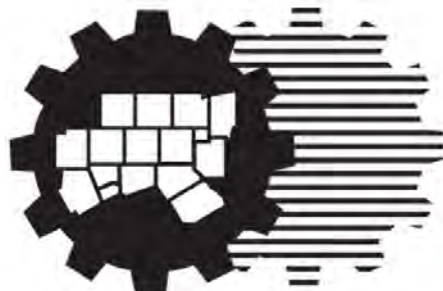


2022 Update

Regional Pedestrian Safety Action Plan



North Central Texas
Council of Governments



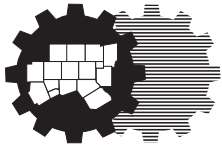
Adopted August 18, 2022

What is NCTCOG?

The **North Central Texas Council of Governments** (NCTCOG) is a voluntary association of, by, and for **local governments** within the 16-county North Central Texas Region. The agency was established by state enabling legislation in 1966 to assist local governments in **planning** for common needs, **cooperating** for mutual benefit, and **coordinating** for sound regional development. Its purpose is to strengthen both the individual and collective power of local governments, and to help them recognize regional opportunities, resolve regional problems, eliminate unnecessary duplication, and make joint regional decisions – as well as to develop the means to implement those decisions.

North Central Texas is a 16-county **metropolitan region** centered around Dallas and Fort Worth. The region has a population of more than 7 million (which is larger than 38 states), and an area of approximately 12,800 square miles (which is larger than nine states). NCTCOG has 229 member governments, including all 16 counties, 167 cities, 19 independent school districts, and 27 special districts.

NCTCOG's **structure** is relatively simple. An elected or appointed public official from each member government makes up the **General Assembly** which annually elects NCTCOG's **Executive Board**. The Executive Board is composed of 17 locally elected officials and one ex-officio non-voting member of the legislature. The Executive Board is the policy-making body for all activities undertaken by NCTCOG, including program activities and decisions, regional plans, and fiscal and budgetary policies. The Board is supported by policy development, technical advisory and study **committees** – and a professional staff led by **R. Michael Eastland**, Executive Director.



NCTCOG's offices are located in Arlington in the Centerpoint Two Building at 616 Six Flags Drive (approximately one-half mile south of the main entrance to Six Flags Over Texas).

North Central Texas Council of Governments

P. O. Box 5888

Arlington, Texas 76005-5888

(817) 640-3300

FAX: (817) 640-7806

Internet: <http://www.nctcog.org>

NCTCOG's Department of Transportation

Since 1974 NCTCOG has served as the Metropolitan Planning Organization (MPO) for transportation for the Dallas-Fort Worth area. NCTCOG's Department of Transportation is responsible for the regional planning process for all modes of transportation. The department provides technical support and staff assistance to the Regional Transportation Council and its technical committees, which compose the MPO policy-making structure. In addition, the department provides technical assistance to the local governments of North Central Texas in planning, coordinating, and implementing transportation decisions.

Prepared in cooperation with the Federal Highway Administration, US Department of Transportation, and the Texas Department of Transportation.

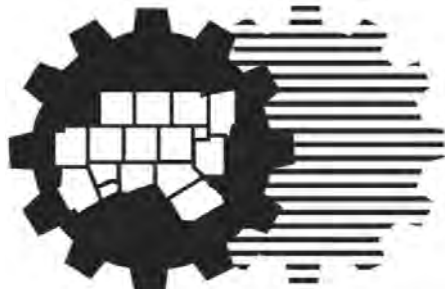
The contents of this report reflect the views of the authors who are responsible for the opinions, findings, and conclusions presented herein. The contents do not necessarily reflect the views or policies of the Federal Highway Administration, the Federal Transit Administration, or the Texas Department of Transportation.

2022 Update

Regional Pedestrian Safety Action Plan



North Central Texas
Council of Governments



Adopted August 18, 2022

NCTCOG Executive Board 2021-2022

President
David Sweet
County Judge, Rockwall County

Vice President
Andrew Piel
Councilmember, City of Arlington

Secretary-Treasurer
Bill Heidemann
Mayor, City of Corinth

Past President
Ray Smith
Mayor, Town of Prosper

Director
Alfonso Campos
County Judge, Erath County

Director
Rick Carmona
Mayor, City of Terrell

Director
Jorja Clemson
Councilmember, City of
Grand Prairie

Director
Michael D. Crain
Councilmember, City of Fort Worth

Director
Tammy Dana-Bashian
Mayor, City of Rowlett

Director
Kevin Falconer
Mayor, City of Carrollton

Director
Clyde Hairston
Mayor, City of Lancaster

Director
Chris Hill
County Judge, Collin County

Director
Clay Lewis Jenkins
County Judge, Dallas County

Director
Cara Mendelsohn
Councilmember, City of Dallas

Director
Bobbie Mitchell
Commissioner, Denton County

Director
Kayci Prince
Mayor Pro Tem, City of Plano

Director
B. Glen Whitley
County Judge, Tarrant County

Ex Officio, Non-Voting Member
Glenn Rogers
Member of the Texas Legislature

Executive Director
R. Michael Eastland

Regional Transportation Council 2021-2022

Theresa Daniel, Ph.D., Chair
Commissioner, Dallas County

Duncan Webb, Vice Chair
Commissioner, Collin County

Cary Moon, Secretary
Councilmember, City of Fort Worth

Daniel Alemán Jr.
Mayor, City of Mesquite

Richard E. Aubin
Councilmember, City of Garland

Dennis Bailey
Commissioner, Rockwall County

Adam Bazaldua
Councilmember, City of Dallas

Elizabeth M. Beck
Councilmember, City of Fort Worth

Gyna Bivens
Mayor Pro Tem, City of Fort Worth

Mohamed "Mo" Bur, P.E.
District Engineer, Texas Department of
Transportation, Dallas District

Dianne Costa
Board Member, Denton County
Transportation Authority

Jeff Davis
Chair, Trinity Metro

Pat Deen
County Judge, Parker County

Janet DePuy
Mayor Pro Tem, City of Richardson

Andy Eads
County Judge, Denton County

Kevin Falconer
Mayor, City of Carrollton

Gary Fickes
Commissioner, Tarrant County

George Fuller
Mayor, City of McKinney

Raul H. Gonzalez
Councilmember, City of Arlington

Barry L. Gordon
Mayor, Duncanville

Rick Grady
Councilmember, City of Plano

Lane Grayson
Commissioner, Ellis County

Mojoy Haddad
Board Member, North Texas Tollway
Authority

Roger Harmon
County Judge, Johnson County

Clay Lewis Jenkins
County Judge, Dallas County

Ron Jensen
Mayor, City of Grand Prairie

Carl L. Johnson, P.E.
District Engineer, Texas Department of
Transportation, Fort Worth District

Brandon Jones
Councilmember, City of Lewisville

John Keating
Councilmember, City of Frisco

Mike Leyman
Councilmember, City of Mansfield

Alison Maguire
Councilmember, City of Denton

B. Adam McGough
Councilmember, City of Dallas

William Meadows
Board Member, Dallas Fort Worth
International Airport

Allan E. Meagher
Councilmember, City of Irving

Cara Mendelsohn
Councilmember, City of Dallas

Omar Narvaez
Councilmember, City of Dallas

Philip J. Ritter
Citizen Representative, City of Dallas

Jim R. Ross
Mayor, City of Arlington

Chris Schulmeister
Councilmember, City of Allen

Jeremy Tompkins
Councilmember, City of Euless

T. Oscar Trevino, Jr., P.E.
Mayor, City of North Richland Hills

William Tsao, P.E.
Citizen Representative, City of Dallas

B. Glen Whitley
County Judge, Tarrant County

Michele Wong Krause
Chair, Dallas Area Rapid Transit

Michael Morris, P.E.
Director of Transportation, NCTCOG

Surface Transportation Technical Committee

Tanya Brooks, Chair
Assistant Director, Traffic Management Division
Transportation and Public Works
City of Fort Worth

The Surface Transportation Technical Committee took action to recommend the Plan on 05/28/2021, and action was taken by the Regional Transportation Council to endorse the Plan on 06/10/2021.

The Plan was adopted by reference in Mobility 2045 (2022 Update) by the RTC on 06/10/2022.

The Plan was updated in 2022. The Surface Transportation Technical Committee took action to recommend the Plan on 07/22/2022, and action was taken by the Regional Transportation Council to endorse the Plan on 08/18/2022.

Pedestrian Safety Action Plan Committee

The development of this Plan was guided by representatives of the agencies listed below acting as the Pedestrian Safety Action Plan Committee. The Committee provided expertise in a range of pedestrian-related fields and their time and participation on the Committee is appreciated.

North Central Texas Council of Governments	Federal Transit Administration
AARP	Fort Worth Inc.
Blue Zone	Fort Worth Independent School District
Children's Medical Center	John Peter Smith Health Network
City of Burleson	MedStar911
City of Dallas	Parkland Health & Hospital
City of Denton	Safe Kids Coalition
City of Fort Worth	Tarrant County
City of Plano	Tarrant County Public Health Department
City of Richardson	Texas Health Methodist Hospital of Fort Worth
Cook Children's	Texas Health Presbyterian Hospital of Dallas
Dallas Area Rapid Transit	Texas Municipal Police Association
Dallas County	Trinity Metro
Dallas Independent School District	TxDOT Dallas District
Denton County Transportation Authority	TxDOT Fort Worth District
Disability Diplomat	UNT Health Sciences
Downtown Dallas Inc.	Urban Strategies
Federal Highway Administration	

Table of Contents

1.	About the Metropolitan Planning Area	1
2.	Regional Crash Data Infographics	4
3.	Introduction	6
3.1	Purpose and Goals	8
4.	Development of the Plan	9
5.	National Trends	11
6.	State Trends	12
7.	Regional Trends.....	13
7.1	Overview of Regional Data.....	14
7.2	Performance Targets and Walking as a Mode Share Within the MPA	16
7.3	Pedestrian Safety Survey.....	17
8.	Identification of the Primary Pedestrian Safety Corridors and Secondary Pedestrian Safety Corridors	19
8.1	Overview of the PPSC and SPSC Corridor Datasets	20
8.2	Refinement of Safety Corridors Through Outreach and Comparisons to Existing Corridor Datasets	20
8.3	Primary Pedestrian Safety Corridors	21
8.4	Secondary Pedestrian Safety Corridors	22
8.5	Environmental Justice.....	22
9.	Recommended Policies and Next Steps	32
10.	Action Items	34
10.1	Monitoring and Outcomes	34
11.	Conclusion	36
Appendix A	Reported Pedestrian Crash Density Using Square-Mile Grid Mapping	
Appendix B	Primary and Secondary Pedestrian Safety Corridors	
Appendix C	Regional Analysis Supportive Data	
Appendix D	Mobility 2045 Policies and Programs in Support of Pedestrian Safety	
Appendix E	Online Engagement Results, Pedestrian Safety Public Survey	
Appendix F	Project 0-6983: North Texas Bicycle and Pedestrian Crash Analysis (2020)	

1. About the Metropolitan Planning Area

As the federally designated Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth area since 1974, the North Central Texas Council of Governments (NCTCOG) Transportation Department works in cooperation with the region's transportation providers to address the complex transportation needs of the rapidly growing region. The scope of the regional Pedestrian Safety Action Plan (PSAP) is the 12-county Metropolitan Planning Area (MPA), which is comprised of Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise counties. The MPA is comprised of three urbanized areas as defined by the United States Census Bureau: Dallas-Fort Worth-Arlington, Denton-Lewisville, and McKinney (Figure 1). Just over 95 percent of all pedestrian crashes analyzed for the PSAP were reported within these urbanized areas, with slightly less than five percent of pedestrian crashes occurring in rural areas.

North Central Texas is one of the fastest-growing regions in the country, adding about one million people every 10 years. The 2020 population estimate within the MPA exceeds 7.6 million, making it the fourth largest metropolitan area nationwide, with a projected increase to over 11.2 million residents by 2045. NCTCOG works with its transportation partners and all levels of government, as well as the public, to address traffic safety and congestion by developing a multimodal transportation system that includes highway, passenger rail, bus, and bicycle and pedestrian facilities.

The Regional Transportation Council (RTC), the independent policy body of the MPO, oversees the work of the MPO, establishes priorities and guides the development of multimodal transportation plans, programs, and partnerships. The RTC consists primarily of local elected officials and representatives from the area's transportation providers, and the RTC determines how to allocate federal, state, and regional funds to transportation improvements. Committees and advisory groups lend expertise and develop recommendations for the RTC to consider.

The RTC continues to support the implementation of policies and programs aimed at enhancing the region's active transportation network, which enable the MPO area to achieve adopted safety performance targets.

Through the RTC's guidance in the development of multimodal transportation plans and programs, the 44-member council approved a regional safety position on December 14, 2017, which states:

“Even one death on the transportation system is unacceptable. Staff will work with our partners to develop projects, programs, and policies that assist in eliminating serious injuries and fatalities across all modes of travel.”¹

The RTC's safety position aligns with the Texas Transportation Commission's (TTC) minute order, from May 30, 2019, which states:

“The Texas Transportation Commission (commission) directs the Texas Department of Transportation (department) to work toward the goal of reducing the number of deaths on Texas roadways by half by the year 2035 and to zero by the year 2050. The commission acknowledges a majority of motor vehicle crashes can be prevented, thereby reducing fatalities.”

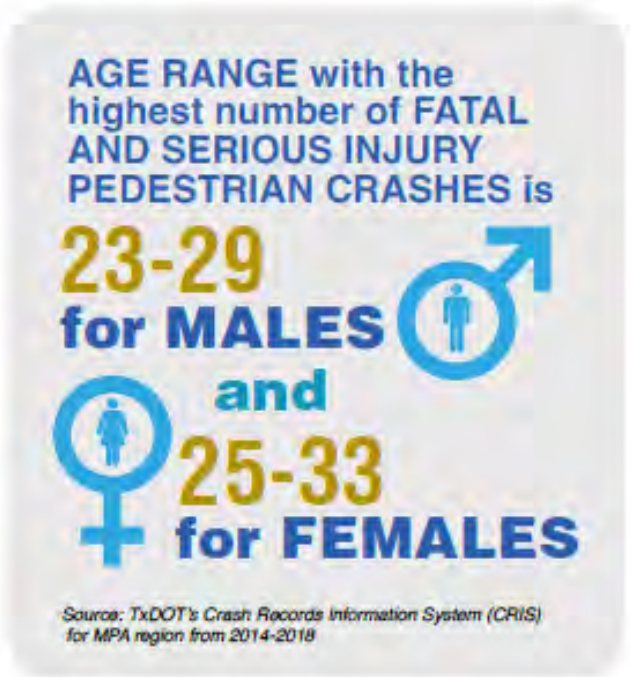
The RTC and Texas Department of Transportation (TxDOT) statements align with the United States Department of Transportation's goal, as referenced in their USDOT Pedestrian Safety Action Plan (2020)²:

“The goal of the USDOT Pedestrian Safety Action Plan is to reduce pedestrian deaths and serious injuries. To accomplish this goal, USDOT is taking a comprehensive approach that encompasses improvements to the roadway and surrounding environment, increased education on the shared responsibility of both pedestrians and motorists along with enforcement and adjudication of pedestrian safety laws.”

¹ The statement was reaffirmed by the RTC on February 14, 2019.

² highways.dot.gov/sites/fhwa.dot.gov/files/2020-11/FHWA_PedSafety_ActionPlan_Nov2020.pdf

2. Regional Crash Data Infographics





Source: TxDOT's Crash Records Information System (CRIS) for MPA region from 2014-2018

In DALLAS COUNTY, BLACKS OR AFRICAN AMERICANS

comprise only **23%** of the POPULATION but **33%** of the PEDESTRIAN FATALITIES.



In TARRANT COUNTY, BLACKS OR AFRICAN AMERICANS

comprise only **16%** of the POPULATION but **30%** of the PEDESTRIAN FATALITIES.



Source: TxDOT's Crash Records Information System (CRIS) for MPA region from 2014-2018



More than **2/3** of FATAL & SERIOUS INJURY PEDESTRIAN CRASHES are happening at

NON-INTERSECTIONS

Source: TxDOT's Crash Records Information System (CRIS) for MPA region from 2014-2018

23%

of all reported PEDESTRIAN CRASHES were

HIT AND RUNS on the part of the driver

Source: TxDOT's Crash Records Information System (CRIS) for MPA region from 2014-2018

THE HIGHEST NUMBER of FATAL & SERIOUS INJURY pedestrian crashes for men and women occur on

FRIDAYS

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
				X		

Source: TxDOT's Crash Records Information System (CRIS) for MPA region from 2014-2018

42% of fatal pedestrian crashes involved PEDESTRIAN FAILURE TO YIELD RIGHT-OF-WAY TO VEHICLE as the first contributing factor



Source: TxDOT's Crash Records Information System (CRIS) for MPA region from 2014-2018

3. Introduction

Active transportation, including walking, is an important facet in the daily lives of our region’s residents. Residents and visitors across the Dallas-Fort Worth metropolitan area rely on connections to transit and other transportation modes through a pedestrian system that overcomes obstacles to access, closes gaps in sidewalk connectivity and provides a significant level of comfort for pedestrians from all demographics.

The North Central Texas Council of Governments is dedicated to the development of a safe, accessible, and equitable pedestrian network that connects people to jobs, schools and essential services through organizational policies, programs, and collaborative efforts with local governments. Directives within NCTCOG’s *Metropolitan Transportation Plan - Mobility 2045* (Mobility 2045), support interconnected active transportation facilities that promote walking as an equal with all other transportation modes, for people of all ages and abilities. Language in support of a safe regional pedestrian network has been incorporated within the policies and programs have been supported by the Regional Transportation Council for many years and are included in Mobility 2045 which was adopted by the RTC on June 14, 2018.

Between 2014 and 2018, a total of 7,072 pedestrian crashes were reported within the Dallas-Fort Worth 12-county MPA. The total number of individual pedestrians killed over the five-year span was 672, increasing from 95 in 2014, to 146 in 2018, as shown in Table 1, marking an overall increase of 54 percent.

Total Pedestrian Fatalities Within MPA 2014 - 2018						
County	2014	2015	2016	2017	2018	Total
Dallas	54	71	84	73	71	353
Tarrant	29	39	40	45	46	199
Denton	2	7	7	11	7	34
Hunt	1	3	1	5	6	16
Collin	2	3	4	2	4	15
Ellis	2	0	4	3	3	12
Kaufman	1	1	6	4	0	12
Johnson	1	2	1	3	4	11
Rockwall	2	0	3	1	2	8
Parker	1	1	0	1	2	5
Wise	0	4	0	0	0	4
Hood	0	1	0	1	1	3
Total	95	132	150	149	146	672
Sources: Fatality Analysis Reporting System 2010–2017 Final File, 2018 Annual Report File; Population – Census Bureau						

Table 1: Pedestrian fatalities per county between 2014-2018 in the MPA.

Both Dallas and Fort Worth had pedestrian fatality rates per 100,000 population well above the state average, and all three averages were significantly higher than the national average in recent years (Figure 2). In a 2004 initiative deemed a Focused Approach to Safety, the Federal Highway Administration (FHWA) designated states and cities with the highest number of pedestrian fatalities and/or fatality rates as *Pedestrian Safety Focus States and Focus Cities* respectively, giving them priority in the allocation of federal resources.³ The State of Texas was named as one of the initial thirteen focus states in 2004, which was expanded to sixteen states in 2015. Since the inception of the initiative, both the Cities of Dallas and Fort Worth have been identified as focus cities, as the number of reported fatal and serious injury pedestrian crashes have been consistently much higher than the national average. For example, between 2014 and 2017, the average number of pedestrian fatalities per 100,000 population was 3.93 in Dallas and 2.95 in Fort Worth, both significantly higher than the national average of 1.72. Figure 2 identifies the number of pedestrian fatalities per 100,000 population for Dallas, Fort Worth, the State of Texas, and the United States, between the years 2014 and 2018.

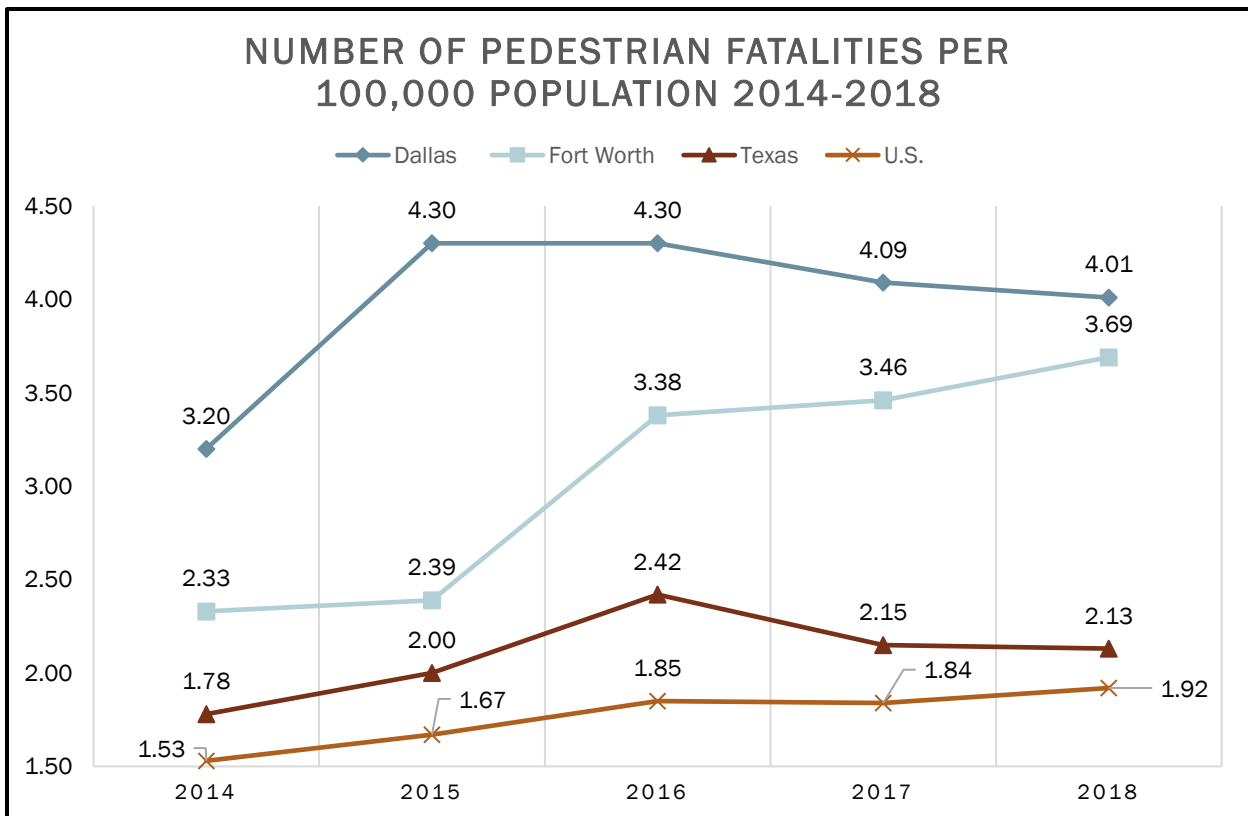


Figure 2: Pedestrian fatalities per 100,000 population for Dallas, Fort Worth, Texas, and the United States, between the years 2014 and 2018.⁴

³ "Pedestrian Safety Focus States and Cities - Safety: Federal Highway Administration." *Office of Safety Programs, FHWA*, safety.fhwa.dot.gov/ped_bike/ped_focus/.

⁴ Source: National Highway Traffic Safety Administration (NHTSA) Fatality Analysis Reporting System (FARS): nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system.

Following the national trend, the number of pedestrian fatalities increased across the region as the combined number of all other traffic deaths declined.⁵ Analysis of regional crash reports indicated that as much as one out of every five fatalities for all modes of travel between 2014-2018 was a pedestrian. The contributing factor in 42 percent of the region's fatal pedestrian crashes was reported as the pedestrian failing to yield right-of-way to the motorist and 23 percent of all crashes were reported as hit-and-runs. The complete summary of regional crash data can be found in Appendix C.

In response to the increasing number of pedestrian fatalities and to align NCTCOG's efforts with the safety positions adopted by the RTC and the Texas Transportation Commission, a regional Pedestrian Safety Action Plan (PSAP) was developed. The PSAP was designed to provide guidance for our regional partners as well as the development of more detailed local plans, in support of reducing the annual number of pedestrian fatalities to zero. The Plan was formed in collaboration with the Texas Department of Transportation, local governments, and a multidisciplinary group of stakeholders that comprised the Pedestrian Safety Action Plan Committee. This document summarizes the development of the PSAP, including current conditions, the identification of the Primary and Secondary Pedestrian Safety Corridors (PPSC and SPSC), actionable items, and recommended policies.

3.1 Purpose and Goals

The purpose of the Pedestrian Safety Action Plan is to serve as a guide for state, regional and local governments for improving pedestrian safety across the 12-county MPA. The PSAP identifies current conditions and targeted areas for improvements, as well as recommended actions involving engineering, education, enforcement, encouragement, and evaluation (the five Es). The PSAP is intended to serve as the framework for NCTCOG and the region in the development of pedestrian-related safety policies, the enhancing of existing pedestrian facilities, and programming for new projects and programs. By developing the PSAP at a regional-level, NCTCOG encourages cities throughout the MPA to develop their own detailed local plans, using a similar framework. The PSAP's purpose aligns with the policies and programs outlined in NCTCOG's Mobility 2045, in which the RTC encourages the implementation of all reasonable pedestrian safety countermeasures that enable the region to achieve adopted safety performance targets. Appendix D provides a summary of all related pedestrian safety policies and programs included in Mobility 2045.

The following goals were identified in the process of developing the PSAP are endorsed by the RTC:

1. Eliminate all serious injury and fatal pedestrian crashes across the region by 2050.

⁵ The Governors Highway Safety Association found that the number of pedestrian fatalities increased by 35 percent over a ten-year period, whereas the combined number of all other traffic deaths declined by six percent during the same period. Pedestrian deaths as a percentage of total motor vehicle crash deaths increased from 12 percent in 2008 to 16 percent in 2017. Pedestrian Traffic Fatalities by State: 2018 Preliminary Data: ghsa.org/sites/default/files/2019-02/FINAL_Pedestrians19.pdf.

(Supports RTC and the TxDOT/TTC safety goals)

2. Balance the safety and needs of all users of all ages and abilities in the transportation system design, maintenance, and operation phases, with priority given to the most vulnerable users.
3. Provide a high level of comfort in the design, construction, and maintenance of transportation facilities.
4. Integrate within roadway design the most direct facility alignments that prioritize safe pedestrian movements.
5. Implement all reasonable pedestrian safety countermeasures to achieve adopted regional safety performance targets.

4. Development of the Plan

A Pedestrian Safety Action Plan Committee comprised of regional professionals provided technical guidance and assisted in developing the PSAP's purpose, goals, and action plan. The committee members had expertise and experience in a diverse array of pedestrian-related fields, including federal, State, and local transportation planning, school districts, health agencies, transit agencies, senior and disability advocates, and law enforcement, amongst others. The Committee met three times between April 2019 and January 2021.

Data was compiled and analyzed to determine the regional trends, using five years of pedestrian crash reports as detailed in Section 7. In addition, an online public opinion survey was conducted with assistance by TxDOT between May 6 and July 5, 2019. On June 10, 2019, NCTCOG hosted a public meeting to solicit additional feedback and promote the online survey. The survey is further detailed in Section 7.3 with a summary of outreach, engagement, and results located in Appendix E.

A collaborative research project by the TxDOT Research and Technology Implementation Office and their partners at the University of Texas at El Paso, was instrumental in informing the PSAP by providing substantial assistance in reviewing crash records that summarized contributing factors of pedestrian crashes. The research project further identified both bicycle and pedestrian corridor datasets, the latter of which helped guide the identification of pedestrian high crash corridor datasets (detailed further in Section 8.1). The final TxDOT Research Project report is included as Appendix F.

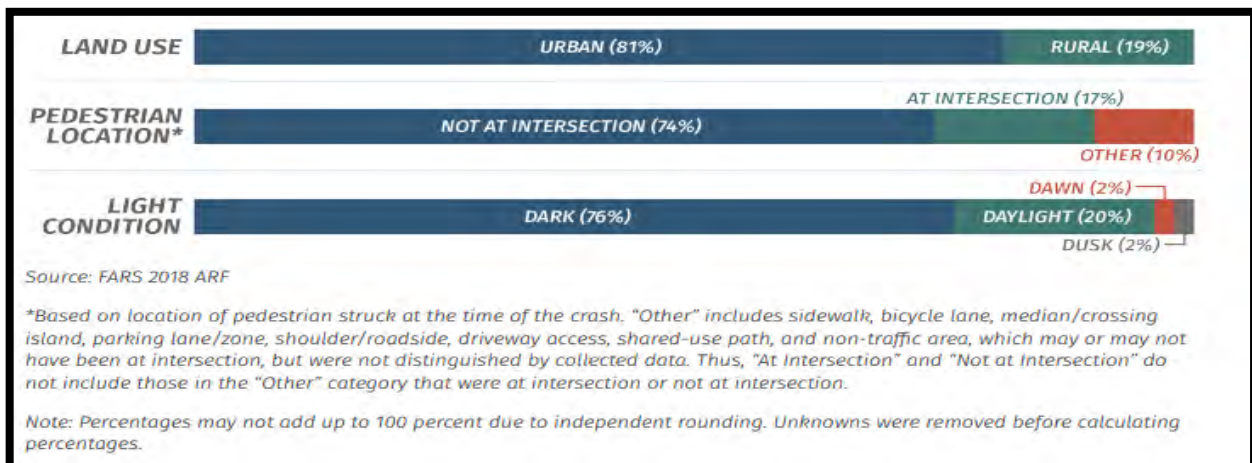
In March 2020, NCTCOG hosted an internal peer review of the data and methodology used for the PSAP, providing the opportunity for inter-governmental coordination with a diverse array of disciplines including freight planning, roadway planning, transit-oriented development, and safety planning. Additionally, the data and methodology was presented specifically to the Environmental Justice team at NCTCOG for their review and feedback.

The PSAP document was presented to NCTCOG's Bicycle and Pedestrian Advisory Committee in February of 2021, and feedback was solicited. After comments and edits were incorporated and the PSAP was finalized,

briefings were provided to NCTCOG's Surface Transportation Technical Committee on April 23, 2021 and the Regional Transportation Council on May 13, 2021.

5. National Trends

Projected data for 2019 indicates the number of pedestrian fatalities in the United States is the highest since 1988.⁶ Figure 3, from the Governor’s Highway Safety Association’s (GHSA) Pedestrian Traffic Fatalities by State: 2019 Preliminary Data, illustrates these figures. The projected 6,205 fatalities in 2019 continues an upward trend in pedestrian deaths since 2009 and Texas is unfortunately following the same trajectory.⁷ Factors that may be contributing to the consistently high numbers of pedestrian crashes include a shift in car sales from passenger vehicles to light trucks (light trucks can potentially cause more damage than passenger cars in accidents), an increasing percentage of SUV-related crashes involving pedestrians, and increased use of smart phones, which has shown to increase cognitive and visual distraction amongst drivers.⁸ The five states with the highest reported crashes, Arizona, California, Florida, Georgia and Texas, accounted for 47 percent of all pedestrian deaths nationwide⁹, while comprising only 33 percent of the total population.¹⁰ Ranking third on the top five list for total number pedestrian fatalities in both 2018 and 2019, behind California and Florida, Texas reported 297 deaths between January and June of 2018, and 313 between January and June of 2019.¹¹ Nationwide, pedestrian fatalities in 2018 occurred mostly in urban areas (81 percent), non-intersection locations (74 percent), and in dark lighting conditions (76 percent), figures all below the regional average (95 percent, 82 percent and 79 percent, respectively), detailed in the next section.¹²



⁶ Pedestrian Traffic Fatalities by State: 2019 Preliminary Data. National Highway Traffic Safety Administration (NHTSA) through the Fatality Analysis Reporting System (FARS), n.d.: ghsa.org/sites/default/files/2020-02/GHSA-Pedestrian-Spotlight-FINAL-rev2.pdf

⁷ USDOT (FHWA) Pedestrian Safety Action Plan: highways.dot.gov/sites/fhwa.dot.gov/files/2020-11/FHWA_PedSafety_ActionPlan_Nov2020.pdf

⁸ Pedestrian Traffic Fatalities by State: 2019 Preliminary Data (see footnote 4).

⁹ Ibid

¹⁰ Based on US Census 2018 population estimates: census.gov/data/tables/time-series/demo/popest/2010s-state-total.html#par_textimage_1574439295

¹¹ Ibid, preliminary adjusted total pedestrian fatalities.

¹² USDOT (FHWA) Pedestrian Safety Action Plan: (see footnote 5)

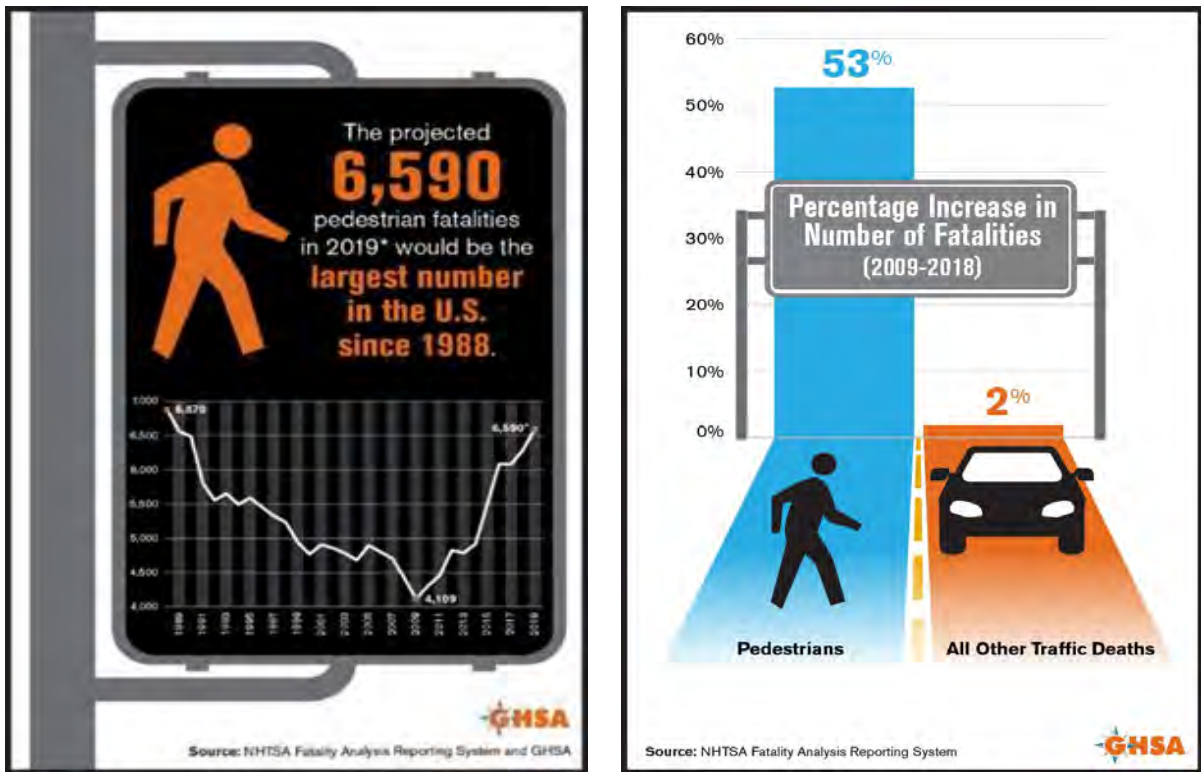


Figure 3: GHSAs infographics depicting projected 2019 pedestrian safety data and fatality increase between 2009-2018.

6. State Trends

During the same timeframes as the analysis completed for the PSAP (2014-2018), the State of Texas had a total of 28,312 reported crashes involving pedestrians.¹³ Of those reported crashes, there were 2,971 fatalities and 5,732 individual pedestrians with suspected serious injuries.¹⁴ In support of TxDOT’s Texas Strategic Highway Safety Plan, 79 percent of all crashes involving a pedestrian fatality between 2010-2016 occurred at night-time.¹⁵ In alignment with national and regional data, males overwhelmingly represented those pedestrians involved in fatal or suspected serious injury crashes, with the ages of males involved peaking at age 21 and again – to a lesser degree – at 55.¹⁶

¹³ This number of reported crashes does not include pedestrian-pedestrian or pedestrian-pedalcyclist only crashes. Texas Motor Vehicle Crash Statistics: txdot.gov/government/enforcement/annual-summary/2018.html

¹⁴ Ibid.

¹⁵ Texas Strategic Highway Safety Plan: texasshsp.com/emphasis-areas/pedestrian-safety/#description

¹⁶ Texas Strategic Highway Safety Plan - demographics: texasshsp.com/emphasis-areas/pedestrian-safety/#demographics

7. Regional Trends

Regional trends were derived from pedestrian crash reports, as compiled through TxDOT's Crash Records Information System (CRIS), for the years 2014-2018. The data was used to determine the demographics of persons involved in the crashes (male, female, age, race, and ethnicity, etc.), the injury severity levels (fatal, suspected serious injury, etc.), the days of the week and times (daytime, dawn, dusk, etc.), the locations (midblock, intersection, on/off-system, etc.), and the contributing factors (attention diverted from driving, improperly parked vehicles, etc.).

Analysis of the 7,072 reports indicated that 660 vehicle-pedestrian crashes involved a pedestrian fatality, resulting in 672 individual pedestrian deaths¹⁷ in the MPA, averaging 134 pedestrian deaths per year.¹⁸ The combined total of fatal and suspected injury pedestrian crashes in the MPA climbed steadily from 366 to 448 during the same time, with a peak of 484 in 2016 as shown in Table 2.¹⁹

Total Reported Pedestrian Crashes Involving a Fatality (K) or a Suspected Serious Injury (A)			
Year / Injury Severity	Number of Crashes with a Fatality (K)*	Number of Crashes with a Suspected Serious Injury (A)	Total Crashes with a K/A
2014	95	271	366
2015	128	289	417
2016	147	337	484
2017	144	304	448
2018	146	302	448
Total	660	1,503	2,163
*Note: The number of reported crashes <i>involving</i> pedestrian fatalities differs from the total number of individual pedestrians killed (672)			

Table 2: Combined pedestrian crashes with a reported injury level of “Killed,” or “Suspected Serious Injury” between 2014-2018 within the MPA.

The steadily increasing number of crashes involving pedestrians with injury levels reported as serious injuries or fatalities can be viewed as a linear graph in Figure 4.

¹⁷ Some accidents resulted in more than one pedestrian fatality. See Table 1 for the total number of pedestrian fatalities.

¹⁸ Informed by National Highway Traffic Safety Administration's Fatality Analysis Reporting System:

<https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>

¹⁹ Informed by pedestrian crash records using the Texas Department of Transportation's Crash Records Information System, limiting years to 2014-2018 for pedestrian searches within the NCTCOG MPA.

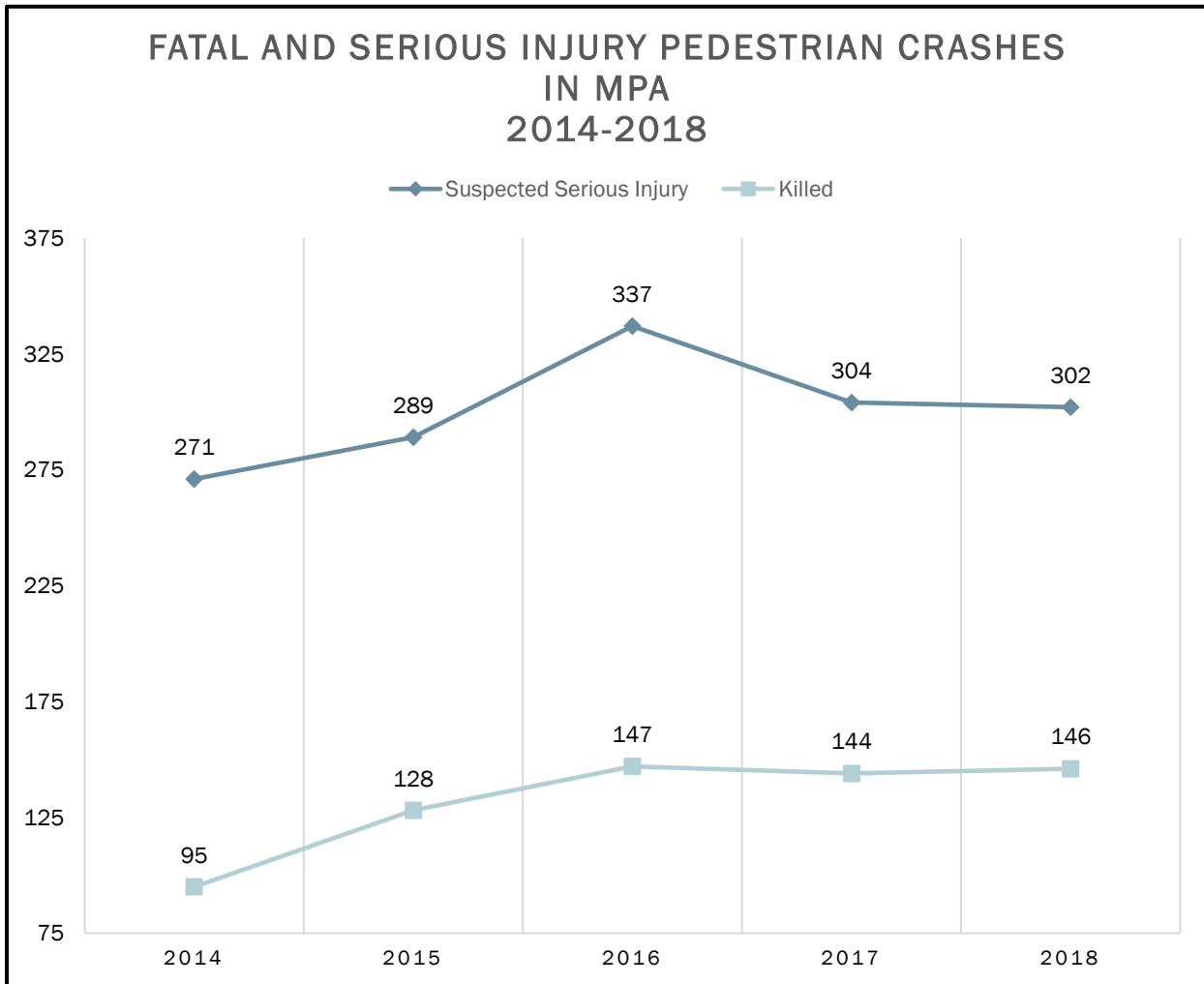


Figure 4: Graph identifies the total numbers of reported fatal and suspected serious injury pedestrian crashes between 2014-2018.

7.1 Overview of Regional Data

Research conducted by the FHWA suggests that collisions involving pedestrians are often underreported nationwide due to the limitations of State motor vehicle crash data.²⁰ The reported regional crashes that were analyzed for the PSAP were limited to those within the roadway, which exclude collisions with vehicles on sidewalks, driveways, or in parking lots.

Despite the limitations associated with underreporting of pedestrian incidents, analysis of crash reports throughout the 12-county region provides insight as to the demographics, types of crashes, times when the incidents are occurring, crash locations, and the contributing factors. TxDOT’s CRIS was used in collecting and

²⁰ https://safety.fhwa.dot.gov/ped_bike/pssp/background/psafety.cfm

analyzing the 7,072 crash records involving pedestrians throughout the region between 2014-2018, which is the time range for all the crash analysis in this safety plan, unless indicated otherwise. Verification of all data, including all query fields and filters, can be found in Appendix C.

Demographic Highlights

- Seventy percent of the reported fatalities were male.
- The age range with the highest number of combined pedestrian fatalities and suspected serious injuries was for males between the ages of 23-29, with another slightly lower peak occurring between ages 52-58.
- The age range with the highest number of combined pedestrian fatalities and suspected serious injuries was for females between the ages of 25-33, with another slightly lower peak occurring between ages 49-57.

Crash data indicates that populations of minority groups within the region did not correlate with their involvement in crashes resulting in a pedestrian fatality. Of the region's residents that identified their race or ethnicity as Black, the percentage of pedestrian deaths outweighed the overall percentage represented within the population:

- In Dallas County, Blacks comprised only 23 percent of the population yet accounted for 33 percent of the county's pedestrian fatalities.
- In Tarrant County, Blacks comprised only 16 percent of the population yet accounted for 30 percent of the county's pedestrian fatalities.

Location and Conditions

- Ninety-five percent of reported fatal and suspected serious injury (combined) pedestrian crashes happened in an urban setting.
- Eighty-two percent of reported fatal and suspected serious injury (combined) pedestrian crashes happened at non-intersections.
- Eighty percent of pedestrian fatalities occurred in dark lighting conditions.²¹

Days of the Week

- The most frequent day of the week for all pedestrian injury types for both males and females was Friday, followed closely by Thursdays.
- The day of the week with the lowest number of overall crashes was Monday.

²¹ Including night crashes with lighted facilities, night crashes without lighted facilities, and night crashes with unknown lighting at facilities.

7.2 Performance Targets and Walking as a Mode Share Within the MPA

Measuring and tracking the performance of the region’s transportation system is a fundamental component of NCTCOG’s Mobility 2045. The performance of the region’s pedestrian network is a critical element in the performance-based planning process.²²

NCTCOG worked closely with TxDOT to establish annual performance targets for the region’s overall transportation system for measures including the five-year rolling average for the number of fatalities, and the total number of serious injuries (for all modes). The 2018 target expressed as a five-year rolling average in reducing total regionwide fatalities and the number of serious injuries is shown in Table 3 and Table 4 (respectively) below:

Five-Year Rolling Average for the Rate of Fatalities (2014-2018)

Table 3: Five-year rolling average for the number of fatalities for all modes (not just pedestrians) on the region’s transportation system.

Year	Source	Statewide Data			Regional Data	
		Projection or Actual Data	Percent Reduction	Target or Actual Data	Projection or Actual Data	Target or Actual Data
2014	FARS	1.45	N/A	1.45	0.92	0.92
2015	ARF	1.36	N/A	1.36	0.92	0.92
2016	CRIS	1.44	N/A	1.44	0.99	0.99
2017	Target	1.45*	0.0%	1.45	0.98	0.98
2018	Target	1.46*	0.4%	1.46	0.99	0.99
2018 target expressed as 5-year average				1.432		0.96

*Based on linear trend analysis from 2011-2015 FARS data.

Five-Year Rolling Average for the Number of Serious Injuries (2014-2018)

Table 4: Five-year rolling average for the number of fatalities for all modes (not just pedestrians) on the region’s transportation system.

Year	Source	Statewide Data			Regional Data		
		Projection or Actual Data	Percent Reduction	Target or Actual Data	Projection or Actual Data	Target or Actual Data	Serious Injury Crashes Reduced
2014	CRIS	17,133	N/A	17,133	3,420	3,420	
2015	CRIS	17,096	N/A	17,096	3,453	3,453	
2016	CRIS	17,578	N/A	17,578	3,641	3,641	
2017	Target	17,890*	0.0%	17,890	3,787	3,787	
2018	Target	18,203*	0.4%	18,130	3,938	3,922	16
2018 target expressed as 5-year average				17,565.4		3,647.8	

*Based on linear trend analysis from 2012-2016 CRIS data.

²² MTP45: nctcog.org/nctcg/media/Transportation/DocsMaps/Plan/MTP/8-Regional-Performance.pdf

NCTCOG safety performance targets for non-motorized travel in the MPA align directly with TxDOT’s Highway Safety Improvement Program performance targets. For regional, non-motorized travel, a crash reduction target of a 0.4 percent has been established, beginning in 2018 and culminating in an overall 2.0 percent reduction by the year 2022.

**TEXAS DEPARTMENT OF TRANSPORTATION
HIGHWAY SAFETY IMPROVEMENT PROGRAM PERFORMANCE TARGETS
REDUCTION SCHEDULE: 2018 – 2022¹**

2018 – 2022 Target Crash Reduction Schedule	
Year	Reduction
2018	0.4%
2019	0.8%
2020	1.2%
2021	1.6%
2022	2.0%

¹ The Regional Transportation Council previously affirmed support for the 2018 TxDOT Highway Safety Improvement Program Performance Targets on December 14, 2017.

7.3 Pedestrian Safety Survey

Residents across the region provided valuable feedback for the PSAP through an online survey conducted with the assistance of TxDOT. A total of 1,045 respondents comprised of 56 percent males and 44 percent females, between the ages of 25 and 64, used the MetroQuest online survey tool to answer questions regarding perceived barriers to walking as a mode of travel, safety concerns, walkable destinations, and the best target audience for pedestrian educational outreach.

Respondents identified the absence of sidewalks and trails as the top barrier to walking as a mode of transportation. Existing sidewalk and trail conditions and bad driver behaviors were also cited as barriers though,

to a somewhat lesser degree. Comments on these barriers further noted lack of connectivity to destinations, scooters and other micro-mobility devices as obstacles, and a lack of tree coverage/shade as concerns.

Participants identified their top safety concerns as speeding vehicles along pedestrian routes, areas lacking sidewalks along roadways, and an overall lack of pedestrian facilities to cross highways. Respondents also indicated that lighting was the topmost safety improvement to improve pedestrian comfort levels on facilities, followed closely by buffered separations between sidewalks/paths and roads. Respondents also noted that minimum 5-10-foot-wide sidewalks or a shared-use paths were the preferred type of pedestrian facility, in lieu of narrow sidewalks or using roadway shoulders as walking areas.

Overall opinions indicated that survey participants would like to use walking as a mode choice more often than they already do. Further, feedback indicated that most respondents would walk more, given a higher degree of existing sidewalks and trails near their residences that could connect them to destinations. Information regarding the public outreach and engagement for the public survey, along with a detailed summary of results, is located in Appendix E.

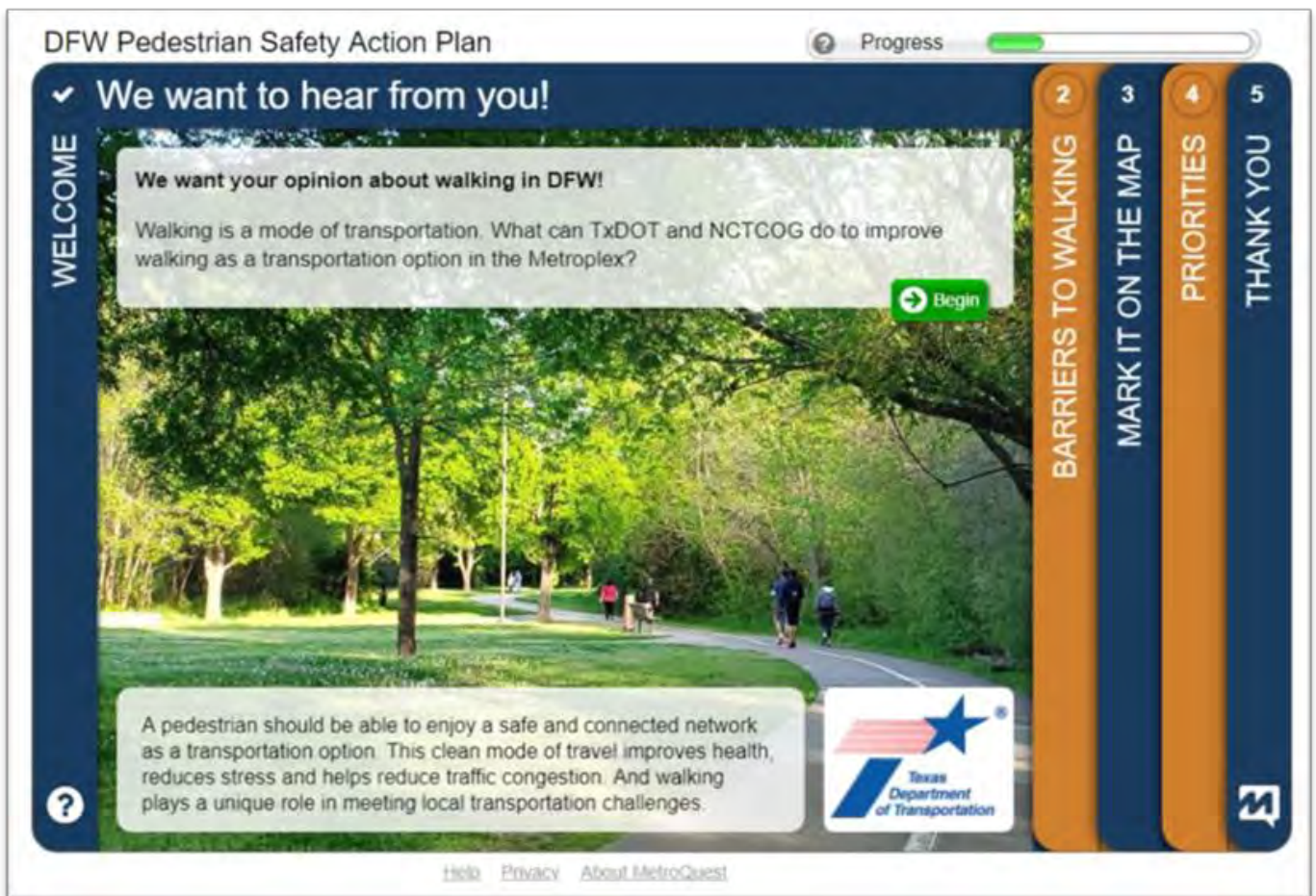


Figure 5: The introductory slide of the 2019 PSAP Public Opinion Survey.

8. Identification of the Primary Pedestrian Safety Corridors and Secondary Pedestrian Safety Corridors

A primary goal of this Pedestrian Safety Action Plan is to reduce the total number pedestrian crashes and fatalities within the region. To achieve this outcome, projects and programs must be strategically selected to direct limited funding to those areas offering the greatest safety benefits in return. Imperative to this strategy is the identification of the corridors in the region with the highest crash history, where existing conditions are most in need of safety countermeasures. To this aim, Primary Pedestrian Safety Corridor (PPSC) and Secondary Pedestrian Safety Corridor (SPSC) datasets were identified, with the PPSC representing corridors within the highest range of crash density and the SPSC representing the second-highest range. Jurisdictions will be able to reference each of the corridor sets when determining projects and programs to implement. The final step in the corridor identification process, outlined below, involved soliciting city and TxDOT staff feedback to ensure the datasets represented the most appropriate locations requiring further study and implementation of safety countermeasures.

The corridor datasets were identified using a four-step process²³:

1) Pedestrian Crash Density Analysis

Developed a regional grid map to identify high- and low- pedestrian crash density. The number of reported crashes was aggregated within each square-mile "cell."

2) Initial Corridor Selection

Crash patterns within the square mile cells with high (20+) and mid (10-19) ranges of reported crashes were used to identify the initial primary and secondary corridor datasets respectively.

3) Common Factors / Expansion

Identified the limits of the initial primary and secondary corridors based on common roadway topology and patterns of land use.

4) Regional Feedback / Refinement

Reviewed the corridor datasets with city and TxDOT staff to ensure all appropriate routes and beginning/end limits were included, removing those routes where safety improvements had already been implemented.

²³ Grid maps for the urbanized area and for individual counties can be found in Appendix A. All pedestrian safety corridor maps can be found in Appendix B.

8.1 Overview of the PPSC and SPSC Corridor Datasets

The following are general statistics regarding the identified pedestrian safety corridors:

- Total number of centerline miles in MPA: **38,229 mi.**
- Total centerline miles of identified safety corridors: **281 mi.**
- Safety corridors percentage of total MPA: **0.74%**
- Number of reported pedestrian crashes along the safety corridors: **30%** of all reported between 2014-2018
- Total number of safety corridors selected: **105**
 - **68 Primary Pedestrian Safety Corridors**
 - **37 Secondary Pedestrian Safety Corridors**
- Total number of counties with corridors: **4**
 - **Dallas, Denton, Collin, and Tarrant**
- Total number of cities with corridors: **10**
 - **Arlington, Carrollton, Dallas, Denton, Fort Worth, Garland, Lewisville, McKinney, Plano, and Richardson**

8.2 Refinement of Safety Corridors Through Outreach and Comparisons to Existing Corridor Datasets

The endpoints of the PPSC and SPSC were initially identified solely based on the density of reported crashes, using a 0.4-mile threshold between crash locations. To this end, all corridor termini were located at crash locations. As proven safety countermeasures would remain effective beyond locations where crashes had been reported, given the road segment had similar roadway characteristics and land use, these initial endpoints were extended upon by analyzing the street typology (number of travel lanes, direction of travel, posted speeds, sidewalks, Average Annual Daily Traffic, and intersections) and land use patterns (commercial, residential, mixed-use, etc.). This methodology is detailed in Appendix B.

After identifying the corridor endpoints based on density of crashes and analysis of common characteristics, PPSC and SPSC datasets were refined by soliciting feedback from partner agencies throughout the region. This step was taken to ensure routes with known safety issues were included and segments that had implemented safety upgrades since 2018 were removed. Existing corridor datasets from completed studies and programs were also used for guidance, including a regionwide pedestrian crash research project facilitated by TxDOT, and the City of Dallas' High Injury Network.

The North Texas Bicycle and Pedestrian Crash Analysis: Project 0-6983

A two-year, Texas Department of Transportation-sponsored research project entitled the North Texas Bicycle and Pedestrian Crash Analysis (Project 0-6983) concluded in August of 2020. The research project originated from a NCTCOG request in response to increasing numbers of pedestrian and bicycle fatalities throughout the region over the past decade. The TxDOT Research and Technology Implementation Division contracted with the Center for Transportation Infrastructure Systems at University of Texas at El Paso to complete the project, which included coding five years of North Central Texas crash data from TxDOT's Crash Records Information System Texas Peace Officer's Crash Reports (Form CR-3) to adhere to FHWA's Pedestrian and Bicycle Crash Analysis Tool methodology. A comprehensive list of countermeasures was also assembled, which included the effectiveness of each countermeasure for each evaluated crash type and crash attribute.

The study also produced a corridor dataset containing 59 high incidence pedestrian crash corridors, based on the analysis of 6,504 reported incidents (disabled vehicle-related crashes involving "unintentional pedestrians" were removed from the dataset), which was used for initial review in developing this Plan including more detailed review and discussions with local government staff to identify the PPSC and SPSC. The Research Project report is included as Appendix F.

City of Dallas Draft High Injury Network

The City of Dallas provided a draft high injury corridor network, developed as part of the City's 2019 adopted Vision Zero Council resolution. The draft network is part of Dallas' systemic analysis to identify city streets representing the highest risk for pedestrians, cyclists, and vehicles, comprised of contiguous roadways designated by the City of Dallas Thoroughfare Plan, as well as some on-system alignments that fall within TxDOT right-of-way. Dallas' draft network is comprised of pedestrian safety corridors with city-level significance and therefore contains more alignments within the City of Dallas as do the PSAP corridor datasets that focus on corridors with regional significance. Significance levels were considered when comparing the PSAP corridors with Dallas' draft corridors, to determine route locations and lengths.

8.3 Primary Pedestrian Safety Corridors

A total of 68 PPSC were derived from square-mile grid cells containing 20-or-more reported crashes. The number of crashes reported along the PPSC comprises 22 percent of all reported pedestrian crashes in the MPA from 2014-2018, whereas the total linear mileage of the PPSC equals only 0.45 percent of the MPA's total centerline roadway miles. In total, the corridors average nine crashes per linear mile of roadway. Figure 6 identifies the

PPSC across the region. Maps for each of the counties containing corridors (Dallas, Denton, and Tarrant) are located in Appendix B.

8.4 Secondary Pedestrian Safety Corridors

A total of 37 SPSC were derived from square-mile grid cells containing 10-19 reported crashes. The number of crashes reported along the SPSC comprises more than seven percent of all reported pedestrian crashes in the MPA from 2014-2018, whereas the total linear mileage of the SPSC equals only 0.28 percent of the MPA's total centerline roadway miles. In total, the corridors average five crashes per linear mile of roadway. Figure 7 identifies the region's SPSC. Maps for each of the counties containing corridors (Dallas, Denton, Collin, and Tarrant) are located in Appendix B.

8.5 Environmental Justice

Each of the 105 Primary and Secondary Pedestrian Safety Corridors were reviewed with NCTCOG's Environmental Justice Index (EJI)²⁴ dataset. This analysis was conducted to determine the corridors located within an "EJ Area", defined as Census block groups that are above the regional percentage for both low-income (below poverty) individuals and aggregate minority individuals. This analysis demonstrates the correlation between the selected Safety Corridors with a high crash history and underserved populations in the region.

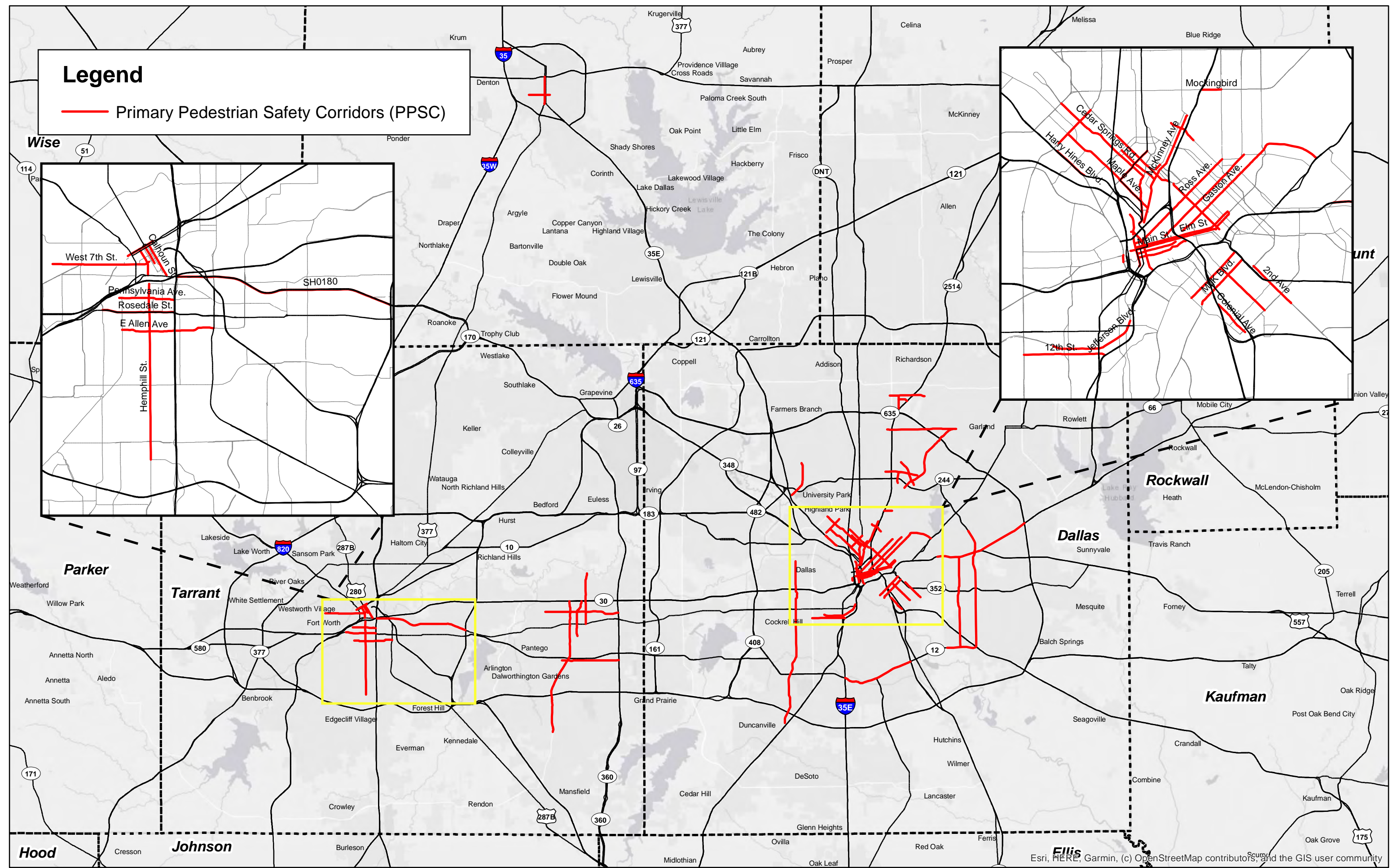
Of the PPSCs, 52 of the 68 corridors (77 percent) are within or partially within an EJ Area. Of the SPSCs, 33 of the 37 corridors (89 percent) are within or partially within an EJ Area. Taken as a whole, 85 of the 105 Safety Corridors (81 percent) identified by this Plan are located in areas that are above the regional percentage for both low-income individuals and minority individuals (i.e. EJ Area). Figure 8 identifies the PPSCs and SPSCs with the Environmental Justice Index. Tables 5 and 6 note the EJ Area designation of each Safety Corridor as Yes, Partial, or No. Maps for each of the counties containing corridors (Dallas, Denton, Collin, and Tarrant,) are located in Appendix B.

²⁴ The Environmental Justice Index is a method to identify environmental justice populations using demographic data at the Census block group level. The method was developed by the North Central Texas Council of Governments (NCTCOG). Executive Order 12898 defines environmental justice populations as low-income and/or minority groups. This rule states that federally funded agencies must identify and address disproportionately high and adverse impacts of their programs, policies, and activities on environmental justice populations.

Primary Pedestrian Safety Corridors (PPSC) Urbanized Area



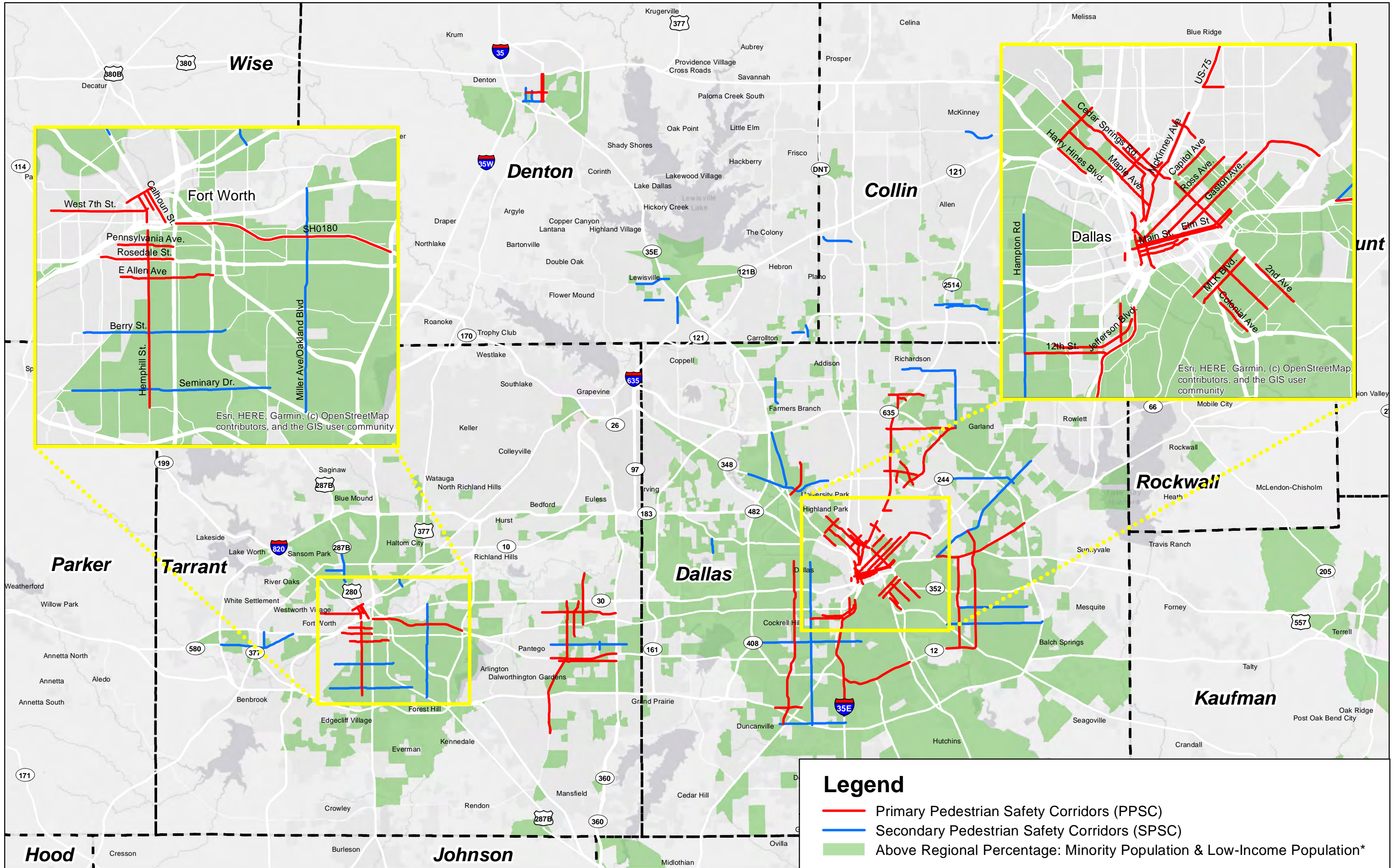
Figure 6: Primary Pedestrian Safety Corridors in the MPA.



Primary and Secondary Pedestrian Safety Corridors (PPSC/SPSC) Urbanized Area: Environmental Justice Index



Figure 8: Identified Primary and Secondary Pedestrian Safety Corridors in the MPA with EJI.



* = Boundaries are from NCTCOG's 2021 Environment Justice Index (EJI) based on the 2015-2019 ACS 5-year Estimates

Table 5: Primary Pedestrian Safety Corridors based on the average number of crashes per mile.

Primary Pedestrian Safety Corridors (PPSC)										
Name	County	City	Begin Point	End Point	On / Off-System	# of Lanes	Length (Miles)	Total Crashes	Avg # of Crashes Per Mile	EJ Area ²⁵
Main St.	Tarrant	Fort Worth	Weatherford (N)	9th St (S)	Off	4	0.45	20	44.19	No
Lamar St.	Dallas	Dallas	Victory (N)	Canton (S)	Off	4	1.16	43	37.22	Partial
Cole Ave.	Dallas	Dallas	Lemmon Ave. (S)	Blackburn (N)	Off	3	0.16	5	31.22	No
Riverfront Blvd.	Dallas	Dallas	Reunion Blvd. (S)	Commerce St. (N)	Off	8	0.17	5	28.62	No
Knox St. Henderson Ave.	Dallas	Dallas	Abbott (N)	Homer (S)	Off	4	0.73	20	27.34	No
MLK Blvd.	Dallas	Dallas	Junis St. (N)	Parnell St. (S)	Off	4	1.52	39	25.60	Yes
Houston St.	Dallas	Dallas	Houston Viaduct (S)	McKinney (N)	Off	4	0.76	18	23.82	Partial
Taylor St.	Tarrant	Fort Worth	Belknap (N)	Lancaster (S)	Off	2	0.73	15	20.60	No
Shady Brook Ln.	Dallas	Dallas	Dallas Park Lane (N)	Southwestern (S)	Off	2	0.70	14	20.13	Yes
Belknap St.	Tarrant	Fort Worth	Lexington St (W)	N Pecan (E)	Off	5	0.75	14	18.56	No
McKinney Ave	Dallas	Dallas	N Akard (S)	Atwater Alley (N)	Off	4	2.94	49	16.69	No
Jackson St.	Dallas	Dallas	Houston (W)	S. Cezar Chavez Blvd. (E)	Off	5	1.01	16	15.77	No
Young St.	Dallas	Dallas	S Houston St. (W)	US 75 (as Canton St) (E)	Off	4	1.29	20	15.54	No
Oak Lawn Ave.	Dallas	Dallas	Maple (W)	Blackburn (E)	Off	4	1.01	14	13.89	No
Elm St	Dallas	Dallas	Houston (W)	Carroll (E)	Off	5	2.54	35	13.80	Partial
SL 12 (Ledbetter Dr)	Dallas	Dallas	Julius Schepps Loop (E)	IH 35E Service Rd. (W)	On	6	4.42	59	13.34	Yes
Maple Ave.	Dallas	Dallas	Inwood Dr. (W)	McKinney Ave. (SE)	Off	4	2.76	36	13.06	Yes
Inwood Rd.	Dallas	Dallas	Redfield (SW)	Lemmon (NE)	Off	6	1.16	15	12.94	Yes
Main St.	Dallas	Dallas	US 77 (SW)	S Carroll Ave. (NE)	Off	4	2.75	35	12.73	Partial
S Malcolm X Blvd.	Dallas	Dallas	Elsie Faye Heggins St. (SE)	Al Lipscomb Way (NW)	Off	4	1.53	19	12.40	Yes

²⁵ A Safety Corridor was considered “Yes” for EJ Area if at least 50% of the corridor was located in Census block groups above the regional percentage for low-income and minority populations. A Safety Corridor was considered “Partial” for EJ Area if up to 50% of the corridor was located in Census block groups above the regional percentage for low-income and minority populations. A Safety Corridor was considered “No” for EJ Area if none of the corridor was located in Census block groups above the regional percentage for low-income and minority populations. See Figure 8.

Primary Pedestrian Safety Corridors (PPSC)

Name	County	City	Begin Point	End Point	On / Off-System	# of Lanes	Length (Miles)	Total Crashes	Avg # of Crashes Per Mile	EJ Area ²⁵
W Hickory St.	Denton	Denton	Ave C (W)	S Bell Ave. (E)	Off	2	1.30	16	12.33	Partial
Mockingbird	Dallas	Dallas	US 75/N Central Expy (W)	Greenville (E)	Off	6	0.49	6	12.25	No
Cedar Springs Rd.	Dallas	Dallas	N Mockingbird Lane (N)	Field St. (S)	Off	6	4.02	49	12.18	Partial
SH 180 (Lancaster Ave.)	Tarrant	Fort Worth	US 35 W (W)	US 820 (E)	Off	6	5.67	68	11.99	Yes
Forrest Ln.	Dallas	Dallas	Park Central Dr (W)	Plano Dr. (E)	Off	6	4.27	51	11.95	Yes
N Collins St. (FM 157)	Tarrant	Arlington	NE Green Oaks Blvd. (N)	E Division St. (S)	On	4	3.15	37	11.74	Yes
N Hall St.	Dallas	Dallas	Wycliff (W)	McKinney (E)	Off	2	1.11	13	11.67	No
Jefferson Blvd.	Dallas	Dallas	N Edgefield Ave (W)	Fleming Pl. (E)	Off	4	2.25	26	11.53	Yes
Park Ln.	Dallas	Dallas	Abrams Rd. (E)	Boedecker (W)	Off	4	2.00	23	11.51	Yes
Camp Wisdom Rd.	Dallas	Dallas	Chaucer Pl. (E)	1H 20 Frontage Rd. (W)	Off	6	1.65	18	10.91	Yes
Midpark Rd.	Dallas	Dallas	Esperanza (W)	N Central Expressway	Off	2	0.55	6	10.87	Yes
Pineland / Eastridge Dr.	Dallas	Dallas	Abrams Rd. (S)	Greenville Ave. (N)	Off	2	1.66	18	10.82	Yes
Ross Ave.	Dallas	Dallas	N Houston	Greenville Ave.	Off	4	3.07	32	10.44	Yes
SL 12 Buckner/Great Trinity Forest.	Dallas	Dallas	Ferguson Rd (N)	Stoneport (S)	On	8	9.17	93	10.14	Yes
N Washington Ave.	Dallas	Dallas	Lemmon Ave. (NW)	Benson St (SE)	Off	2	1.62	16	9.86	Partial
2nd Ave.	Dallas	Dallas	S Fitzhugh Ave. (N)	Dixon Ave. (S)	Off	4	1.32	13	9.86	Yes
Lemmon Ave.	Dallas	Dallas	Lomo Alto Dr. (NW)	US 75 (Couplet)	Off	6	1.76	17	9.69	No
US 310 (S.M. Wright Fwy)	Dallas	Dallas	Martin Luther King Jr. Blvd (N)	Pine St. (S)	On	4	0.93	9	9.68	Yes
Live Oak St.	Dallas	Dallas	N Harwood St. (W)	La Vista (E)	Off	4	2.84	27	9.51	Partial
Colonial Ave.	Dallas	Dallas	Julius Schepps Service NB (NW)	Herald (SE)	Off	2	0.97	9	9.29	Yes
Esperanza Rd.	Dallas	Dallas	W Spring Valley Rd. (N)	Central Expressway (S)	Off	4	0.80	7	8.72	Yes
Marsalis Ave.	Dallas	Dallas	E Colorado Blvd. (N)	E 12 th St. (S)	Off	4	0.95	8	8.42	Yes
E Allen Ave.	Tarrant	Fort Worth	8th Ave. (W)	S Riverside Dr. (E)	Off	2	2.38	19	7.98	Yes
Spring Valley Rd.	Dallas	Richardson	Peyton Dr. (W)	S Greenville Ave	Off	4	2.15	17	7.91	Yes
Houston St.	Dallas	Dallas	Continental Ave. (S)	All-Star Way (N)	Off	3	0.52	4	7.73	No

Primary Pedestrian Safety Corridors (PPSC)

Name	County	City	Begin Point	End Point	On / Off-System	# of Lanes	Length (Miles)	Total Crashes	Avg # of Crashes Per Mile	EJ Area ²⁵
Harry Hines Blvd.	Dallas	Dallas	800 ft. (NW) of Butler (W)	Market Center Blvd. (SE)	Off	6	0.92	7	7.58	Yes
Al Lipscomb Way	Dallas	Dallas	Lamar (S)	Robert B Cullum Blvd (N)	Off	4	1.59	12	7.55	Yes
Calhoun St.	Tarrant	Fort Worth	E Belknap (NW)	E Lancaster Ave. (S)	Off	2	0.93	7	7.51	No
12th St.	Dallas	Dallas	IH 35 (E)	S Hampton Rd. (W)	Off	2	2.04	15	7.37	Yes
Gaston Ave.	Dallas	Dallas	N Good Fair Park Ln (W)	E Grand Ave.	Off	4	4.36	32	7.33	Partial
Hemphill St.	Tarrant	Fort Worth	W Vickery Blvd. (N)	W Felix St. (S)	Off	4	4.52	30	6.63	Yes
Elm St.	Denton	Denton	Eagle Dr. (S)	E University Dr. (N)	On	3	1.68	11	6.56	Yes
Capitol Ave.	Dallas	Dallas	N Haskell Ave. (W)	N Henderson Ave (E)	Off	2	0.95	6	6.32	Yes
West 7th St.	Tarrant	Fort Worth	Dorothy (W)	Throckmorton (E)	Off	4	2.50	15	6.01	No
Locust St.	Denton	Denton	Eagle Dr. (S)	E University Dr. (N)	On	3	1.67	10	5.99	Yes
Rosedale St.	Tarrant	Fort Worth	South Fwy 35 W Frontage Rd. (E)	Forest Park Blvd. (W)	Off	4	1.85	11	5.94	Partial
IH 30	Dallas	Dallas	Ferguson and IH 30	IH 30 & US 635	On	7	5.94	35	5.89	Yes
FM 157 (Cooper St.)	Tarrant	Arlington	US 30 (N)	FM 157 & Hardisty Dr. (S)	On	4	8.43	49	5.82	Yes
Skillman St.	Dallas	Dallas	Southwestern Blvd (W)	Forest Lane (E)	Off	6	5.02	29	5.78	Yes
Jim Miller Rd.	Dallas	Dallas	IH 30 Frontage (S)	S. Great Trinity Forest Way	Off	6	5.60	31	5.53	Yes
IH 35E	Dallas	Dallas	E Kirnwood Dr. (S)	Comal St. (N)	On	8	7.68	39	5.08	Yes
Pioneer Parkway / TX-303	Tarrant	Arlington	S Fielder Rd.	TX 360 (E)	On	6	4.07	20	4.91	Yes
Arkansas Ln.	Tarrant	Arlington	S Davis Dr. (W)	S SH 360 Fwy (E)	Off	4	3.52	17	4.82	Yes
IH 75	Dallas	Dallas	IH 635 (N)	E Mockingbird Ln. (S)	On	8	6.18	29	4.69	Partial
Webb Chapel	Dallas	Dallas	Walnut Hill (N)	Denton (S)	Off	6	2.26	9	3.99	Yes
N Center St.	Tarrant	Arlington	IH 30 (N)	W Mitchell St. (S)	Off	3	2.25	8	3.55	Yes
W Randol Mill	Tarrant	Arlington	Oakwood Ln. (W)	S SH 360 Fwy (E)	Off	6	4.57	15	3.28	Yes
Pennsylvania Ave.	Tarrant	Fort Worth	9th St. (W)	IH 35 Frontage Rd. (E)	Off	4	1.42	4	2.82	Partial
S Westmoreland Rd.	Dallas	Dallas	Canada (N)	Wheatland (S)	Off	6	10.25	15	1.46	Yes

Table 6: Secondary Pedestrian Safety Corridors based on the average number of crashes per mile.

Secondary Pedestrian Safety Corridors (SPSC)										
Name	County	City	Begin Point	End Point	On / Off-System	# of Lanes	Length (Miles)	Total Crashes	Avg # of Crashes Per Mile	EJ Area ²⁶
Camp Wisdom Rd. (II)	Dallas	Dallas	Brierfield Dr.	Altaire Ave. (E)	Off	6	0.49	9	18.37	Yes
Archerwood	Collin	Plano	Parker/FM 2514 (N)	Park (S)	Off	2	0.40	6	15.00	No
Lackland	Tarrant	Fort Worth	IH 30 (N)	Camp Bowie West (S)	Off	4	0.96	10	10.39	Yes
25th St.	Tarrant	Fort Worth	Roosevelt Ave (W)	N Main St.	Off	2	1.12	11	9.83	Yes
Welch St.	Denton	Denton	W Oak St. (N)	Eagle Dr. (S)	Off	2	0.62	6	9.63	Yes
New York Ave.	Tarrant	Arlington	Reever St. (N)	Kent Dr. (S)	Off	4	0.32	3	9.38	Yes
S Josey Ln.	Dallas	Carrollton	Pearl/Walnut Plaza (N)	Dennis Ln. (S)	Off	6	1.60	15	9.35	Yes
N Beach St.	Tarrant	Fort Worth	Ermis St. (N)	US 121 (S)	Off	4	0.66	6	9.09	Yes
S SH 121	Denton	Lewisville	IH 35E (N)	Forestbrook (S)	Off	6	1.57	13	8.29	Yes
Berry St.	Tarrant	Fort Worth	University (W)	Old Mansfield Hwy (E)	Off	6	3.63	29	7.98	Yes
Frankford Rd.	Dallas	Dallas	Crestone Dr. (W)	Texas 190 Access Rd. (E)	Off	6	0.70	5	7.11	Yes
Legacy	Collin	Plano	Corporate Dr. (W)	Hedgcoxe Rd.	Off	6	1.83	12	6.55	No
North Main St (287B)	Tarrant	Fort Worth	Long (N)	14th St. (S)	Off	4	1.77	11	6.23	Yes
Bruton Rd.	Dallas	Dallas	N. Jim Miller Rd. (W)	Haney St. (E)	Off	6	4.21	26	6.18	Yes

²⁶ A Safety Corridor was considered “Yes” for EJ Area if at least 50% of the corridor was located in Census block groups above the regional percentage for low-income and minority populations. A Safety Corridor was considered “Partial” for EJ Area if up to 50% of the corridor was located in Census block groups above the regional percentage for low-income and minority populations. A Safety Corridor was considered “No” for EJ Area if none of the corridor was located in Census block groups above the regional percentage for low-income and minority populations. See Figure 8.

Secondary Pedestrian Safety Corridors (SPSC)

Name	County	City	Begin Point	End Point	On / Off-System	# of Lanes	Length (Miles)	Total Crashes	Avg # of Crashes Per Mile	EJ Area ²⁶
Ave C	Denton	Denton	Scripture (N)	Eagle Dr. (S)	Off	2	0.83	5	6.05	Yes
Park Row	Tarrant	Arlington	Fielder Rd. (W)	Timberlake Dr. (E)	Off	4	4.68	27	5.77	Yes
MacArthur Blvd.	Dallas	Irving	Haley St. (N)	W. Shady Grove Rd. (S)	Off	4	0.87	5	5.75	Yes
Marsh Ln.	Dallas	Dallas	Timberglenn (N)	Briargrove Ln. (S)	Off	6	0.70	4	5.74	Yes
Eagle Dr.	Denton	Denton	North Texas Blvd. (W)	S Bell (E)	Off	4	1.27	7	5.50	Partial
SL 12 / Northwest Hwy.	Dallas	Dallas	Luna (W)	Midway (East)	On	4	5.28	29	5.49	Yes
Ferguson Rd./Centerville Rd.	Dallas	Dallas	IH 30 (SW)	Broadway (NE)	Off	6	8.44	46	5.45	Yes
Illinois Ave.	Dallas	Dallas	Duncanville Rd. (W)	Corinth St. (E)	Off	6	6.11	30	4.91	Yes
N Plano Rd.	Dallas	Richardson	E Cityline Dr. (N)	Forest Ln. (S)	Off	6	3.55	17	4.80	Yes
Camp Bowie	Tarrant	Fort Worth	820 (W)	IH 30 (E)	Off	5	4.65	20	4.30	Yes
Hampton Rd.	Dallas	Dallas	Canada Dr. (N)	IH 20 (S)	Off	6	10.03	43	4.29	Yes
Miller Ave./Oakland Blvd.	Tarrant	Fort Worth	Bridge St. (W)	Mansfield Hwy (S)	Off	4	5.74	24	4.18	Yes
E Wheatland Rd.	Dallas	Dallas	S. Cockrell Hill Rd. (W)	Pawnee St. (E)	Off	6	4.08	17	4.17	Yes
15th St.	Collin	Plano	Columbia (W)	P Ave. (E)	Off	4	1.71	7	4.08	Yes
Harry Hines Blvd.	Dallas	Dallas	12 W Northwest Hwy (S)	N Stemmons Fwy (NW)	On	6	3.51	14	3.99	Yes
Seminary Dr.	Tarrant	Fort Worth	Surrey (W)	Ollie (E)	Off	6	5.08	20	3.94	Yes
FM 1171 / Main St.	Denton	Lewisville	Garden Ridge Blvd. (W)	S Cowan Ave. (E)	Off	6	2.08	8	3.85	Yes
Northwest Hwy	Dallas	Dallas/ Garland	Classen (W)	Arrowhead Dr. (E)	Off	6	4.57	16	3.50	Yes
14th St.	Collin	Plano	US 75 (W)	Shiloh (E)	Off	4	2.63	8	3.05	Yes

Secondary Pedestrian Safety Corridors (SPSC)

Name	County	City	Begin Point	End Point	On / Off-System	# of Lanes	Length (Miles)	Total Crashes	Avg # of Crashes Per Mile	EJ Area ²⁶
Arapaho Rd.	Dallas	Richardson	Woodland Way (W)	N Plano Rd.	Off	6	3.12	9	2.88	No
Eldorado	Collin	McKinney	Lake Forest (W)	Cheverny (E)	Off	4	1.77	5	2.82	No
Lake June	Dallas	Dallas	C F Hawn Service Rd. WB (US 175) (W)	IH 635 (E)	Off	6	5.89	16	2.72	Yes
Bellaire St.	Denton	Lewisville	Old Orchard (W)	Timberbrook (E)	Off	4	1.17	3	2.57	Partial

9. Recommended Policies and Next Steps

Policy recommendations were identified based on the evidence collected through regional crash data analysis and guidance from the Pedestrian Safety Action Plan Committee. The recommendations also align with NCTCOG’s mission statement in ensuring that the individual and collective power of local governments is utilized in supporting necessary steps to improve pedestrian safety.

Existing Mobility 2045 Policies

MTP Policy Reference #	Active Transportation
BP3-001	Support the planning and design of a multimodal transportation network with seamless interconnected active transportation facilities that promotes walking and bicycling as equals with other transportation modes.
BP3-002	Implement pedestrian and bicycle facilities that meet accessibility requirements and provide safe, convenient, and interconnected transportation for people of all ages and abilities.
BP3-003	Support programs and activities that promote pedestrian and bicycle safety, health, and education.

Recommended Policies:

1. The North Central Council of Governments will work collaboratively with local governments throughout the metropolitan planning area and the Texas Department of Transportation to implement the goals and policies as outlined within the Pedestrian Safety Action Plan.
2. Local governments are encouraged to integrate proven safety countermeasures as part of all future roadway projects, including engineering improvements, educational programs, and enforcement of pedestrian-related legislation.
3. Priority will be given to implement safety countermeasures and other actions along the identified Pedestrian Safety Corridors.
4. Multimodal Level of Service (MMLoS) analysis will be used by NCTCOG, local agencies and TxDOT as part of the roadway design process. This analysis will include the evaluation of the levels of service (LOS) for each mode, to balance the LOS needs of auto drivers, transit riders, bicycle riders, and pedestrians holistically, with priority given to the safety and comfort of the most vulnerable road users.²⁷
5. Develop educational programs and resources to be made available for communities, schools, and driver’s education programs, which emphasize responsible roadway sharing for all modes.

²⁷National Cooperative Highway Research Program (NCHRP) Report 616: Multimodal Level of Service Analysis for Urban Streets (2008): https://nacto.org/docs/usdg/nchrp_rpt_616_dowling.pdf

6. Provide law enforcement personnel with educational information regarding current laws, rights, and responsibilities of the most vulnerable roadway users, and training to enforce said laws will be encouraged.
7. Enforcement of state legislation that lowers speed limits in urban districts, obligates motorists to stop and yield the right-of-way to pedestrians crossing the street, and clarifies the enforcement and increases penalties for the use of a wireless communication device while operating a motor vehicle will be encouraged.



10. Action Items

Each recommended action is associated with one of the three Es: Engineering, Education/Encouragement/Evaluation (combined), and Enforcement. Whereas engineering action steps involve improvements to existing or new infrastructure, non-engineering actions take the form of educational programs or outreach campaigns, encouragement through policy support, evaluation of implemented actions, and the enforcement of traffic laws.

10.1 Monitoring and Outcomes

These action items will be assessed on an annual basis. NCTCOG will develop a progress report card and provide it to the Pedestrian Safety Action Plan Committee and various NCTCOG technical committees. In addition to providing an annual update on the progress of the Action Items, the report will include statistics focused on outcomes such as total pedestrian crashes and fatalities in the region during the prior year. The reported outcomes will track the progress toward reaching the stated goal of the Plan to eliminate all serious and fatal pedestrian crashes in the region by 2050.

	Recommended Action	Action Item Type	Implementors	Timeline (from June 2021 RTC endorsement)	Recommended Policy	Costs (H/M/L)
1	Facilitate collaboration with TxDOT, local governments and regional organizations* in support of projects and programs that improve regional pedestrian safety.	Engineering	TxDOT, local governments, regional organizations and NCTCOG	Continuous	1, 2, 3, 5	Low
2	Conduct Roadway Safety Audits (RSA) for the pedestrian safety corridors.	Engineering	TxDOT, local governments and NCTCOG	2-3 years (2023-2024)	2, 3, 4	Medium
3	Implement safety improvements based on RSA findings for pedestrian safety corridors.	Engineering	TxDOT, local governments and NCTCOG	10 years (2031)	2, 3, 4	Medium-High
4	Develop performance measures to evaluate the effectiveness of implemented countermeasures based on measurable data.	Education/Evaluation/Encouragement	TxDOT, local governments and NCTCOG	2-5 years (short-term) and 10 years (long-term) (2023-2026; 2031)	2, 3, 4	Low

	Recommended Action	Engineering, Education, Enforcement, Encouragement, Evaluation	Implementors	Timeline	Recommended Policy	Costs (H/M/L)
6	Coordinate and/or support educational programs and marketing campaigns aimed at informing the public, including drivers and pedestrians, of their rights and responsibilities when traveling on the roadway. Education campaigns, including Lookout Texans, should be cognizant of their intended audience, based on the demographics historically involved in reported pedestrian crashes.	Education/Evaluation/Encouragement	City offices for community planning, schools, and educational institutions, and NCTCOG	1-2 years; Continuous (Education) (2022-2023)	5, 6	Medium
7	Coordinate and/or support the development and implementation of policies, programs and marketing campaigns aimed at improving safety and higher levels of physical activity for students.	Education/Evaluation/Encouragement	NCTCOG, local governments, independent school districts (ISDs) and other educational institutions	1-2 years; Continuous (Education) (2022-2023)	5	Low
8	Complete updates to the Regional Pedestrian Safety Action Plan at least every five years to integrate as part of the Metropolitan Transportation Plan, using updated data and regional analysis.	Education/Evaluation/Encouragement	NCTCOG	5 years (2026)	1	Low
9	Conduct annual monitoring of pedestrian safety trends and reported crashes	Education/Evaluation/Encouragement	NCTCOG, TxDOT, local governments	1 year; Continuous (2022)	1	Low
10	Support a Regional Transportation Council (RTC) legislative program that addresses lower traffic speeds, yielding to pedestrians, and the use of wireless communication devices while operating a motor vehicle.	Enforcement	Local governments, Police/enforcement agencies, and NCTCOG	2-3 years (2023-2024)	7	Low

*Regional organizations refer to regional safety coalitions, active transportation advocacy groups, and other stakeholders whose work promotes or involves active transportation.

11. Conclusion

The policies and suggested action items outlined in the Pedestrian Safety Action Plan serve as the initial steps to reduce the total number of regionwide pedestrian crashes; and, to comprehensively improve the level of safety and comfort across the MPA's pedestrian network. However, in order to improve safety and reduce the number of crashes and fatalities across the region it is essential for cities and counties to take action at the local level. While NCTCOG is the primary implementing agency for this Plan at the regional level, NCTCOG encourages the use of the PSAP as a guide to develop local pedestrian safety action plans, inclusive of locally significant safety corridors/networks, policies, action steps and measurable safety performance measures. There may be state and federal funding available for various projects in the future, however local capital investment programs and county bond programs should be the primary mechanism for allocating funds and systematically improving areas over time.

A multi-government effort must be made for the region to achieve the level of educational programming and resource dissemination outlined in the PSAP's recommended policies and action items. Cities must work in tandem with their law enforcement partners to ensure all roadway users are aware of their responsibilities, across all modes, and that enforcement is effective and robust.

Efforts must be made to identify areas experiencing pedestrian safety issues, and engineering designs must be thoughtfully planned and implemented to improve upon existing infrastructure. Practitioners must work collaboratively to ensure best practices in roadway design, traffic engineering, city planning, and project selection are shared across the region. In these efforts, safety, and level of comfort for the roadway's most vulnerable users is of the utmost importance.

As the development of schools, retail, special interests, and other essential urban components expand to meet the region's increasing population, careful design of our transportation system is needed. As a targeted approach in mitigating the MPA's most dangerous areas for pedestrians, a grouping of the safety corridors identified in the PSAP will be selected for extensive road safety audits, based on criteria that examines the number of crashes along the route and the proximity to schools and transit. As the region's transportation professionals evaluate current practices and develop ways to improve, NCTCOG will be available to assist.