycle/pedestrian paths and trails

A connected network of bicycle/pedestrian paths and trails improves the ability for people to seamlessly travel between the different facilities without having to traverse major roadways to reach other destinations. In addition, connected trails provide a great boost to tourism and bring additional revenues to the region.

Fill in sidewalk gaps to create a complete sidewalk network

Contiguous sidewalk networks increase pedestrian mobility/accessibility and contribute to healthier communities, while also reducing pedestrian-automobile crashes and increasing the city's overall safety.

Place dots here

Promote public health through active transportation

Active transportation promotes human energy as a means of transportation and connectivity, which inherently encourages healthier communities as a whole; not only does active transportation impact physical health but also positively impacts cognitive functioning.

Improve bicycle and pedestrian safety along roadways

By planning and investing in appropriate bicycle and pedestrian projects that are context sensitive, communities can see a measurable improvement in pedestrian and bicycle collisions, as well as overall comfortability along roadways throughout the region.

Develop a designated regional bicycle route system

Raising awareness of regional bicycle facilities to current and future bicyclists in the area, while also increasing intermodal connectivity between urban and rural areas in the MPO region can lead to a more informed and active network of bicyclists.

Create bicycle and pedestrian friendly communities to boost economic activity

Increased bicycle and foot traffic boost metropolitan economic activity for several reasons. Recent research shows bicyclists and pedestrians tend to spend the most money at local businesses, and that active transportation counters costs from externalities such as pollution, bad health, and gas prices.

Create complete streets policies that are ready for community adoption

Allows for communities to seamlessly benefit from complete streets policies, including but not limited to better accessibility/mobility, increased urban activity, decreased automobile dependence, increased city aesthetic, and overall healthier community lifestyles.

Educate the community on the benefit of active transportation investments

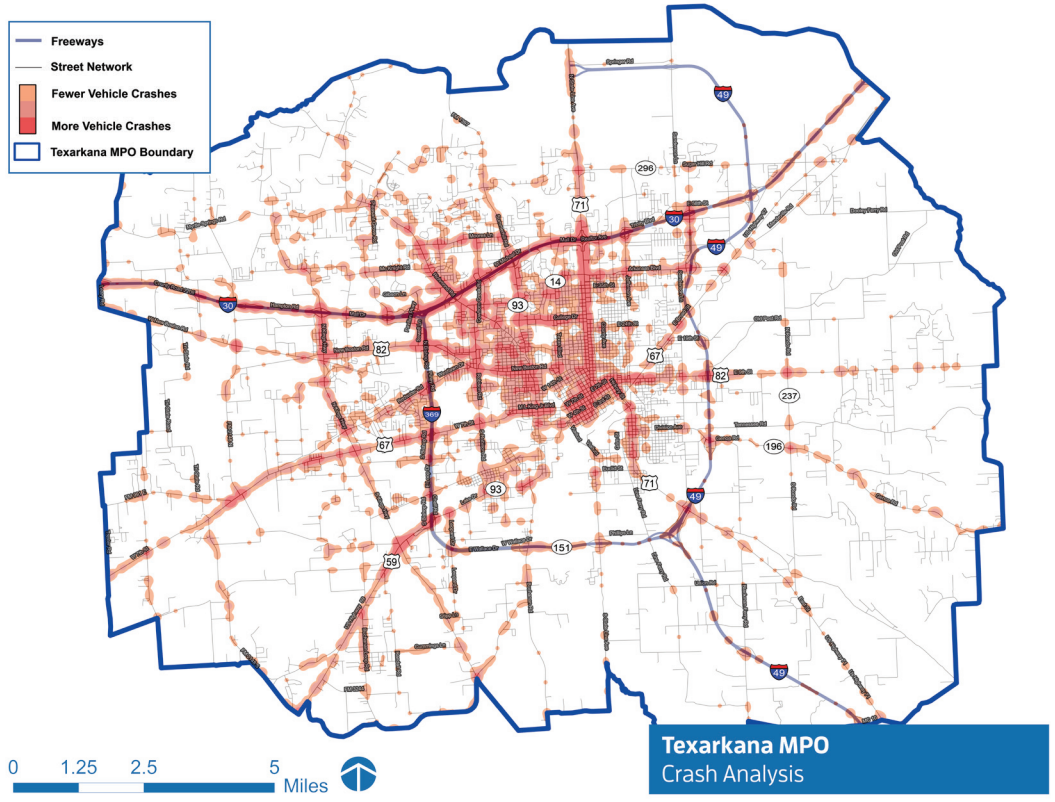
Knowledge and information are effective tools for positive change. Educating communities on the benefits of active transportation investments allows for a city/region to realize and achieve such goals sooner rather than later, in turn creating a healthier and more cohesive community.

Regional Active Transportation Master Plan

VISIONING OPEN HOUSE

CRASH ANALYSIS

The map below shows crash patterns in the Texarkana Region. The heat map illustrates overall vehicular crash densities by location. Darker areas show more traffic crashes than lighter areas. It is important to understand crash patterns in the region since high crash locations can be unsafe for bicycle and pedestrians. Crash data was provided to the MPO from both TxDOT and ArDOT. Texas crash data ranges from 2010 to 2017. 50 fatalities were recorded within Texas for that same time period. Arkansas crash data ranges from 2011 to 2015. 32 crashes involved fatalities in Arkansas for that same time period.



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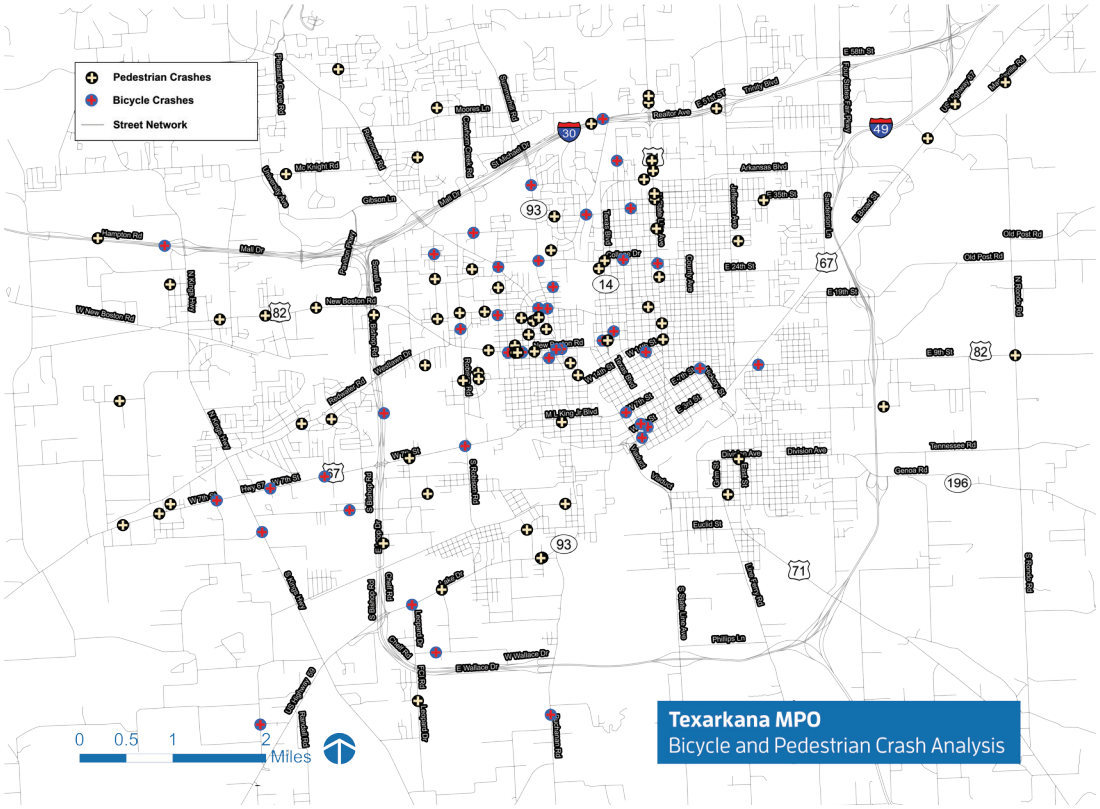
Regional Active Transportation Master Plan

VISIONING OPEN HOUSE

BICYCLE AND PEDESTRIAN CRASH ANALYSIS

The map below shows bicycle and pedestrian crash patterns in the Texarkana Region. The points on the map show crashes involving both a vehicle and a pedestrian or bicycle. Texas crash data ranges from 2010. to 2017. Arkansas crash data ranges from 2011 to 2015. The recorded data by TxDOT and ArDOT shows a total of 7 pedestrians and bicyclists who died as a result crashes involving a vehicle and a pedestrian or bicycle.



Regional Active Transportation Master Plan

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WHAT KIND OF BICYCLIST ARE YOU?

Place dots here

Place a dot next to the categories of bicyclists you most identify with. If you identify with multiple categories, please feel free to utilize additional dots. Understanding what types of bicyclists are in the region will help the MPO identify which types of projects are most appropriate to prioritize for future investment.

Strong and Fearless

People willing to bicycle with limited or no bicycle-facilities. These riders are comfortable on high speed, high volume roadways in urban areas and roadways with little shoulder width in rural areas.

Enthused and Confident

People willing to bicycle if bicycle facilities/signage exists. These riders are comfortable on moderate speed, moderate volume roadways in urban areas if there is a designated space for bicycles. Very comfortable on low stress roadways. These people will avoid on road bicycling in rural areas with limited roadway shoulders.

Interested but Concerned

People willing to bicycle if high quality bicycle infrastructure is in place. These riders are most comfortable on buffered bicycle facilities, off road paths/ trails and local streets in urban areas.

Low Skill/Little Interest

People unwilling to bicycle even if high quality bicycle infrastructure is in place. These people do not feel comfortable riding on any on-road bicycle facility but may utilize an off-road path/trail.

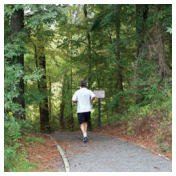
WHAT KIND OF PEDESTRIAN ARE YOU?

Place dots here

Place a dot next to the categories of pedestrians you most identify with. If you identify with multiple categories, please feel free to utilize additional dots. Understanding what types of pedestrians are in the region will help the MPO identify which types of projects are most appropriate to prioritize for future investment.

Walk Dependent/Choice Walkers

These types of people walk as their primary mode of travel, whether by choice or need. They are not deterred by poor sidewalk conditions or gaps in the sidewalk network. Many seek direct connections to their jobs/ destination or transit stops.



Recreation/Leisure

These types of people walk/run solely for exercise and/ or fun. They feel most comfortable utilizing connected sidewalks or trails and paths. They have some level of comfort on low stress local streets with limited sidewalks.

Mobility Impaired

Mobility impaired pedestrians have limited ability to traverse a difficult sidewalk network. This type of person typically uses walking aids or a wheel chair and needs clearly defined sidewalks that are in good condition. Intersections are difficult for them if they are not ADA compliant.

Low Skill/Children

Children or low skill walkers require sidewalk facilities and may be unable or unwilling to travel roadways with gaps in the sidewalk network. Low skill and children walkers feel most comfortable on low volume/low speed roadways with dedicated pedestrian facilities, as well as on trails and paths.

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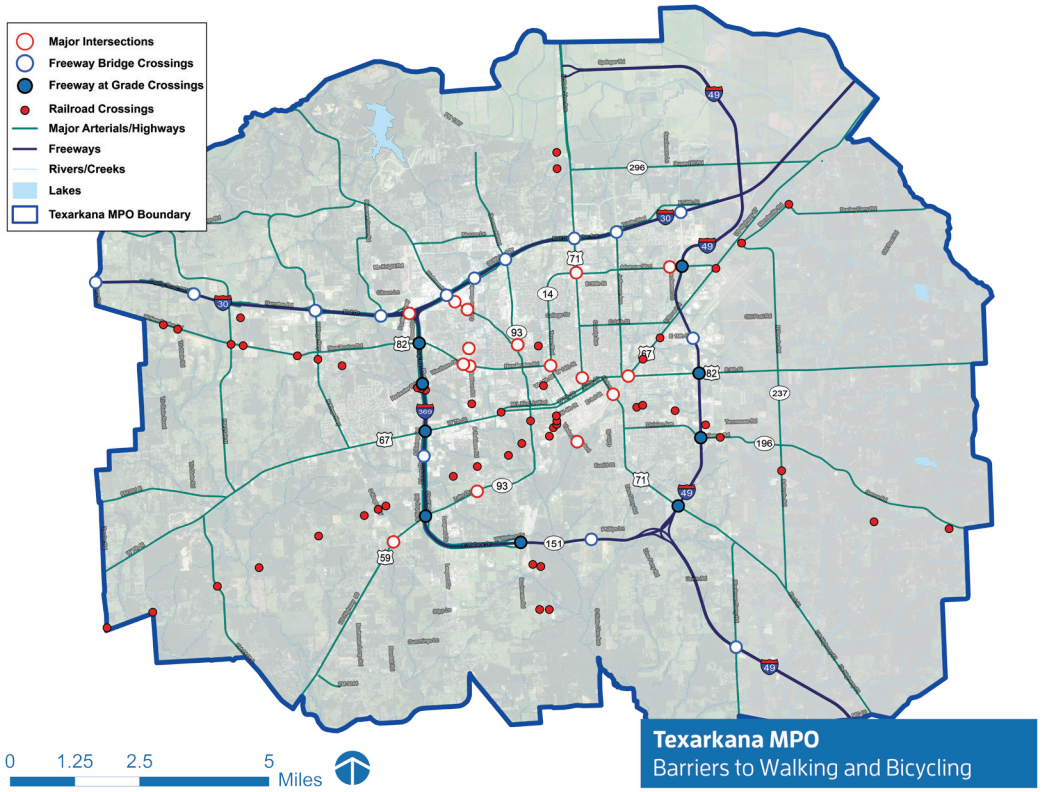
Regional Active Transportation Master Plan

VISIONING OPEN HOUSE

BARRIERS TO WALKING AND BICYCLING

The map below shows barriers to walking and bicycling in the Texarkana Region. Typical barriers to walking and bicycling include major intersections with limited bicycle and pedestrian facilities, major roadways, railroad crossings, narrow bridges over creeks and rivers, and interstate crossings. **Please place additional dots along with notes on the map below to identify additional barriers to walking and bicycling in the Texarkana Region.**



Regional Active Transportation Master Plan

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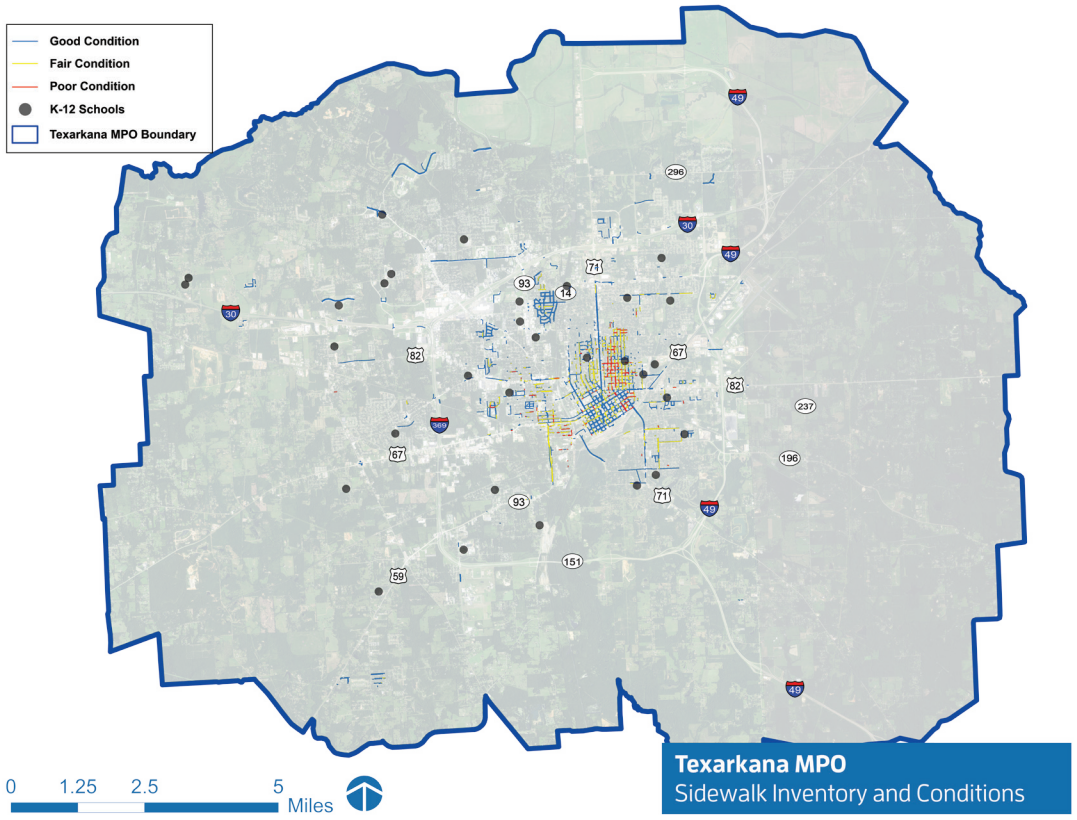
SIDEWALK INVENTORY AND CONDITIONS



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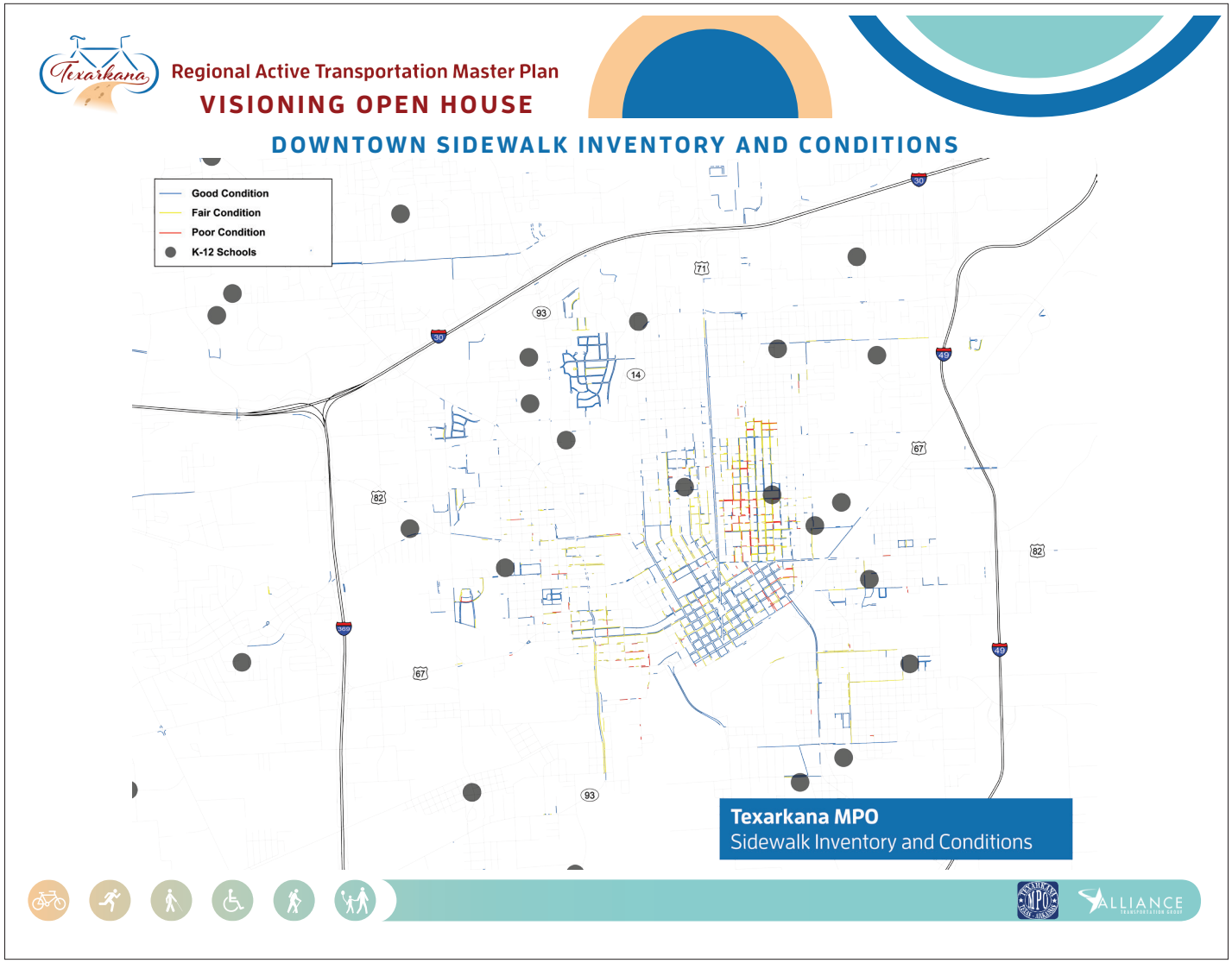
Texarkana
Regional Active Transportation Master Plan
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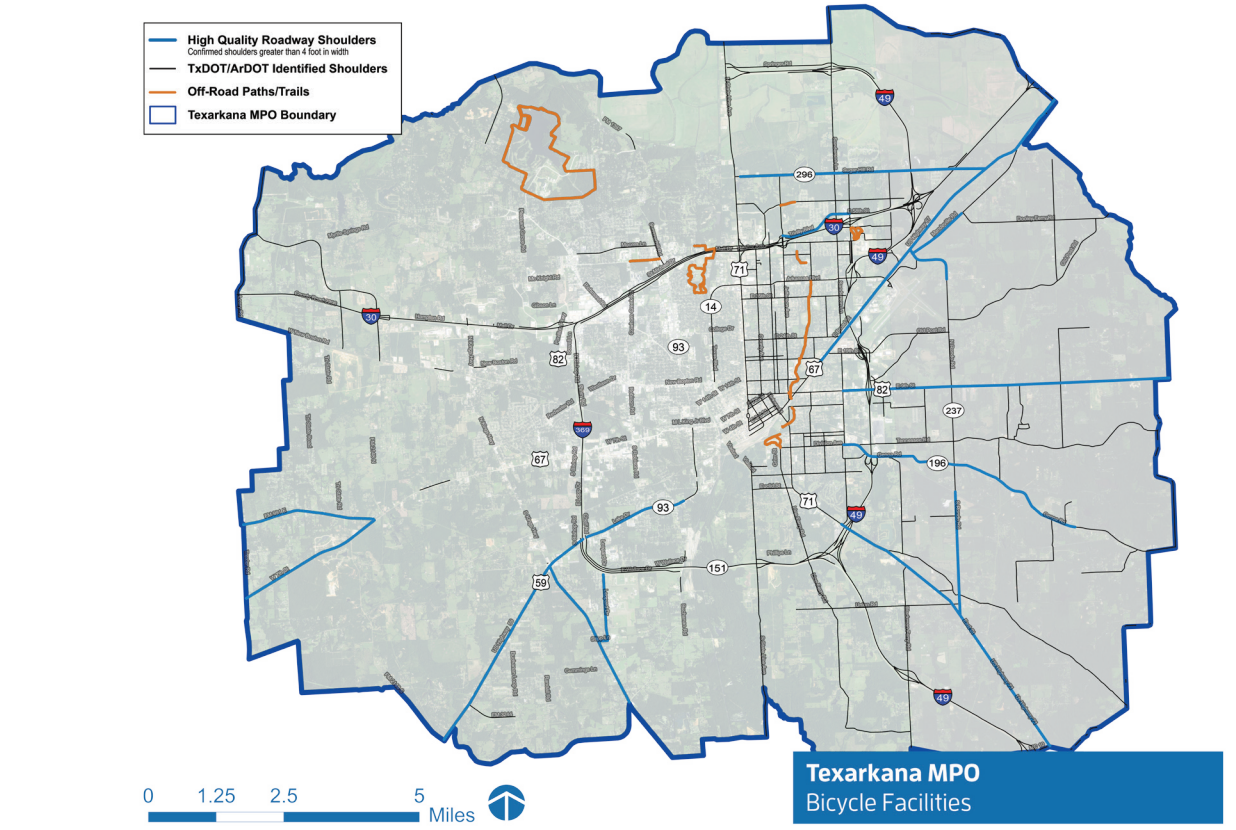
DOWNTOWN SIDEWALK INVENTORY AND CONDITIONS
Good Condition
Fair Condition
Poor Condition
K-12 Schools
Texarkana MPO
Sidewalk Inventory and Conditions
ALLIANCE

Regional Active Transportation Master Plan

VISIONING OPEN HOUSE

EXISTING BICYCLE FACILITIES



Appendix

Regional Active Transportation Master Plan

VISIONING OPEN HOUSE

BICYCLE LEVEL OF STRESS

What is bicycle level of stress?

A "level of stress" analysis was conducted to measure how fit each road in Texarkana are for bicycling. Roads with high levels of stress are poor for cycling and typically feature dangerous cycling situations, such as high-speed traffic and a lack of cycling infrastructure. Roads with low levels of stress are good for cycling and typically feature ideal cycling conditions. This might include a paved off-road trail or a quiet residential street. Roads with low levels of stress are great for cyclists with almost all levels of experience and skills, while roads with high levels of stress are often only useable by cyclists with plenty of experience and a willingness to ride in traffic.

Information on travel speed, traffic volumes, number of lanes, road width, and pavement conditions was collected for the arterials and collector roads in Texarkana. These are all indicators of the cycling "level of stress" and each of these indicators was used to create a level of stress index for Texarkana. Specific categories of stress are described in more depth below.

Levels of Stress

High Stress / Low Comfort

Large, multi-lane road with high speeds and no cycling infrastructure. Most cyclists would not bike here except for in extreme circumstances.

Moderate Stress /Comfort

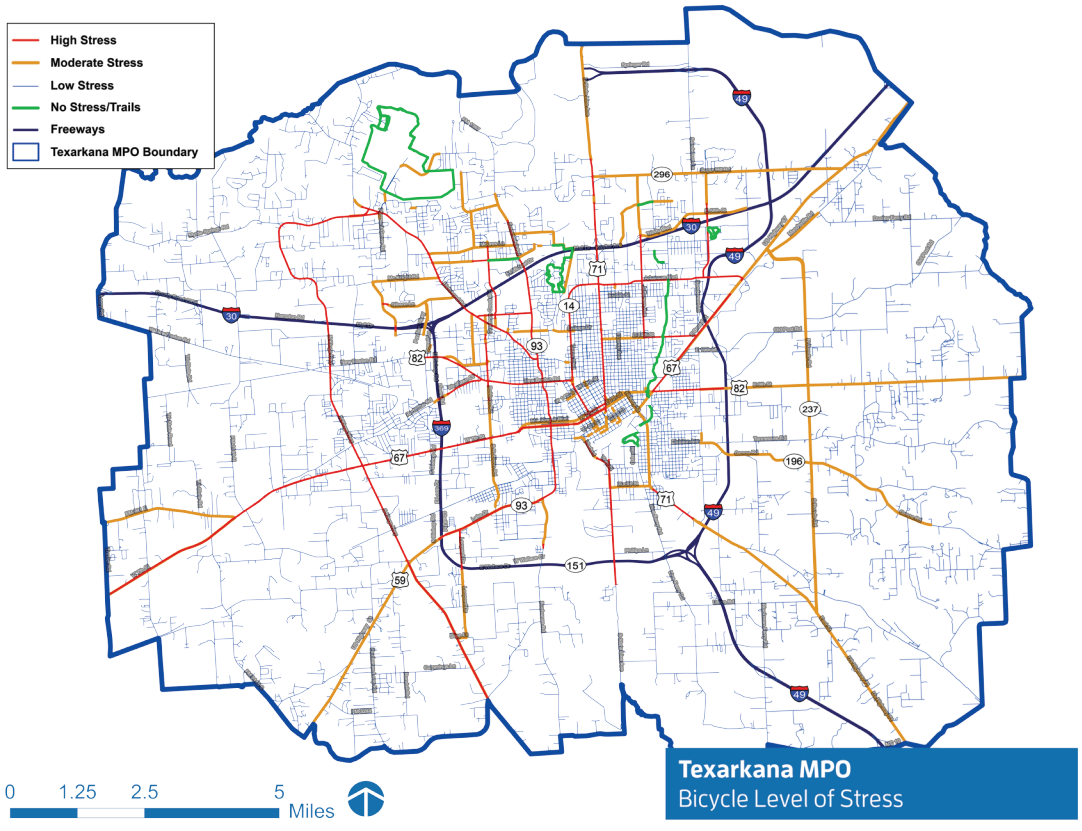
Relatively low-traffic road without bike lanes. Also includes roads with higher speeds and shoulders. Acceptable for those who are comfortable riding in traffic or near higher speed traffic with some buffer.

Low Stress / High Comfort

Low-traffic residential street or rural road. Acceptable for the majority of cyclists. This could also include a separated bike lane with physical barriers between the cars and bicycles (currently there are no bike lanes in Texarkana).

No Stress / Trails

Completely separate from roadway. Acceptable for all cyclists, even children. Trails and side paths provide the highest level of comfort. Some low stress may occur where trails cross roadways.

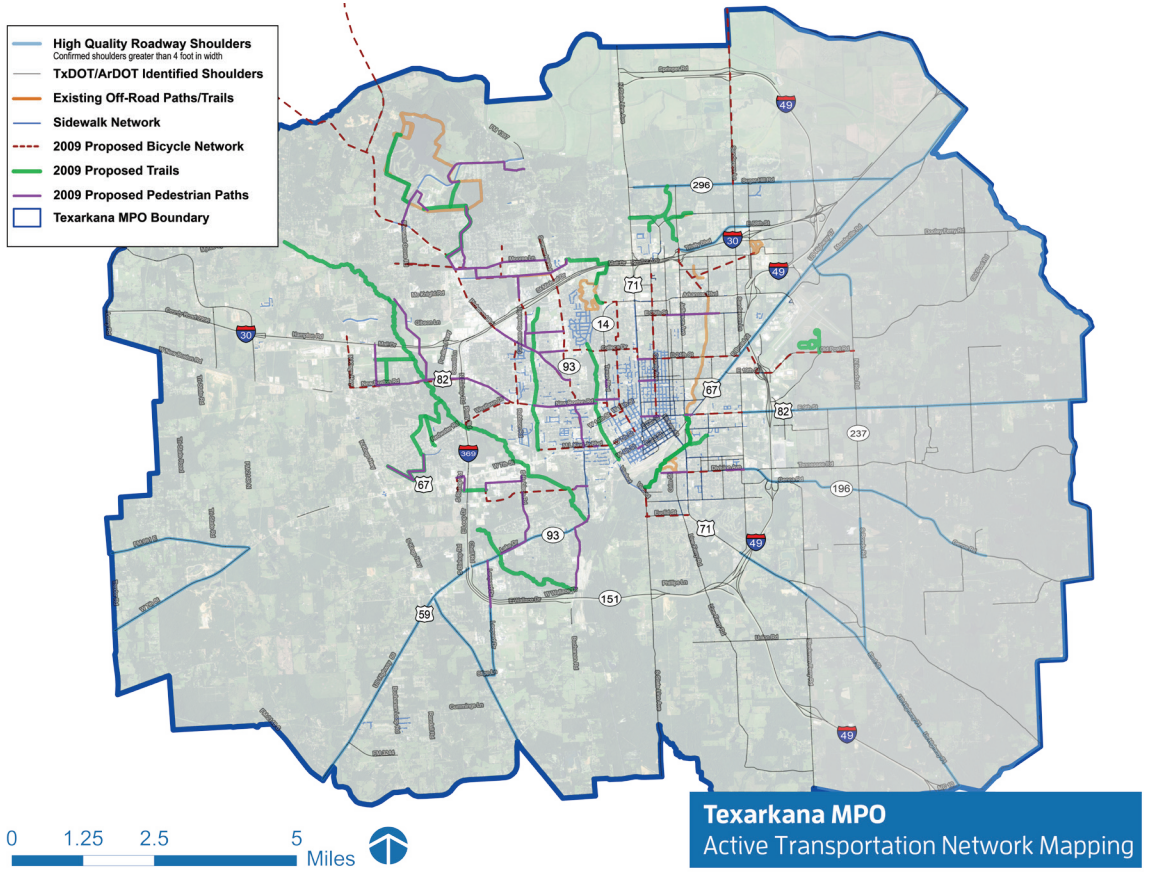


Regional Active Transportation Master Plan

VISIONING OPEN HOUSE

FUTURE NETWORK MAPPING

For this exercise, **please tell us where you would like to see active transportation facilities built, which bicycle and walking routes you travel most frequently, where wider roadway shoulders are needed, where significant gaps in the sidewalk network are, and where you would like to see trails or additional off-road paths.** For your information, we have provided the recommendations for bicycle, pedestrian and trail facilities from the 2009 Texarkana Bicycle and Pedestrian Plan. Your response will help the MPO start to prepare a preliminary conceptual active transportation network, as well as identify potential future projects.



Appendix

Project Open House Boards

The following boards were presented at the project open house. Additional information can be found in Chapter 4.

Regional Active Transportation Master Plan

PUBLIC OPEN HOUSE

PROJECT INTRODUCTION

INTRODUCTION

The Texarkana Metropolitan Planning Organization (MPO), with the help of Alliance Transportation Group and Data Transfer Solutions, is developing a Texarkana Regional Active Transportation Master Plan (TRATMP) for the Texarkana region.

The TRATMP will include projects and recommendations that will feed into the next Metropolitan Transportation Plan update that will be completed by the Texarkana MPO.

Active Transportation refers to the use of physical activity for the purpose of transporting people and sometimes goods. This includes forms of travel such as walking, bicycling, and using a wheel chair.

PURPOSE

The primary purpose of the TRATMP is to plan for the future of active transportation in the Texarkana region based on the community's needs, goals, vision, and federal guidelines. A completed plan will generally result in a set of prioritized projects, performance measures, and policy recommendations that will guide the MPO to make improvements and take actions that reflect the goals set out at the beginning of the planing process.

The purpose of this Open House is to review conceptual active transportation projects and networks and let the project team know which you feel are most important to the region.

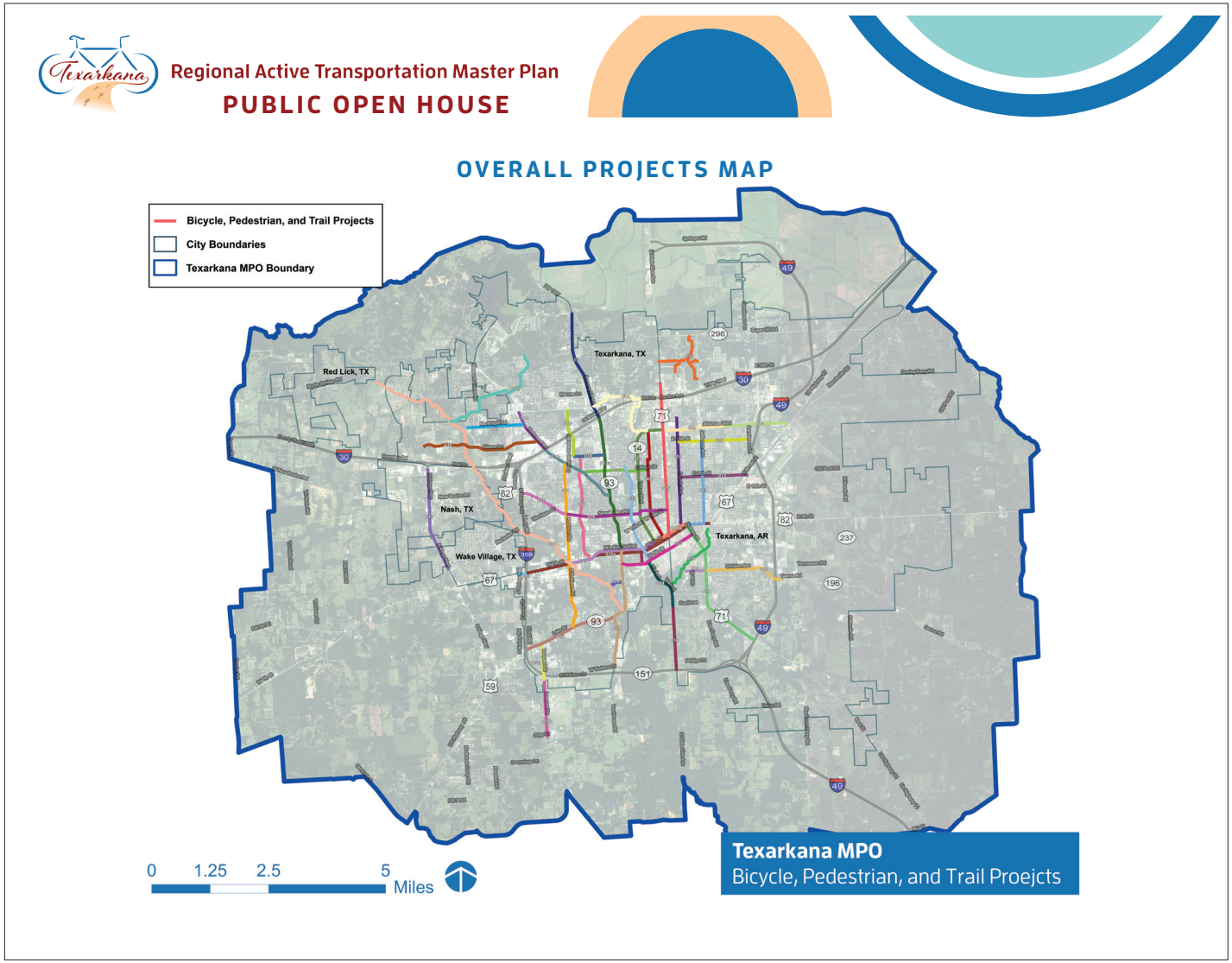
PROJECT AND NETWORK IDENTIFICATION

The TRATMP project team used a variety of sources to identify the current set of bicycle, pedestrian, and trail projects and conceptual active transportation networks throughout the Texarkana MPO region. These sources included:

- 2009 Texarkana MPO Bicylce/Pedestrian Plan
- Review of City plans
- Data analysis
- Public visioning and network planning Open House (September 2017)
- Project Identification and Prioritization Workshop
- Discussions with City Staff and MPO Staff

The data analysis process included five specific sub-analyses, including a transit connectivity analysis, a sidewalk inventory, a barriers analysis, a school connectivity analysis, and a bicycle level of stress analysis. This analysis helped define project limits and recommended active transportation infrastructure improvements for each project.

Appendix

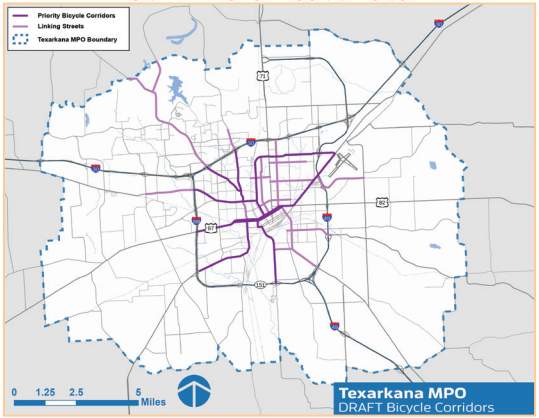

Regional Active Transportation Master Plan
PUBLIC OPEN HOUSE
OVERALL PROJECTS MAP
Bicycle, Pedestrian, and Trail Projects
City Boundaries
Texarkana MPO Boundary
Red Lick, TX
Texarkana, TX
Nash, TX
Wake Village, TX
Texarkana, AR
0 1.25 2.5 5 Miles
Texarkana MPO
Bicycle, Pedestrian, and Trail Proejcts

Regional Active Transportation Master Plan

PUBLIC OPEN HOUSE

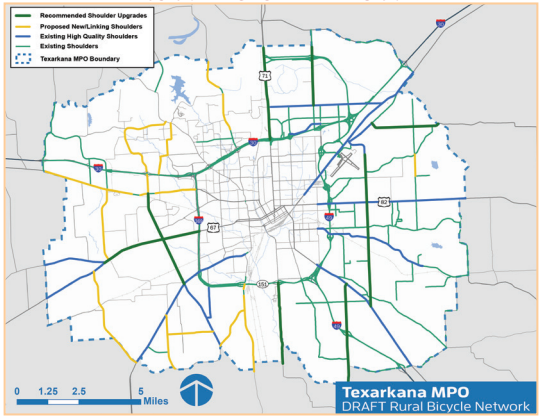
CONCEPTUAL ACTIVE TRANSPORTATION NETWORKS

URBAN BICYCLE CORRIDORS



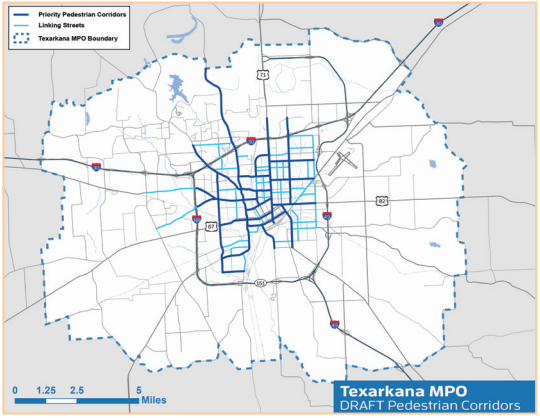
Urban Bicycle Corridors are broken into two categories, priority corridors and linking streets. Priority Corridors illustrate areas where higher levels of investment would provide improved regional connectivity. Linking Streets provide pivotal connections to Priority Corridors and typically require less investment to improve safety and mobility in the region.

RURAL BICYCLE NETWORK



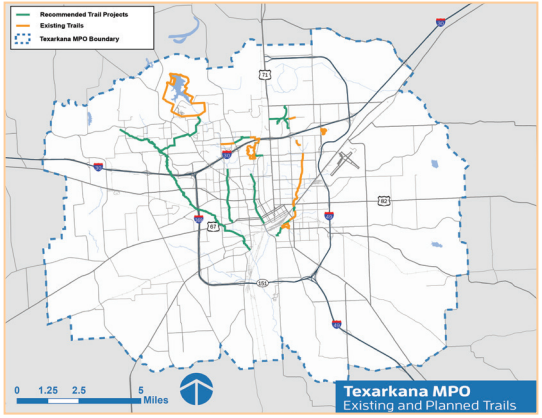
The **Rural Bicycle Network** consists of existing shoulders and recommended new or upgraded shoulders. Recommended shoulder upgrades provide safer facilities along major rural routes used by Texarkana bicyclists. New/linking shoulders provide additional space and increased safety for rural bicyclists on roadways. The final plan will recommend locations for rural bicycle signage.

PEDESTRIAN CORRIDORS



Pedestrian Corridors are broken into two categories, priority pedestrian corridors and linking streets. Priority pedestrian corridors improve regional mobility along major roadways in the urban area. Linking Streets provide pivotal connections to Priority Corridors from major destinations and neighborhoods.

TRAIL NETWORK



The **Trail Network** consists of existing and planned off-road trail facilities. Trail facilities provide the highest level of comfort for users and allow users to travel long distances in the region on a continuous facility. Consideration should be made where facilities intersect major roadways to ensure safe crossings are provided for users. The trail network ties into pedestrian and bicycle corridors to provide a complete network.

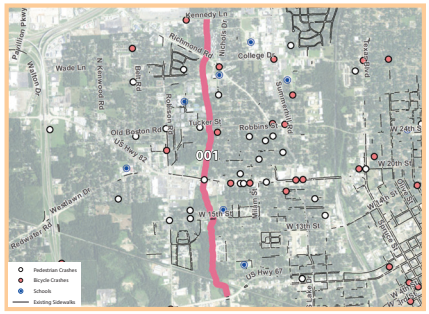
Appendix

Regional Active Transportation Master Plan

PUBLIC OPEN HOUSE

PROJECT PROFILES

PROJECT 001: COWHORN CREEK TRAIL



Note: Project Extents and Details Subject to Change

Description: Construct bicycle and Pedestrian trail along Cowhorn Creek from Kennedy Lane to the proposed US Bike Route 84.

Length: 2.34 miles

Bicycle Level of Stress: No Stress / Trails

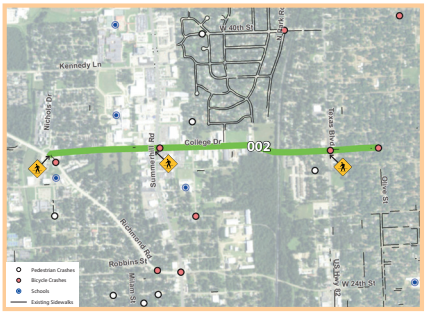
Project Source: 2009 Plan, Public Open House

Traffic Volume (ADT): N/A

Posted Speed: N/A

Crashes: N/A

PROJECT 002: COLLEGE DR SIDEWALK



Note: Project Extents and Details Subject to Change

Description: Construct sidewalks along College Drive between Olive Street and Richmond Road. Improve pedestrian crossings at Texas Boulevard and tie into existing crossings at Summerhill Road and Richmond Road.

Length: 1.38 miles

Bicycle Level of Stress: Moderate Stress / Comfort

Project Source: 2009 Plan, Sidewalk Connectivity Analysis, Public Open House, MPO / City Staff

Traffic Volume (ADT): 5,125

Posted Speed: 30 - 35 mph

Crashes: 230 per mile

PROJECT 003: 7TH ST SIDEWALK

Note: Project Extents and Details Subject to Change

Description: Construct sidewalks along W 7th Street/US Hwy 67 from Wake Village Road to Robison Road. Install pedestrian crossings at W 7th Street at Wake Village Road, W 7th Street and Kilgore Road, and at W 7th Street and Robison Road.

Length: 1.15 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: MPO / City Staff

Traffic Volume (ADT): 13,779

Posted Speed: 45 mph

Crashes: 215 per mile

PROJECT 004: NORTH ST SIDEWALK

Note: Project Extents and Details Subject to Change

Description: Construct sidewalks along North Street from Wagner Creek Trail (Project 031) to S Lake Drive. Install pedestrian crossings at the intersection of the Trail with North Street.

Length: 0.34 miles

Bicycle Level of Stress: Low Stress / High Comfort

Project Source: 2009 Plan, MPO / City Staff

Traffic Volume (ADT): 501

Posted Speed: 30 mph

Crashes: 0 per mile

Regional Active Transportation Master Plan

PUBLIC OPEN HOUSE

PROJECT PROFILES

PROJECT 005A: LEOPARD DR SIDEWALK

Note: Project Extents and Details Subject to Change

Description: Construct sidewalks along Leopard Drive from S Lake Drive to Grady T Wallace Soccer Complex. Install pedestrian crossings at S Lake Drive and Leopard Drive and at Leopard Drive and Grady T Wallace Soccer Complex.

Length: 0.79 miles

Bicycle Level of Stress: High Stress / Low Comfort

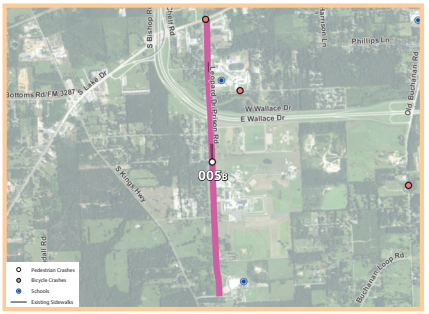
Project Source: 2009 Plan, Sidewalk Connectivity Analysis

Traffic Volume (ADT): 2,365

Posted Speed: 30 - 45 mph

Crashes: 19 per mile

PROJECT 005B: LEOPARD DR BICYCLE LANE



Note: Project Extents and Details Subject to Change

Description: Construct bicycle lanes along Leopard Drive from S Lake Drive to Stipp Road.

Length: 2.01 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: 2009 Plan, Bicycle Level of Stress Analysis

Traffic Volume (ADT): 2,365

Posted Speed: 30 - 45 mph

Crashes: 13 per mile

PROJECT 006: DIVISION ST SIDEWALK

Note: Project Extents and Details Subject to Change

Description: Construct sidewalks along Division Street from Roberts Street to East Street. Install pedestrian crossings at Division Street and East Street.

Length: 0.45 miles

Bicycle Level of Stress: Moderate Stress / Comfort

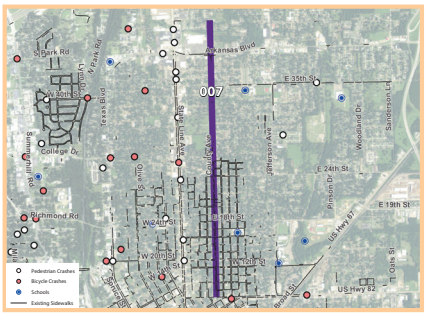
Project Source: 2009 Plan, Public Open House

Traffic Volume (ADT): 3,200

Posted Speed: 30 mph

Crashes: 36 per mile

PROJECT 007: COUNTY AVE SHARED LANE



Note: Project Extents and Details Subject to Change

Description: Create shared lanes along County Avenue from E 42nd Street to E 9th Street that provides a parallel bike route to State Line Ave on a lower stress roadway.

Length: 2.3 miles

Bicycle Level of Stress: Moderate Stress / Comfort

Project Source: 2009 Plan, Connectivity Analysis

Traffic Volume (ADT): 4,300

Posted Speed: 30 mph

Crashes: 10 per mile

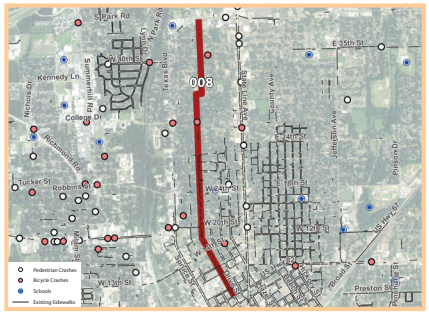
Appendix

Regional Active Transportation Master Plan

PUBLIC OPEN HOUSE

PROJECT PROFILES

PROJECT 008: OLIVE ST BICYCLE INFRASTRUCTURE



Note: Project Extents and Details Subject to Change

Description: Paint Sharrows and install shared lane signage along Olive Street from Texas Boulevard to W Dr Martin Luther King Jr Boulevard.

Length: 2.39 miles

Bicycle Level of Stress: Moderate Stress / Comfort

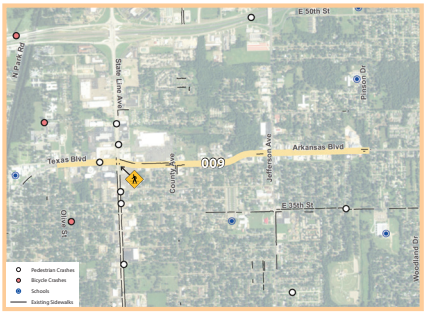
Project Source: Public Open House, Connectivity Analysis

Traffic Volume (ADT): 276

Posted Speed: 30 mph

Crashes: 19 per mile

PROJECT 009: TEXAS BLVD / ARKANSAS BLVD SIDEWALK



Note: Project Extents and Details Subject to Change

Description: Construct sidewalks and fill sidewalk gaps along Texas Boulevard and Arkansas Boulevard from Olive Street to Pinson Drive. Install pedestrian crossings at State Line Avenue. Improve crossings at County Avenue, Jefferson Avenue, and Pinson Drive.

Length: 1.63 miles

Bicycle Level of Stress: High Stress / Low Comfort

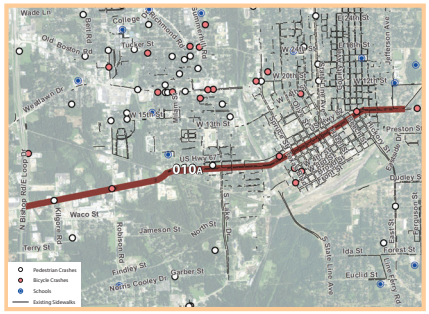
Project Source: MPO / City Staff

Traffic Volume (ADT): 13,903

Posted Speed: 40 mph

Crashes: 145 per mile

PROJECT 010A: 7TH ST BICYCLE INFRASTRUCTURE



Note: Project Extents and Details Subject to Change

Description: Construct bike lanes and signage along 7th Street and 9th Street from E Loop Drive to E Broad Street.

Length: 4.14 miles

Bicycle Level of Stress: High Stress / Low Comfort

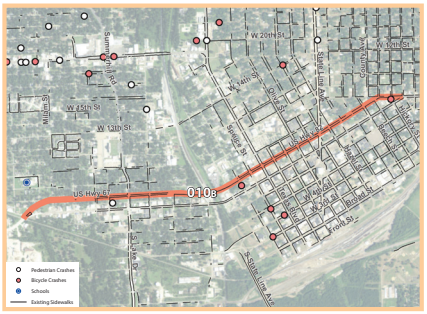
Project Source: Public Open House, Connectivity Analysis, Bicycle Level of Stress Analysis

Traffic Volume (ADT): 10,931

Posted Speed: 35 - 45 mph

Crashes: 78 per mile

PROJECT 010B: W MLK JR BLVD BICYCLE INFRASTRUCTURE



Note: Project Extents and Details Subject to Change

Description: Construct bike lanes and install signage along W Martin Luther King Jr Boulevard and 9th Street from W 7th Street to Locust Street.

Length: 2.21 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Project Team, Public Open House, Bicycle Level of Stress Analysis

Traffic Volume (ADT): 12,562

Posted Speed: 35 - 40 mph

Crashes: 15 per mile

PROJECT PROFILES

PROJECT 011: ARKANSAS BLVD BICYCLE LANE

Note: Project Extents and Details Subject to Change

Description: Construct bicycle lanes along Arkansas Boulevard from Pinson Street to E Broad Street.

Length: 1.39 miles

Bicycle Level of Stress: High Stress / Low Comfort

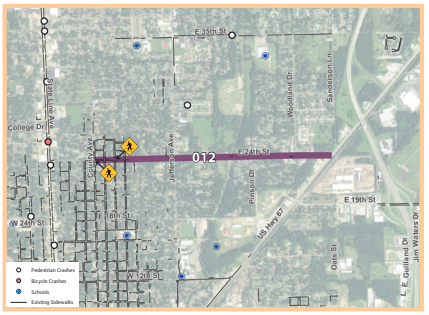
Project Source: Safety Analysis, Public Open House, Connectivity Analysis, MPO / City Staff

Traffic Volume (ADT): 7,715

Posted Speed: 40 mph

Crashes: 32 per mile

PROJECT 012: E 24TH ST BICYCLE INFRASTRUCTURE AND SIDEWALK



Note: Project Extents and Details Subject to Change

Description: Paint Sharrows and install shared lane signage, and construct sidewalks and fill sidewalk gaps along E 24th Street from E Broad Street to Jefferson Avenue. Construct sidewalks and fill sidewalk gaps along E 24th Street from Jefferson Avenue to County Avenue. Install pedestrian crossings at County Avenue and Hickory Street. Improve crossings at Jefferson Avenue.

Length: 1.48 miles

Bicycle Level of Stress: High Stress / Low Comfort

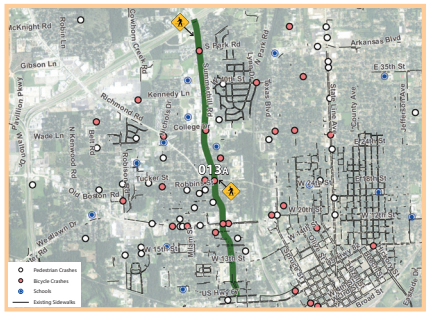
Project Source: Public Open House, School Connectivity Analysis, MPO / City Staff

Traffic Volume (ADT): 3,733

Posted Speed: 40 mph

Crashes: 9 per mile

PROJECT 013A: LAKE DR / SUMMERHILL RD BICYCLE LANE AND SIDEWALK



Note: Project Extents and Details Subject to Change

Description: Construct bicycle lanes and sidewalks along N Lake Drive and Summerhill Road from W Dr Martin Luther King Jr Boulevard to IH-30. Install pedestrian crossings at Richmond Road and at Mall Drive. Improve crossings at W Martin Luther King Jr Boulevard, W 13th Street, New Boston Road, Parker Avenue, College Drive, Kennedy Lane, W 40th Street, and Summerhill Square. This project connects to Project 015: Summerhill Rd Bicycle Infrastructure and Sidewalk.

Length: 2.9 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis, Bicycle Level of Stress Analysis, MPO / City Staff

Traffic Volume (ADT): 9,077

Posted Speed: 40 - 45 mph

Crashes: 191 per mile

PROJECT 013B: RICHMOND RD BICYCLE LANE AND SIDEWALK

Note: Project Extents and Details Subject to Change

Description: Construct bicycle lanes and sidewalks and fill in sidewalk gaps along Richmond Road from Summerhill Road to IH-30. Install pedestrian crossings at Richmond Road and Summerhill Road, N Robison Road, Kennedy Lane, Belt Road, and Mall Drive. Improve crossings at College Drive.

Length: 1.71 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis, Bicycle Level of Stress, MPO / City Staff

Traffic Volume (ADT): 21,770

Posted Speed: 40 - 45 mph

Crashes: 148 per mile

Appendix

Regional Active Transportation Master Plan

PUBLIC OPEN HOUSE

PROJECT PROFILES

PROJECT 014: RICHMOND RD BICYCLE INFRASTRUCTURE

Note: Project Extents and Details Subject to Change

Description: Paint Sharrows and install shared lane signage along Richmond Road from IH-30 to Galleria Oaks Drive.

Length: 1.02 miles

Bicycle Level of Stress: High Stress / Low Comfort

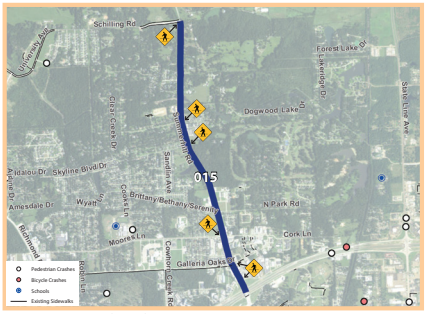
Project Source: Public Open House, Connectivity Analysis

Traffic Volume (ADT): 25,611

Posted Speed: 45 mph

Crashes: 460 mile

PROJECT 015: SUMMERHILL RD BICYCLE INFRASTRUCTURE AND SIDEWALK



Note: Project Extents and Details Subject to Change

Description: Paint Sharrows and install shared lane signage and sidewalks along Summerhill Road from IH-30 to University Avenue/ Schilling Road. Install pedestrian crossings at the northside IH-30 frontage, Galleria Oaks Drive, Moores Lane, Clear Creek Drive, Dogwood Lake Drive, and University Avenue/ Schilling Road. This project provides a connection to the Texas A&M Campus.

Length: 2.36 miles

Bicycle Level of Stress: High Stress / Low Comfort

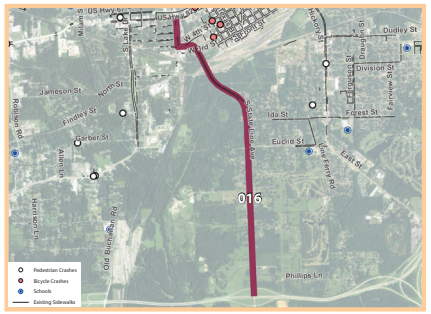
Project Source: Public Open House, Connectivity Analysis, MPO / City Staff

Traffic Volume (ADT): 9,728

Posted Speed: 40 - 50 mph

Crashes: 65 per mile

PROJECT 016: STATE LINE AVE BICYCLE LANE



Note: Project Extents and Details Subject to Change

Description: Construct bicycle lanes along Lelia Street, W 4th Street, and S State Line Avenue from W 7th Street to Jarvis Parkway.

Length: 2.9 miles

Bicycle Level of Stress: High Stress / Low Comfort

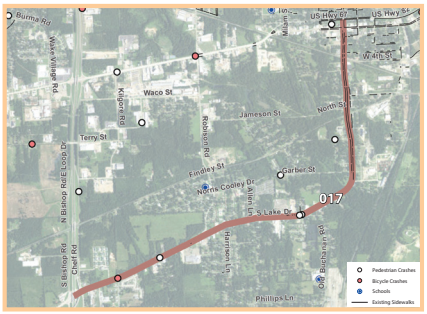
Project Source: Public Open House, Connectivity Analysis

Traffic Volume (ADT): 3,662

Posted Speed: 30 - 40 mph

Crashes: 8 per mile

PROJECT 017: LAKE DR BICYCLE LANE



Note: Project Extents and Details Subject to Change

Description: Construct bicycle lanes along S Lake Drive from Jarvis Parkway to W Dr Martin Luther King Jr Boulevard.

Length: 3.58 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Gaps Analysis, Connectivity Analysis

Traffic Volume (ADT): 7,717

Posted Speed: 40 - 50 mph

Crashes: 58 per mile

Regional Active Transportation Master Plan

PUBLIC OPEN HOUSE

PROJECT PROFILES

PROJECT 018: HICKORY ST / EAST ST BICYCLE INFRASTRUCTURE

Note: Project Extents and Details Subject to Change

Description: Install bicycle Sharrows and shared lane signage along Hickory Street and East Street from E 9th Street to IH-49.

Length: 3.12 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis, MPO / City Staff

Traffic Volume (ADT): 8,383

Posted Speed: 30 - 45 mph

Crashes: 42 per mile

PROJECT 019: DIVISION ST BICYCLE INFRASTRUCTURE

Note: Project Extents and Details Subject to Change

Description: Paint sharrows and install signage along Division Street from East Street to Genoa Road/IH-49 northbound entrance ramp.

Length: 1.71 miles

Bicycle Level of Stress: Moderate Stress / Comfort

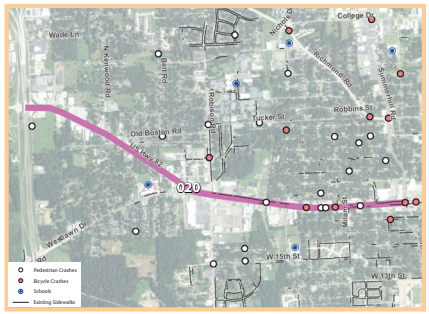
Project Source: Gaps Analysis, Level of Stress Analysis

Traffic Volume (ADT): 2,950

Posted Speed: 30 mph

Crashes: 12 per mile

PROJECT 020: NEW BOSTON RD BICYCLE LANE



Note: Project Extents and Details Subject to Change

Description: Construct bicycle lanes along New Boston Road from IH-369/ US-59 to Summerhill Road.

Length: 2.11 miles

Bicycle Level of Stress: High Stress / Low Comfort

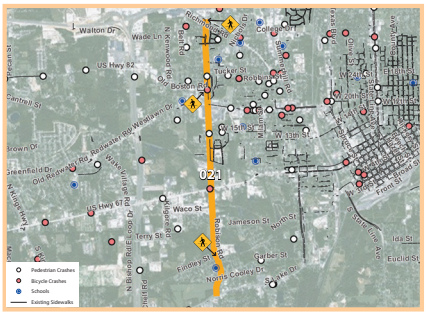
Project Source: Level of Stress Analysis, Public Open House

Traffic Volume (ADT): 9,906

Posted Speed: 40 - 45 mph

Crashes: 185 per mile

PROJECT 021: ROBISON RD SIDEWALK IMPROVEMENTS



Note: Project Extents and Details Subject to Change

Description: Construct sidewalks and fill sidewalk gaps along Robison Road from Richmond Road to S Lake Drive. Install pedestrian crossings at Robison Road and Findley Street, New Boston Road, and Richmond Road, and improve crossings at W 7th Street.

Length: 3.54 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Sidewalk Analysis, Gaps Analysis, Connectivity Analysis

Traffic Volume (ADT): 7,439

Posted Speed: 30 - 40 mph

Crashes: 58 per mile

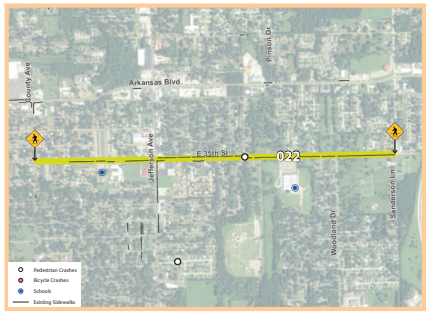
Appendix

Regional Active Transportation Master Plan

PUBLIC OPEN HOUSE

PROJECT PROFILES

PROJECT 022: E 35TH ST SIDEWALK IMPROVEMENTS



Note: Project Extents and Details Subject to Change

Description: Complete sidewalk network and fill sidewalk gaps along E 35th Street from County Avenue to Sanderson Lane. Install pedestrian crossings on E 35th Street at County Avenue and at Sanderson Lane. Improve existing pedestrian crossings at Jefferson Avenue.

Length: 1.5 miles

Bicycle Level of Stress: Moderate Stress / Comfort

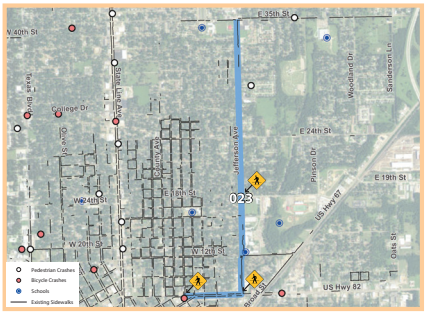
Project Source: Public Open House, 2009 Plan, Connectivity Analysis

Traffic Volume (ADT): 4,000

Posted Speed: 30 mph

Crashes: 11 per mile

PROJECT 023: JEFFERSON AVE SIDEWALK IMPROVEMENTS



Note: Project Extents and Details Subject to Change

Description: Complete sidewalk network and fill sidewalk gaps along Jefferson Avenue and E 9th Street from E 35th Street to Hickory Street. Install pedestrian crossings at Jefferson Avenue and E 18th Street, Jefferson Avenue and E 9th Street, and E 9th Street and Hickory Street. Improve crossings at Jefferson Avenue at E 24th Street and at E 12th Street.

Length: 2.13 miles

Bicycle Level of Stress: High Stress / Low Comfort

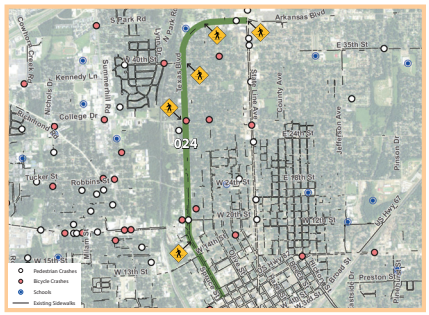
Project Source: School Connectivity Analysis, Public Open House

Traffic Volume (ADT): 6,707

Posted Speed: 30 - 40 mph

Crashes: 41 per mile

PROJECT 024: TEXAS BLVD SIDEWALK IMPROVEMENTS



Note: Project Extents and Details Subject to Change

Description: Complete sidewalk network and fill sidewalk gaps along Texas Boulevard from N State Line Avenue to W Dr Martin Luther King Jr Boulevard. Install pedestrian crossings at the intersections of Texas Boulevard and N State Line Avenue, Elizabeth Street, W 40th Street, College Drive, New Boston Road, and W 16th Street. Improve crossings at Texas Boulevard at W 14th Street and at W 24th Street.

Length: 2.9 miles

Bicycle Level of Stress: High Stress / Low Comfort

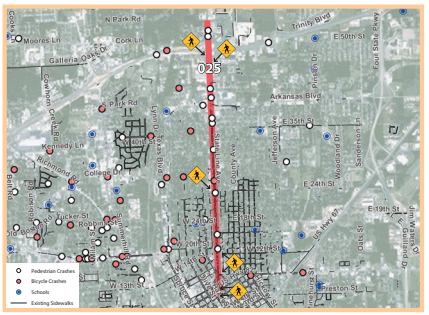
Project Source: Public Open House, Safety Analysis, Connectivity Analysis

Traffic Volume (ADT): 13,413

Posted Speed: 40 mph

Crashes: 81 per mile

PROJECT 025: N STATE LINE AVE SIDEWALK IMPROVEMENTS



Note: Project Extents and Details Subject to Change

Description: Complete sidewalk network and fill sidewalk gaps, enhance crosswalks, and enhance ADA connectivity along State Line Avenue from Holcombe to W 7th Street. Install pedestrian crossings at State Line Avenue and IH-30 frontage, W 52nd Street, Texas/ Arkansas Boulevards, E 24th Street, W 19th Street, E 9th Street, Dr Martin Luther King Jr Boulevard, and 7th Street. Improve crossings on State Line Avenue at E 35th Street and College Drive.

Length: 3.32 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Safety Analysis, Connectivity Analysis

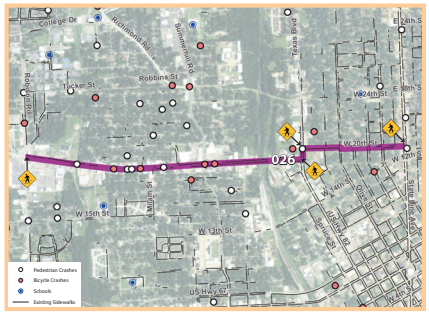
Traffic Volume (ADT): 20,816

Posted Speed: 30 - 45 mph

Crashes: 130 per mile

PROJECT PROFILES

PROJECT 026: NEW BOSTON RD SIDEWALK IMPROVEMENTS



Note: Project Extents and Details Subject to Change

Description: Complete sidewalk network and fill sidewalk gaps along New Boston Road, Texas Boulevard, and W 20th Street from N Robison Road to N State Line Avenue. Install pedestrian crossings at New Boston Road and N Robison Road, N Boston Road and Texas Boulevard, Texas Boulevard and W 20th Street, and W 20th Street at N State Line Avenue. Improve crossings at Milam Street, Summerhill Road, and Spruce Street.

Length: 2.23 miles

Bicycle Level of Stress: High Stress / Low Comfort

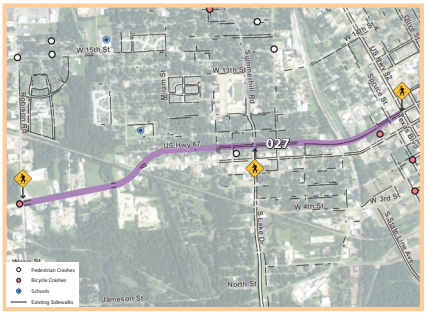
Project Source: Public Open House, Safety Analysis, Connectivity Analysis

Traffic Volume (ADT): 12,376

Posted Speed: 40 mph

Crashes: 167 per mile

PROJECT 027: US HWY 67 SIDEWALK IMPROVEMENTS



Note: Project Extents and Details Subject to Change

Description: Complete sidewalk network and fill sidewalk gaps along US Hwy 67 (W Martin Luther King Jr Boulevard and W 7th Street) from N Robison Road to Texas Boulevard. Improve pedestrian crossings at N Robison Road, N Lake Drive, and Texas Boulevard.

Length: 1.93 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis

Traffic Volume (ADT): 14,416

Posted Speed: 40 - 45 mph

Crashes: 11 per mile

PROJECT 028: OLD BUCHANAN RD SIDEWALK IMPROVEMENTS

Note: Project Extents and Details Subject to Change

Description: Complete sidewalk network and fill sidewalk gaps along Old Buchanan Road and S Lake Drive from Corral Creek to W Dr Martin Luther King Jr Boulevard. Install pedestrian crossings at S Lake Drive and Old Buchanan Road. Improve crossings at W 7th Street and W 4th Street.

Length: 2.64 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Public Open House, Connectivity Analysis

Traffic Volume (ADT): 5,302

Posted Speed: 40 - 45 mph

Crashes: 58 per mile

PROJECT 029: S STATE LINE AVE SIDEWALK IMPROVEMENTS

Note: Project Extents and Details Subject to Change

Description: Complete sidewalk network and fill sidewalk gaps along State Line Avenue from W 4th Street to Euclid Street. Install pedestrian crossings at State Line Avenue and Ida Street and at State Line Avenue and Euclid Street.

Length: 1.18 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: Connectivity Analysis, Public Open House

Traffic Volume (ADT): 3,208

Posted Speed: 30 - 40 mph

Crashes: 4 per mile

Appendix

Regional Active Transportation Master Plan

PUBLIC OPEN HOUSE

PROJECT PROFILES

PROJECT 030: SOUTHEAST CONNECTOR TRAIL

Note: Project Extents and Details Subject to Change

Description: Construct new trail segments and fill in gaps between existing trails from just east of S State Line Avenue between Division Street and Ida Street and ending at Broad Street.

Length: 1.05 miles*

Bicycle Level of Stress: N/A

Project Source: 2009 Plan

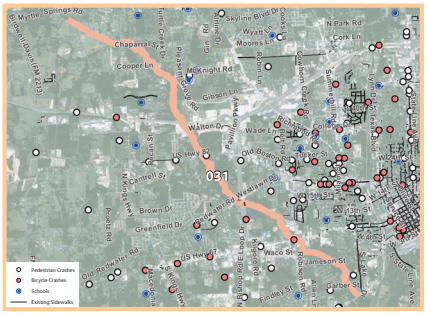
Traffic Volume (ADT): N/A

Posted Speed: N/A

Crashes: N/A

*Length represents new trail segments only

PROJECT 031: WAGNER CREEK TRAIL



Note: Project Extents and Details Subject to Change

Description: Construct new trail from just south of Myrtle Springs Road just west of N Kings Hwy to S Lake Drive. Projects 004 and 021 connect to this trail project.

Length: 8.92 miles

Bicycle Level of Stress: N/A

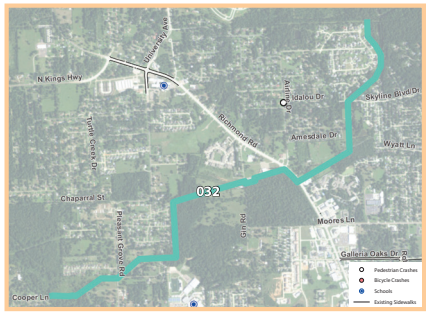
Project Source: 2009 Plan

Traffic Volume (ADT): N/A

Posted Speed: N/A

Crashes: N/A

PROJECT 032: NORTHWEST CONNECTOR TRAIL



Note: Project Extents and Details Subject to Change

Description: Construct new trail from Bringle Lake Trail to proposed Project 031 (Wagner Creek Trail). This project connects to the Texas A&M Campus via Bringle Lake Trail.

Length: 2.78 miles

Bicycle Level of Stress: N/A

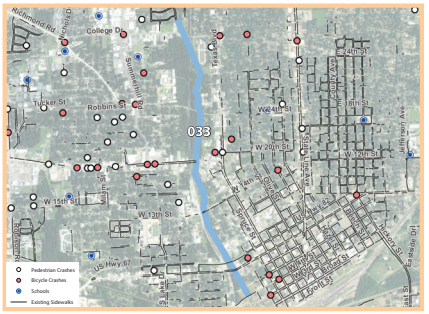
Project Source: 2009 Plan, Connectivity Analysis

Traffic Volume (ADT): N/A

Posted Speed: N/A

Crashes: N/A

PROJECT 033: SWAMPOODLE CREEK TRAIL



Note: Project Extents and Details Subject to Change

Description: Construct new trail along Swampoodle Creek from Potomac Avenue north of College Drive to W 4th Street.

Length: 2.19 miles

Bicycle Level of Stress: N/A

Project Source: 2009 Plan, Connectivity Analysis

Traffic Volume (ADT): N/A

Posted Speed: N/A

Crashes: N/A

Regional Active Transportation Master Plan

PUBLIC OPEN HOUSE

PROJECT PROFILES

PROJECT 034: NORTH CONNECTOR TRAIL

Note: Project Extents and Details Subject to Change

Description: Construct new trail segments and fill in gaps between existing trails from Morris Lane to Texas Boulevard.

Length: 1.22 miles*

Bicycle Level of Stress: N/A

Project Source: 2009 Plan, Connectivity Analysis

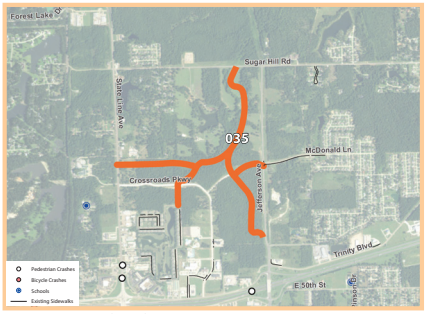
Traffic Volume (ADT): N/A

Posted Speed: N/A

Crashes: N/A

*Length represents new trail segments only

PROJECT 035: TRINITY BIKE / PED TRAIL



Note: Project Extents and Details Subject to Change

Description: Construct new trail in the Trinity area between State Line Avenue, Jefferson Avenue, IH-30, and Sugar Hill Road.

Length: 3.4 miles

Bicycle Level of Stress: N/A

Project Source: 2009 Plan, Connectivity Analysis

Traffic Volume (ADT): N/A

Posted Speed: N/A

Crashes: N/A

PROJECT 036: KENNEDY LN SIDEWALK

Note: Project Extents and Details Subject to Change

Description: Construct sidewalks along Kennedy Lane from Summerhill Road to Cowhorn Creek Road. Install pedestrian crossings at Cowhorn Creek Road. Improve crossings at Summerhill Road and east of Pineknoll Street connecting Texas High School and Texas Middle School.

Length: 0.68 miles

Bicycle Level of Stress: High Stress / Low Comfort

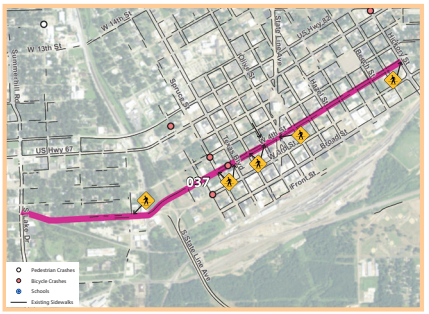
Project Source: MPO / City Staff

Traffic Volume (ADT): 7,977

Posted Speed: 40 mph

Crashes: 170 per mile

PROJECT 037: W 4TH ST BICYCLE INFRASTRUCTURE AND SIDEWALK



Note: Project Extents and Details Subject to Change

Description: Construct/install bicycle infrastructure and complete sidewalk network along W 4th Street from S Lake Drive to Hickory Street. Install pedestrian crossings at Lelia Street, Spruce Street, Texas Boulevard, Main Street, Pine Street, N State Line Avenue, and Hickory Street. Improve crossings at S Lake Drive, Elm Street, Wood Street, and Walnut Street.

Length: 1.7 miles

Bicycle Level of Stress: Low Stress / High Comfort

Project Source: MPO / City Staff

Traffic Volume (ADT): 2,160

Posted Speed: 30 mph

Crashes: 66 per mile

Appendix

Regional Active Transportation Master Plan

PUBLIC OPEN HOUSE

PROJECT PROFILES

PROJECT 038: GIBSON LN SIDEWALK

Note: Project Extents and Details Subject to Change

Description: Complete sidewalk network and fill sidewalk gaps along Gibson Lane from Richmond Road to N Kings Hwy. Construction of sidewalks will depend on the completion of Gibson Lane between the two extents listed for this project. When appropriate, install pedestrian crossings at Richmond Road, Pavilion Parkway, Pleasant Grove Road (both east and west of Wagner Creek), and N Kings Hwy.

Length: 2.52 miles

Bicycle Level of Stress: Moderate Stress / Comfort

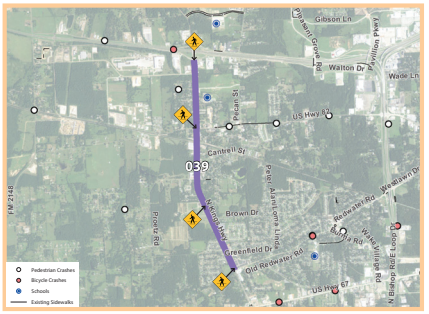
Project Source: MPO / City Staff

Traffic Volume (ADT): 5,514

Posted Speed: 45 mph

Crashes: 37 per mile

PROJECT 039: N KINGS HWY BICYCLE LANE AND SIDEWALK



Note: Project Extents and Details Subject to Change

Description: Construct bicycle lanes and sidewalks along N Kings Hwy from IH-30 to Redwater Road. Install pedestrian crossings at the southside IH-30 frontage, W New Boston Road, Chapelwood United Methodist/ Chapelwood Memorial Garden, and Redwater Road. Improve crossings at Burton Street and at Akin Street/BWI Companies, Inc.

Length: 2.27 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: MPO / City Staff

Traffic Volume (ADT): 9,948

Posted Speed: 30 - 50 mph

Crashes: 113 per mile

PROJECT 040: COWHORN CREEK RD BICYCLE LAND AND SIDEWALK

Note: Project Extents and Details Subject to Change

Description: Construct bicycle lanes and sidewalks along Cowhorn Creek Road from Kennedy Lane to Galleria Oaks Drive. Install pedestrian crossings at Kennedy Lane, the Central Mall street across from the Texarkana Convention Center, S Cowhorn Creek Loop, and N Cowhorn Creek Loop. Improve crossings at Galleria Oaks Drive.

Length: 1.05 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: MPO / City Staff

Traffic Volume (ADT): 8,785

Posted Speed: 40 mph

Crashes: 87 per mile

PROJECT 041: McKNIGHT RD BICYCLE LANE AND SIDEWALK

Note: Project Extents and Details Subject to Change

Description: Construct bicycle lanes and sidewalks along McKnight Road from Richmond Road to Pleasant Grove Road (Pleasant Valley turns into University Avenue). Install pedestrian crossings at Richmond Road, Pleasant Grove High School, and Pleasant Grove Road.

Length: 1.23 miles

Bicycle Level of Stress: High Stress / Low Comfort

Project Source: MPO / City Staff

Traffic Volume (ADT): 4,849

Posted Speed: 45 mph

Crashes: 52 per mile

Project Prioritization Files

The following documents were used during the project prioritization process. Additional information can be found in Chapter 5.

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LIST OF PROJECTS

- PROJECT 001: COWHORN CREEK TRAIL
- PROJECT 002: COLLEGE DR SIDEWALK
- PROJECT 003A: 7TH ST AT BISHOP RD SIDEWALK
- PROJECT 003B: WACO ST SIDEWALK
- PROJECT 003C: NORTH ST SIDEWALK
- PROJECT 004A: NEW BIKE / PED TRAIL
- PROJECT 004B: WAGNER CREEK TRAIL
- PROJECT 005A: LEOPARD DR SIDEWALK
- PROJECT 005B: LEOPARD DR BICYCLE LANE
- PROJECT 006: DIVISION ST SIDEWALK
- PROJECT 007: COUNTY AVE SHARED LANE
- PROJECT 008: OLIVE ST BICYCLE INFRASTRUCTURE
- PROJECT 009: COLLEGE DR BICYCLE INFRASTRUCTURE
- PROJECT 010A: 7TH ST BICYCLE INFRASTRUCTURE

Appendix

EVALUATION CRITERIA WEIGHTING

Please score the following goals on a scale of 1-5 based on their importance to you, with 1 being unimportant to the future of the bicycle/pedestrian transportation network and 5 being most important to the future of the bicycle/pedestrian transportation network.

PROVIDE SAFE ROUTES TO SCHOOL FOR CHILDREN

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

CREATE BIKE- AND PED-FRIENDLY COMMUNITIES TO BOOST ECONOMIC ACTIVITY

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Appendix

CREATE A CONNECTED NETWORK OF BIKE AND PED PATHS AND TRAILS

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

CREATE A TRANSPORTATION NETWORK FOR ALL AGES/ ABILITY LEVELS

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

BUILD A COMPLETE NETWORK OF ON-ROAD BIKE LANES

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

PROVIDE ACCESS TO TRANSIT STOPS USING SIDEWALKS AND BIKE FACILITIES

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

FILL IN SIDEWALK GAPS TO CREATE A COMPLETE SIDEWALK NETWORK

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

IMPROVE BIKE AND PED SAFETY ALONG ROADWAYS

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

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WELCOME!

Thank you for attending today's project prioritization workshop for the Texarkana Metropolitan Planning Organization's (MPO) Texarkana Regional Active Transportation Master Plan (TRATMP). Today you will be scoring proposed active transportation projects based on a set of evaluation criteria that support the goals of the TRATMP. Results from today's exercise will be included in the final plan document, resulting in a prioritized list of short-, mid-, and long-term active transportation improvement projects planned for implementation.

PROJECT GOALS

Goals for the plan were developed through community and stakeholder input, discussions with MPO planning staff and through a review of national performance measures.

Goal I - Provide safe routes to school for children
Goal 2 - Create a connected network of bicycle and pedestrian paths and trails
Goal 3 - Build a complete network of on-road bike lanes
Goal 4 - Fill in sidewalk gaps to create a complete sidewalk network
Goal 5 - Create bicycle and pedestrian friendly communities to boost economic activity
Goal 6 - Create a transportation network for all ages/ability levels
Goal 7 - Provide access to transit stops using sidewalks and bike facilities
Goal 8 - Improve bicycle and pedestrian safety along roadways

Appendix

PROJECT LIST

The preliminary list of projects was developed by the consultant team in collaboration with MPO staff, through a review of the 2009 Bicycle and Pedestrian Plan, and during conversations with stakeholders and the public. If there are additional projects that you feel should be included in this process, please bring them up in today's discussion.

INSTRUCTIONS

For each project, review the project description and map to gain an understanding of the details of the project. If you have questions about a particular project, please let the project team know. Score each project based on the degree to which you believe it addresses the evaluation criteria for each goal, which are listed on the back of this page. While the evaluation criteria serve as a guide for how to think about each goal, you should use your own judgment and local knowledge in scoring each project. The following supplemental maps provide additional information and regional context that may be useful in scoring the projects:

- Bicycle and Pedestrian Crashes, 2010-2017 (Texas 2010-2017, Arkansas 2011-2015)
- Existing bicycle level of stress
- Bicycle Project Map
- Pedestrian Project Map
- Conceptual Future Networks (bicycle, pedestrian and trails)
- Existing sidewalk coverage and conditions

When you are finished scoring each project, please turn in your scoring sheet to the project team. If you need extra time to finish scoring the projects, you can scan and email your scoring sheet to the project team at bbrey@emailatg.com.

GOALS & EVALUATION CRITERIA

PROVIDE SAFE ROUTES TO SCHOOL FOR CHILDREN

- Does the project connect to or pass near a school campus?
- Does the project provide connections between neighborhoods and schools?

CREATE A CONNECTED NETWORK OF BICYCLE AND PEDESTRIAN PATHS AND TRAILS

- Does the project connect to other proposed projects or existing bicycle/pedestrian facilities?
- Does the project connect to existing or proposed paths/trails?

BUILD A COMPLETE NETWORK OF ON-ROAD BIKE LANES

- Does the project connect to other proposed or existing bike lanes?
- Does the project extend bike lane infrastructure to areas currently lacking bicycle accessibility?
- Does the project improve bicycle accessibility along moderate/high stress roadways?

Appendix

FILL IN SIDEWALK GAPS TO CREATE A COMPLETE SIDEWALK NETWORK

- Does the project connect to other proposed projects and the existing sidewalk network?
- Does the project extend sidewalk infrastructure to areas currently lacking pedestrian accessibility?

CREATE BICYCLE AND PEDESTRIAN FRIENDLY COMMUNITIES TO BOOST ECONOMIC ACTIVITY

- Does the project (by itself or in combination with other projects) connect neighborhoods to commercial districts, employment centers, and other key destinations?
- Does the project provide recreational opportunities to attract more tourism?
- Does the project provide for possible future connections to communities adjacent to the Texarkana MPO area?

CREATE A TRANSPORTATION NETWORK FOR ALL AGES/ABILITY LEVELS

- Will the project increase comfort and safety for all bicyclists and pedestrians using it?
- Is the project accessible for users of varying age/ability?

PROVIDE ACCESS TO TRANSIT STOPS USING SIDEWALKS AND BIKE FACILITIES

- Does the project connect to existing or planned transit stops?

IMPROVE BICYCLE AND PEDESTRIAN SAFETY ALONG ROADWAYS

- Does the project propose new bicycle or pedestrian facilities along a busy or high-stress roadway?
- Does the project help separate bicycle/pedestrian traffic from automobile traffic?
- Does the project alert automobiles of shared spaces and the presence of cyclists/pedestrians?

PROJECT PRIORITIZATION WORKBOOK

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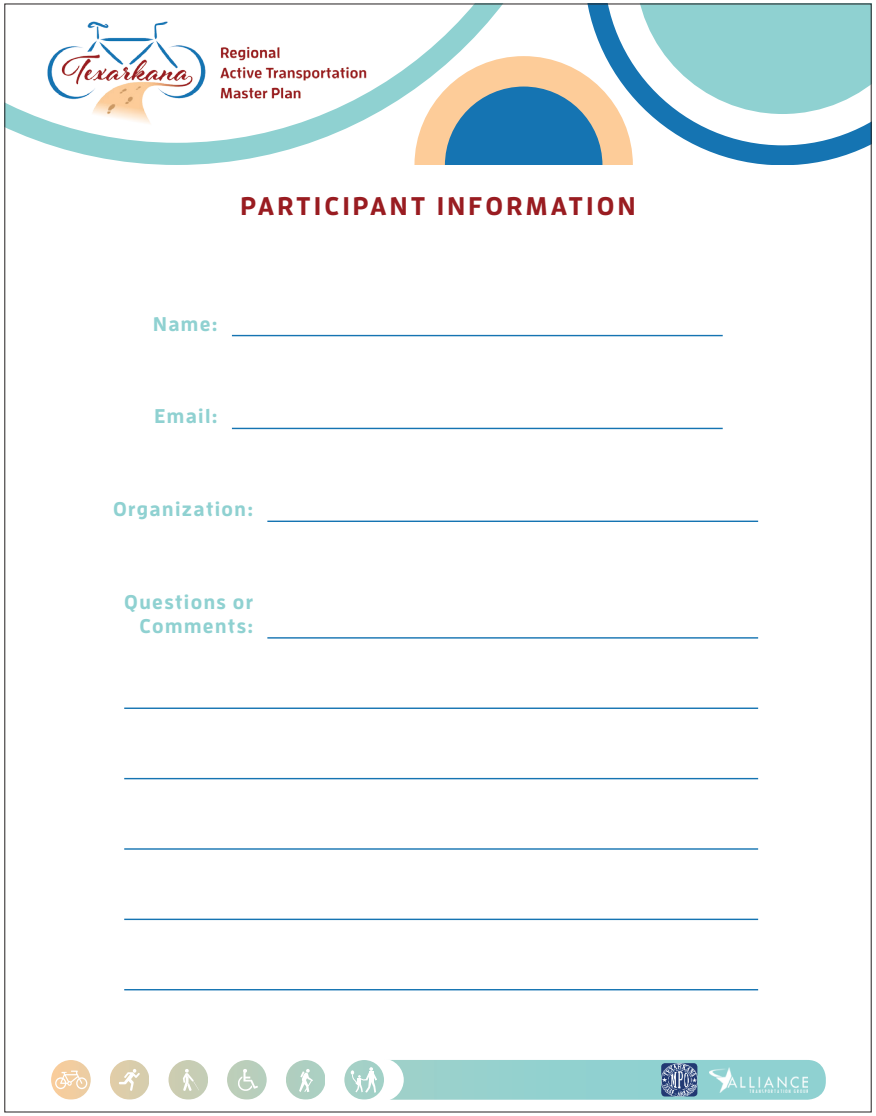
Appendix



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PARTICIPANT INFORMATION

Name: _____

Email: _____

Organization: _____

Questions or
Comments: _____

_____

_____

_____

_____

_____

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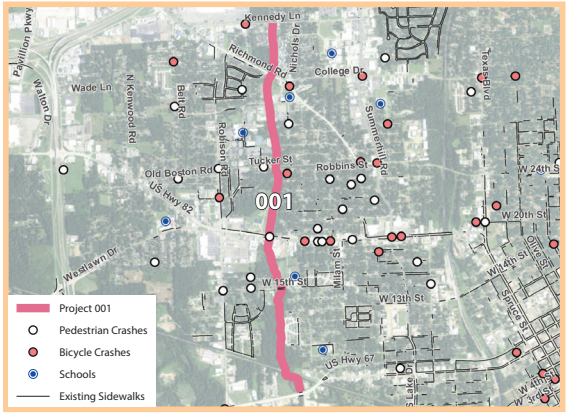
PROJECT 001: COWHORN CREEK TRAIL



Description: Construct bicycle and Pedestrian trail along Cowhorn Creek from Kennedy Lane to the proposed US Bike Route 84.

Length: 2.34 miles

Bicycle Level of Stress: No Stress / Trails

Project Source: 2009 Plan, Public Open House

Traffic Volume (ADT): N/A

Posted Speed: N/A

Crashes: N/A

Level of Impact on Goal	Zero Impact	Very Little Impact	Some Impact	Positive Impact	Substantial Positive Impact
Provide safe routes to school for children					
Create connected network of bicycle and pedestrian paths and trails					
Build a complete network of on-road bike lanes					
Fill in sidewalk gaps to create a complete sidewalk network					
Create bicycle and pedestrian friendly communities to boost economic activity					
Create transportation network for all ages/ability levels					
Provide access to transit stops using sidewalks and bike facilities					
Improve bicycle and pedestrian safety along roadways					

*The remainder of the project prioritization workbook follows a similar format to this page. Additional information on the workbook and its results can be found in chapter 5.