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APPENDIX A

TECHNICAL MEMO 1: OUTREACH & ENGAGEMENT SUMMARY

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Master Transportation Plan

Outreach and Engagement Summary

February 23, 2026

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1 Introduction

This Summary Report presents the results of community and stakeholder engagement conducted throughout the development of the Fort Worth Master Transportation Plan. Engagement activities occurred across multiple phases of the planning process and included citywide Open House events, district-level Open Houses, coordination with the Comprehensive Plan process, transportation fairs, stakeholder meetings, and a series of one-to-one briefings with agency partners, community leaders, and private sector stakeholders.

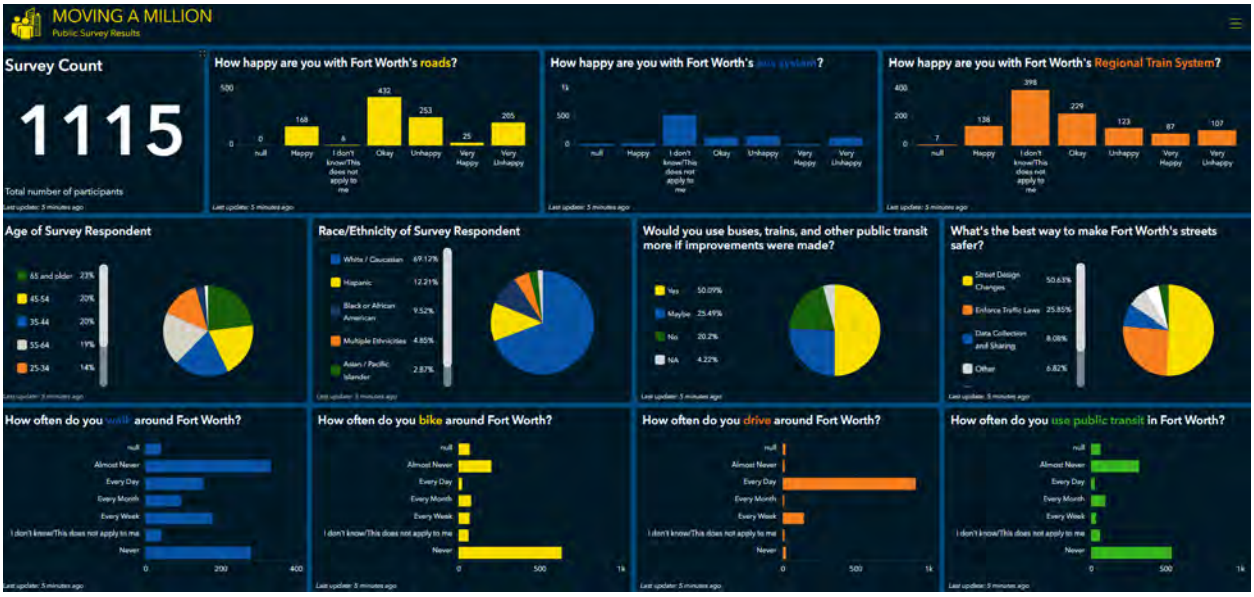
The Master Transportation Plan aims to unify Fort Worth's transportation-related plans into a single, coordinated vision. The result is a capital-focused program aligned with city policies and funding realities, grounded in the needs and priorities of the Fort Worth community. As the transportation element of Reimagine Fort Worth, the city's comprehensive plan, the plan establishes a clear framework for transportation vision, goals, policies, and project priorities, while incorporating the Vision Zero Safety Action Plan.

Throughout the planning process, feedback was collected through in-person events, online tools, targeted outreach, and direct stakeholder coordination. Early engagement helped shape the plan's goals, objectives, and Big Ideas, while subsequent phases refined project priorities, implementation strategies, and investment direction. This report summarizes the feedback received across all engagement efforts and documents how community input informed the final plan.

2 Survey

The Moving a Million survey was an online questionnaire circulated broadly at the outset of the planning process through multiple communication channels, including the project website, email lists, social media, and partner networks. As one of the first major engagement activities, the survey asked core, foundational questions intended to help shape the direction of the Master Transportation Plan—focusing on travel behavior, satisfaction with existing transportation systems, and priorities for improving safety and mobility. The results provide an early snapshot of community perspectives and establish a baseline to guide subsequent phases of analysis and decision-making. A summary of the survey findings is shown in **Figure 1**.

Figure 1 Moving A Million Survey Dashboard



3 Summary of Open Houses

3.1 Open House Objectives

The Open Houses had four key objectives for the public:

- **Learn** about the transportation planning process and the City of Fort Worth's goals.
- **Help** the City of Fort Worth prioritize investment in our Big Ideas.
- **Share** your Big Ideas for improving transportation in Fort Worth.
- **Map** your most frequent trips and identify specific locations where improvements are needed to help the city plan and prioritize projects.

3.2 Advertising the Open Houses

The Open Houses were publicized using several methods to reach relevant stakeholders from the surrounding community, local businesses and elected officials.

Information about the M1M was made available in several ways, including through flyers, a news release, social media, and the project website in order to reach all sections of the community. This provided them with the opportunity and time to submit comments and feedback on the proposals.

This will include information on the following activities:

- Flyers
- News release

- Social media
- Website

3.3 Open House events

3.3.1 Open House Materials

3.3.1.1 Exhibit Boards

Both in person and online the Open House events displayed 17 exhibit boards (see Appendix D). The exhibit boards shared information on the City of Fort Worth's six goals, these are as follows:

- Safety First
- Fix It First
- Human Comfort
- Economic Competitiveness
- Technology
- Equity

Each goal had two boards, the first providing data to support the goal and the second shared the objectives of each goal along with Big Ideas, measurable actions that could be implemented in order to achieve these goals.

For each goal participants were asked to place sticker dots on the Big Ideas they wanted the city to prioritize and/or to write their own suggestions on sticky notes and attach them to the boards.

3.3.1.2 Project Overview Handout

The Project Overview Handout (see Appendix D) was made available in person and online. It explained the purpose of the Open House, how The City of Fort Worth is developing a variety of plans that work together, the Master Transportation Planning Process and the key themes from the previous open house as well as next steps.

3.3.1.3 Safety Action Plan High Injury Networks

In addition to the Safety-First Big Ideas boards, three boards containing safety countermeasure themes were displayed. For each district a map displaying the High Injury Networks (HIN) for that district was also shared so attendees could observe accident patterns in the Fort Worth area. Participants were asked to make comments on their preferences for the different types of countermeasures and if they agreed with the HIN as identified for their district. They were also asked to provide recommendations on other road network areas of concern. These boards can be found in Appendix D.

3.3.1.4 Mapping Activity

Online and in person participants were able to map their trips with the in-person mapping activity included at the Open Houses. These were as follows:

1. Map Your Trips: Participants were asked what routes they take most often when traveling around Fort Worth. They used the mapping tool to plot their journeys and could add comments to include trip purpose or define the general route taken.
2. Hotspot ID: Participants were asked to pinpoint where they experience the most congestion and/or have safety concerns across the Fort Worth transportation network. They could add comments to share specific concerns at each location.
3. Map the Gaps: Participants were asked to identify gaps in Fort Worth's transportation network by highlighting specific routes or areas where connections are lacking. They could pinpoint locations or draw routes and add comments to these.

3.3.1.5 Comment Cards, Traffic Safety Survey and Demographic Survey

At the in-person events participants had the option to fill out comment cards and a traffic safety survey. On the comment cards participants could write any additional comments they had on a comment card provided by the project team.

The traffic safety survey included questions about Fort Worth's biggest traffic safety problems, the most dangerous places in Fort Worth (for driving, biking, and walking), email, district, and zip code.

The demographic survey asked participants about their household income, age, race/ethnicity and zip code.

All of the above were collected at the end of each meeting.

3.3.1.6 Open House webpage

Throughout the duration of the Open Houses the Open House webpage was live to allow participants to view all of the materials at their own convenience.

3.3.1.7 Online Survey

A short online survey was available via the project's online Open House webpage. The survey collected demographic information, allowed respondents to provide their own Big Ideas and gave them the option to vote for their favored Big Ideas from the City of Fort Worth, under each goal. Participants could also provide any additional comments they had. A list of respondents who participated in the online survey can be found at Appendix A.

3.3.2 District 10 Follow Up Open House Materials

The follow up meeting in District 10 had its own set of boards to closely look at specific concerns within the district. There were six boards in total that covered the following:

- District 10 Network Performance
- District 10 Transportation Projects
- District 10 Key Corridor Improvements
- What we've heard in District 10
- What is Moving a Million
- Mobility Mantras

For the 'What we've heard in District 10 board, participants were asked to place a red or green dot next to comments from the first round of engagement regarding areas with the worst transportation issues. A red dot indicated that they disagreed, a green dot indicated they agreed. Participants were also asked 'What else should we know?' where they could share thoughts and add additional input to the board.

4 Overview of Open Houses

A total of 180 community members attended the Open Houses, and over 598 stickers were placed on the exhibit boards in support of the Big Ideas for each goal. 59 participants shared their own Big Ideas through comment cards or sticky notes. 11 traffic surveys were also collected, and 63 people completed the online survey.

4.1 Citywide Transportation Fair Events

Ten Open House events were held between October 19 and October 26, 2024. At each event, attendees were asked to sign in; these sign-in sheets can be found at Appendix A. A total of 112 people attended all the events. Out of these events, the most well-attended event was District 9, with 26 people, and the least well-attended events were District 4 and District 7, with 4 people.

Following the initial ten open houses a further meeting was held on December 12, 2024 for District 10. This was in response to feedback received in the first meeting in District 10 that there was not adequate notice for the meeting. This event had 68 attendees making it the most well attended. The results and analysis of this event are presented separately in Section 5 of this report due to the nature of the information presented.

Table 1 below summarizes the date, time, location, and number of attendees at each Open House.

Table 1 Citywide Transportation Fair events

Date	Time	Location	Address	District	Attendees
Saturday, October 19	10:30 a.m. - 1 p.m.	Basswood Elementary School	3100 Clay Mountain Trail, 76137	4	4
Monday, October 21	4:30 - 7 p.m.	Riverside Community Center	3700 E Belknap St, 76111	11	9
Monday, October 21	4:30 - 7 p.m.	Vivian J. Lincoln Branch Library	8829 McCart Ave, 76123	6	10
Tuesday, October 22	4:30 - 7 p.m.	Northside Community Center	1100 NW 18th St, 76164	2	5

Tuesday, October 22	4:30 - 7 p.m.	Southwest Community Center	6300 Welch Ave, 76133	9	26
Wednesday, October 23	4:30 - 7 p.m.	LVTRise Community Center	8201 Calmont Ave, 76116	3	TBC
Wednesday, October 23	5:30 - 7:30 p.m.	Truett Wilson Middle School	14250 Sendera Ranch Blvd, 76052	10	10
Thursday, October 24	4:30 - 7 p.m.	Eagle Mountain-Saginaw ISD Admin	1600 Mustang Rock Rd, 76179	7	4
Thursday, October 24	4:30 - 7 p.m.	Everman Civic Center	213 N Race St, 76140	8	TBC
Saturday, October 26	10:30 a.m. to 1 p.m.	Handley Meadowbrook Community Center	6201 Beaty St, 76112	5	23
Thursday, December 12	6:30 – 8:30pm	Truett Wilson Middle School	14250 Sendera Ranch Blvd, Haslet, 76052	10	68

4.2 Additional Projects

A series of additional projects pertaining to specific districts or areas were also showcased during the Open Houses. Projects included:

- Eastside Transportation Plan
- East Berry Street Plan
- Storm Water Management
- Safe Streets
  - McPherson-Summer Creek Safe Streets
  - Everman Safe Streets
- Reimagine Fort Worth
- Oakland Extension
- Long Avenue Safe Streets
- Butler Place + Connecting the Core

5 Participant Demographics

Participants were asked to complete an optional demographic survey as part of the online survey and during the Open House events. The results of these surveys have been combined and are displayed below.

5.1 Zip Codes of Participants

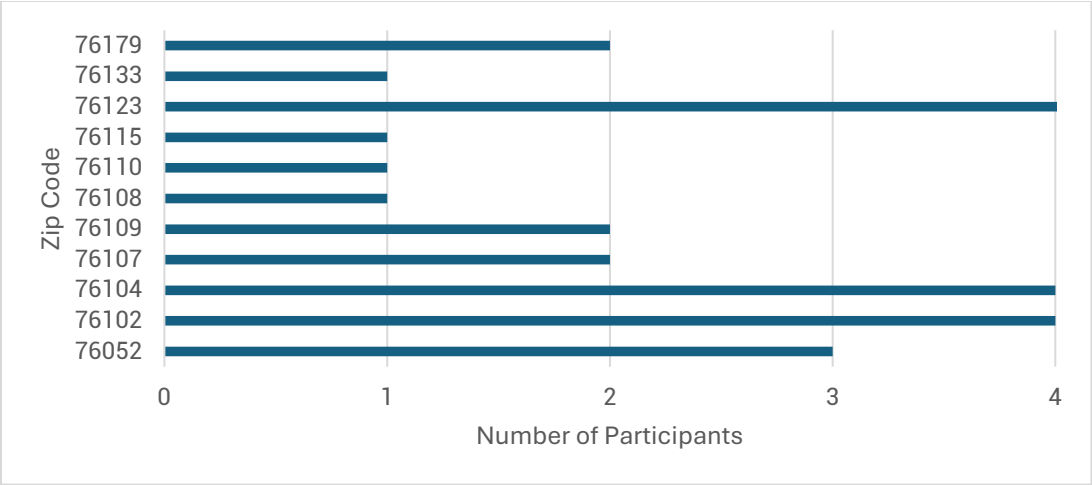


Figure 2 Zip Code of Participants

As shown in Figure 1, participants were asked to provide their home ZIP code. A total of 26 attendees provided a valid ZIP code and 76123, located in District 11, receiving the most entries.

5.2 Race/Ethnicity of Participants

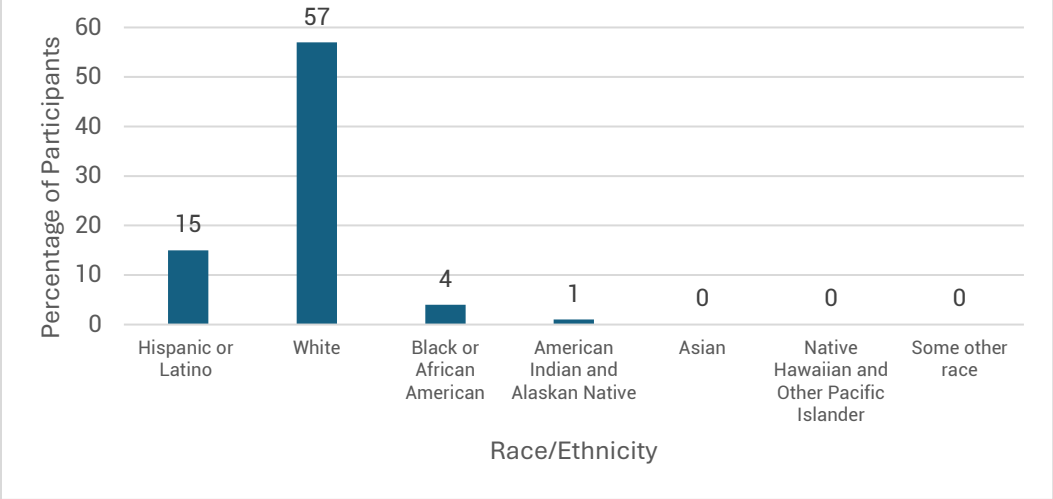


Figure 3 Race/Ethnicity of Participants

As shown in Figure 2, participants were asked to provide their race/ethnicity. A total of 77 attendees provided a response. Of the responses received, 74% of participants identified as non-Hispanic white alone, while only 25% identified as a minority race or ethnicity.

5.3 Household Income of Participants

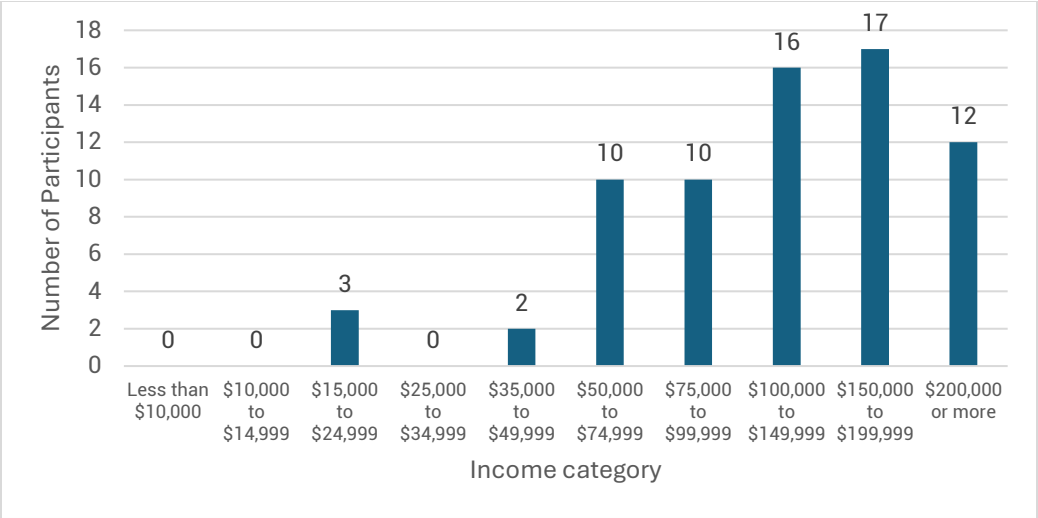


Figure 4 Household Income of Participants

As shown in Figure 3, participants were asked to provide their household income. A total of 70 participants provided a response. Of the responses received, 64% selected an income higher than $100,000, while only 7% selected an income of $49,999 or lower.

5.4 Age of Participants

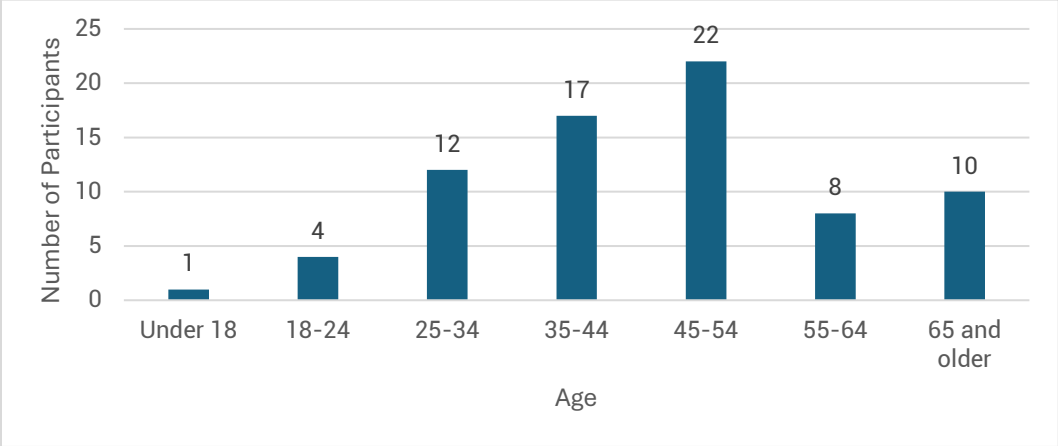


Figure 5 Age of Participants

As shown in Figure 4, participants were asked to provide their age. A total of 74 participants provided a response. Of the responses received, 29% selected the age range of 45-54, while 13% selected the age range of 65 and older.

6 Engagement Results and Analysis

6.1 M1M Goals – overall overview

Participants were asked to select the Big Ideas they felt most connected to or deemed most significant. Given the similarities between in-person engagement activities and the online survey, their results have been combined for analysis.

As each Big Idea was connected to one of the M1M's goals, the number of votes for each Big Idea under each goal has been combined to indicate which Goals received the most votes.



Figure 6 Overview of Big Idea Priorities by Goal

As shown in Figure 5, over 26% of participants favored 'Human Comfort' the most; specifically, high-capacity city and regional transit, placing an emphasis on improved integration of transportation modes and street connectivity for more efficient and convenient travel experiences.

Over 18% of participants favored 'Fix It First', making it the second most prioritized goal; specifically, connecting the grid. Improving the grid helps reduce the strain on existing roads by distributing traffic more evenly, which reduces wear and tear and helps maintain road conditions longer.

Only 13% of participants preferred 'Technology' as a key goal, making it the lowest priority. The top focus was synchronized traffic signals. Coordinating traffic signals across key corridors helps reduce delays, improve travel times, and increase overall efficiency for both vehicles and pedestrians.

6.2 M1M Goals – per goal overview

At the in-person Open Houses, 579 stickers were applied to the exhibit boards that explained the six goals Fort Worth presented, while 556 responses were collected through the online survey. Below is an analysis of each goal and the top priorities within each one.

6.2.1 Goal #1 Safety First

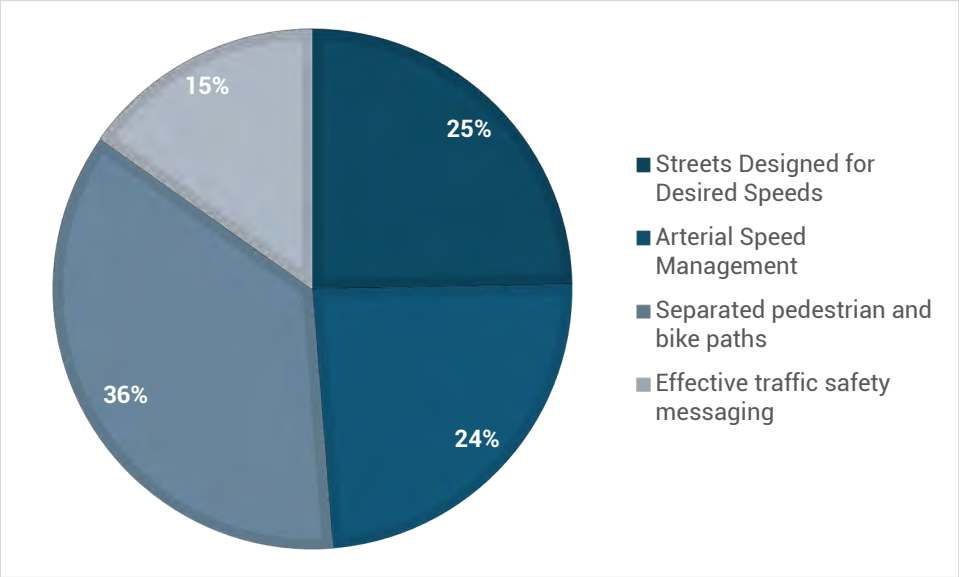


Figure 7 Total Responses for Goal #1 – Safety First

The 'Safety First' exhibit board highlighted the importance of implementing safety measures that reduce crashes and eliminate traffic fatalities and severe injuries across all transportation modes and trips.

Participants were asked to identify which safety ideas Fort Worth should prioritize. A total of 158 responses were received, both in-person and online, with 'separated pedestrian and bike paths' ranking the highest at 57 responses and 'effective traffic messaging' ranking the lowest at 24 responses.

Figure 7 below indicates that District 9 prioritized 'Safety First' the most during the in-person Open House. Districts with "0" did not receive any feedback from attendees for this exhibit board.

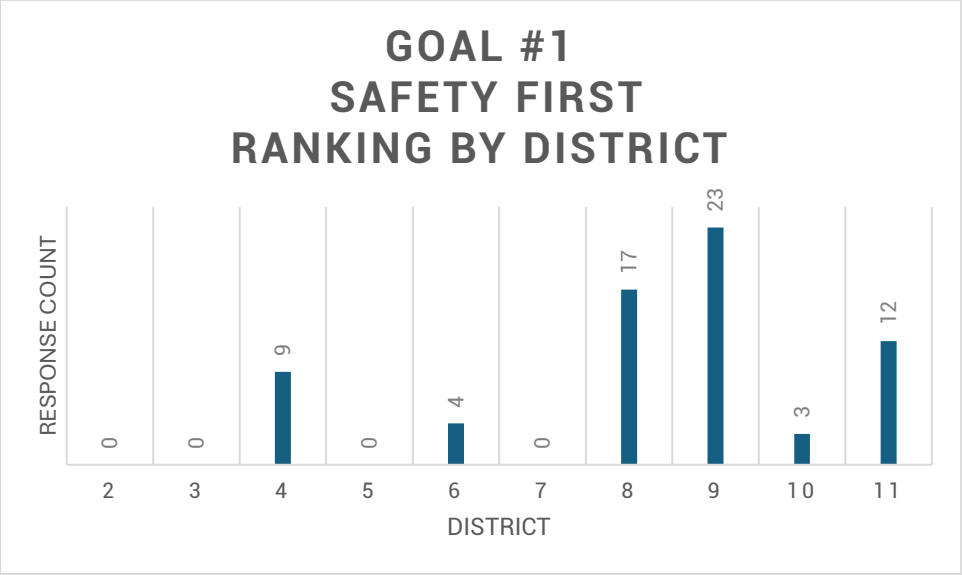


Figure 8 Ranking by District for Goal #1 – Safety First

6.2.2 Goal #2 Fix It First

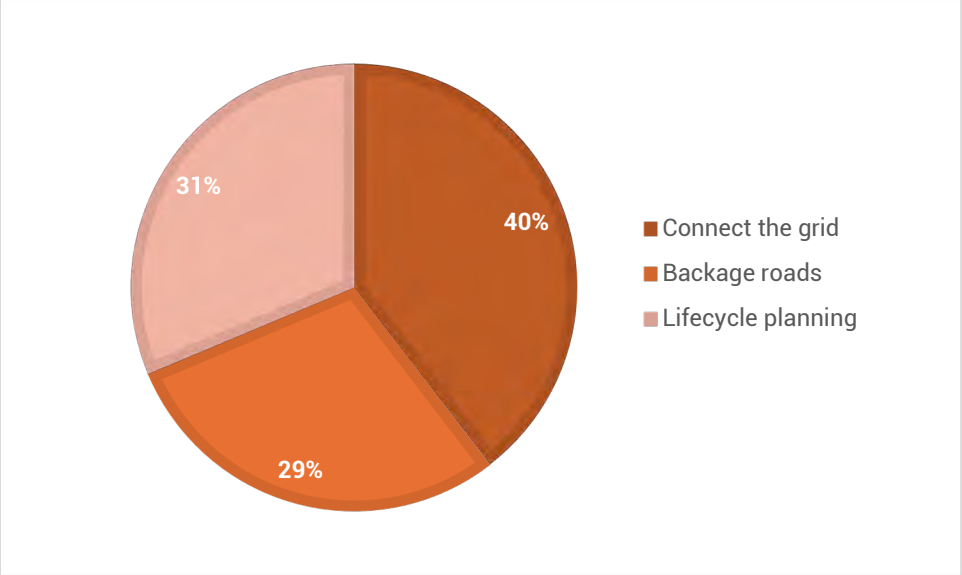


Figure 9 Total responses for Goal # 2 - Fix It First

The 'Fix It First' exhibit board highlighted the importance of upgrading and preserving existing systems while ensuring that new transportation assets are built with long-term maintenance, balancing immediate needs with future growth and service demands.

Participants were asked to identify what should be fixed first in Fort Worth. A total of 182 responses were received, both in-person and online, with 'connecting the grid' ranking the highest at 72 responses and 'backage roads' ranking the lowest at 53 responses.

Figure 9 below indicates that District 5 prioritized 'Fix It First' the most during the in-person Open House. Districts with "0" did not receive any feedback from attendees for this exhibit board.

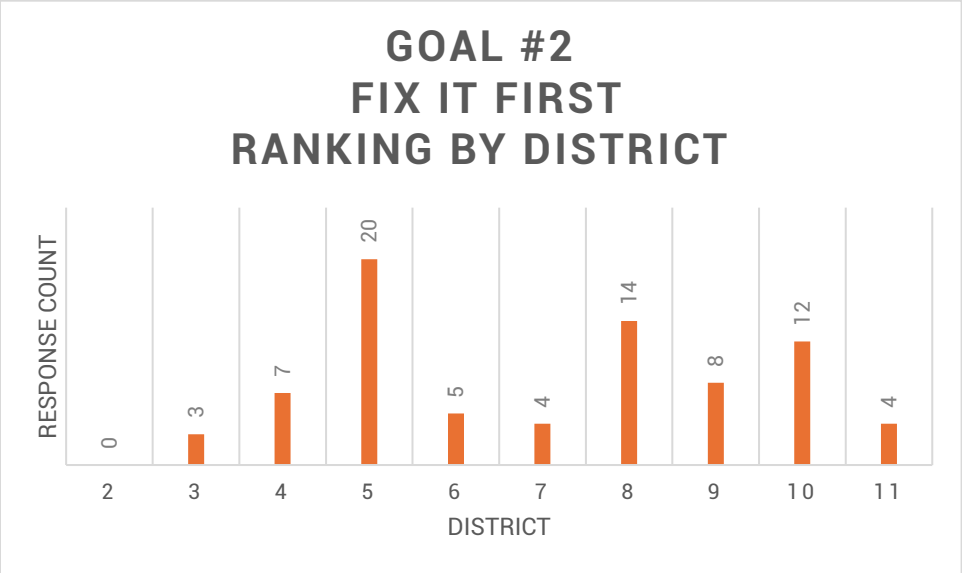


Figure 10 Ranking by District for Goal #2 – Fix It First

6.2.3 Goal #3 Human Comfort

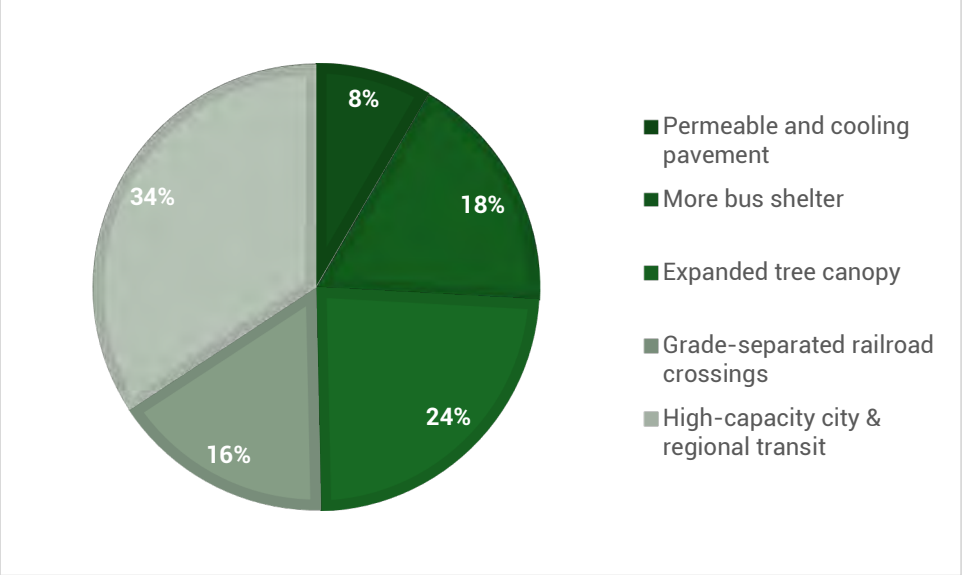


Figure 11 Total responses for Goal #3 - Human Comfort

The 'Human Comfort' exhibit board highlighted the importance of creating a convenient, connected, and considerate network for everyone and our environment. The Big Ideas focused

on easing congestion, keeping traffic flowing smoothly, enhancing alternatives like biking and transit, and improving connections throughout the city.

Participants were asked to identify their priorities for human comfort in Fort Worth. A total of 260 responses were received, both in-person and online, with 'high-capacity city & regional transit' ranking the highest at 49 responses and 'permeable and cooling pavement' ranking the lowest at 12 responses.

Figure 11 below indicates that District 5 prioritized 'Human Comfort' the most during the in-person Open House. Districts with "0" did not receive any feedback from attendees for this exhibit board.

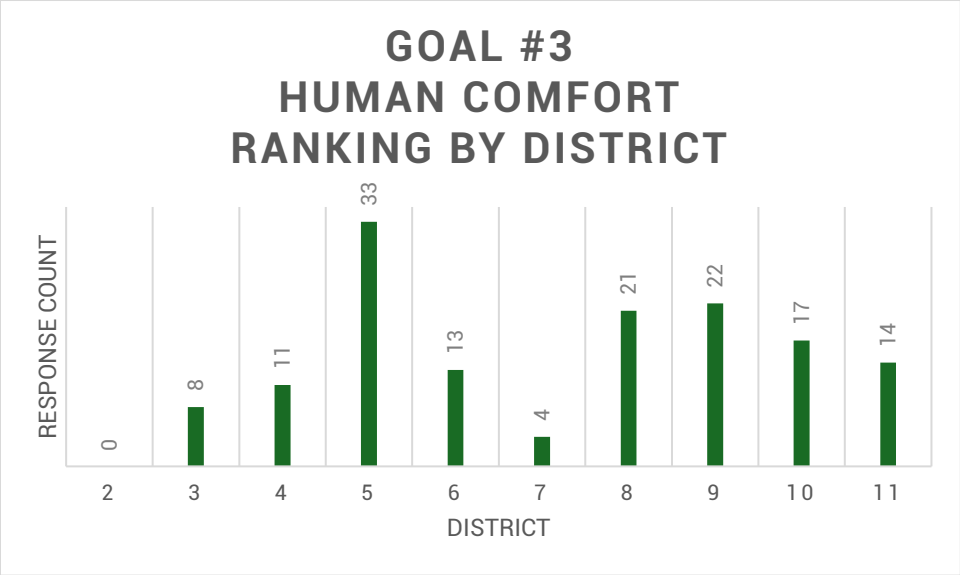


Figure 12 Ranking by District for Goal #3 - Human Comfort

6.2.4 Goal #4 Economic Competitiveness

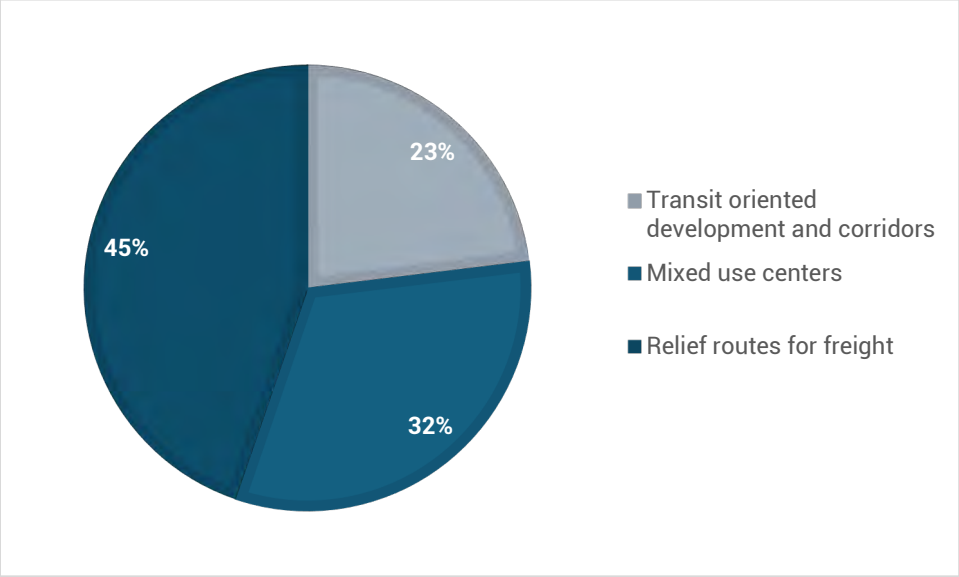


Figure 13 Total Responses for Goal #4 Economic Competitiveness

The 'Economic Competitiveness' exhibit board highlighted the importance of supporting businesses, improving regional and global connectivity, facilitating trade and investment, promoting labor mobility, and enhancing prosperity.

Participants were asked to identify their priorities for economic competitiveness in Fort Worth. A total of 143 responses were received, both in-person and online, with 'relief routes for freight' ranking the highest at 64 responses and 'transit-oriented development and corridors' ranking the lowest at 33 responses.

Figure 13 below indicates that District 10 prioritized 'Economic Competitiveness' the most during the in-person Open House. Districts with "0" did not receive any feedback from attendees for this exhibit board.

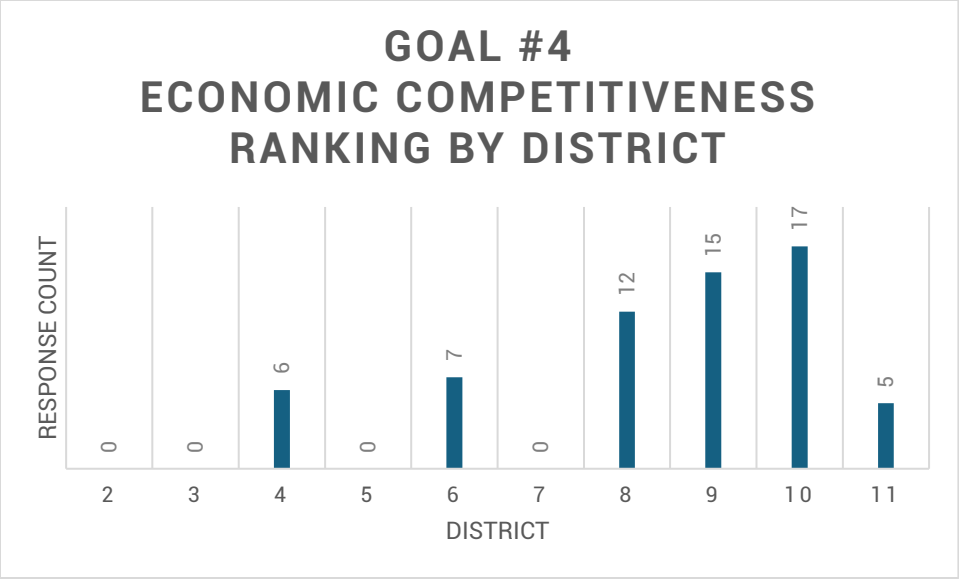


Figure 14 Ranking by District for Goal #4 – Economic Competitiveness

6.2.5 Goal #5 Technology

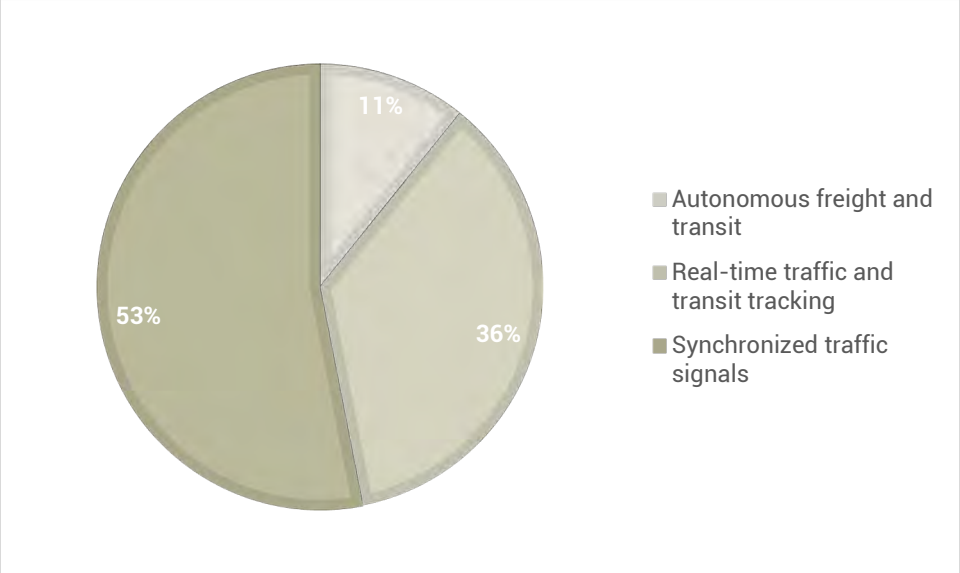


Figure 15 Total Responses for Goal #5 - Technology

The 'Technology' exhibit board highlighted the importance of embracing flexible and resilient technology to adapt to evolving transportation needs and challenges. A rapid population growth is putting pressure on existing infrastructure, creating a gap between what's currently in place and the technology needed to keep up with future transportation demands.

Participants were asked to identify their priorities for technology in Fort Worth. A total of 130 responses were received, both in-person and online, with 'synchronized traffic signals' ranking the highest at 69 responses and 'autonomous freight and transit' ranking the lowest at 14 responses.

Figure 15 below indicates that District 9 prioritized 'technology' the most during the in-person Open House. Districts with "0" did not receive any feedback from attendees for this exhibit board.

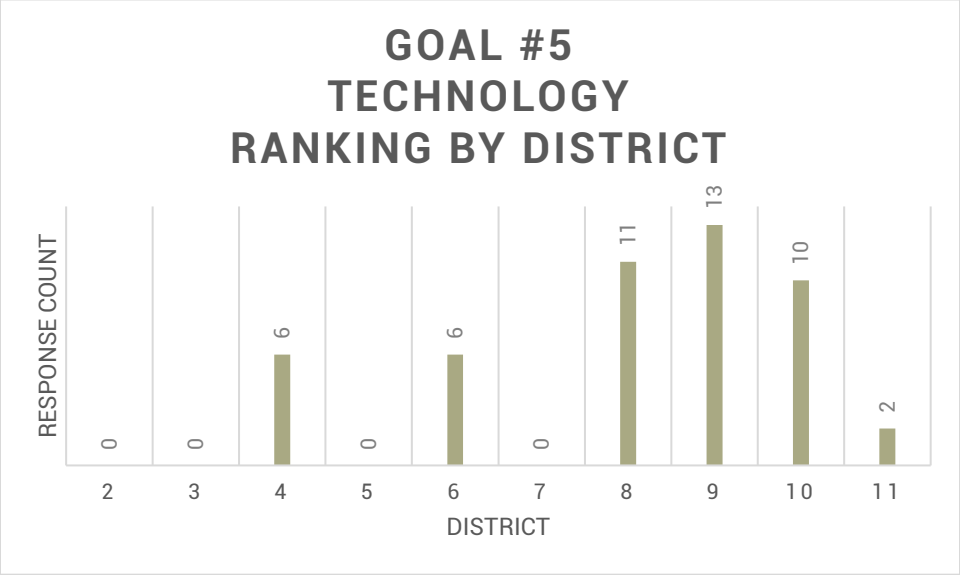


Figure 16 Ranking by District for Goal #5 - Technology

6.2.6 Goal #6 Equity

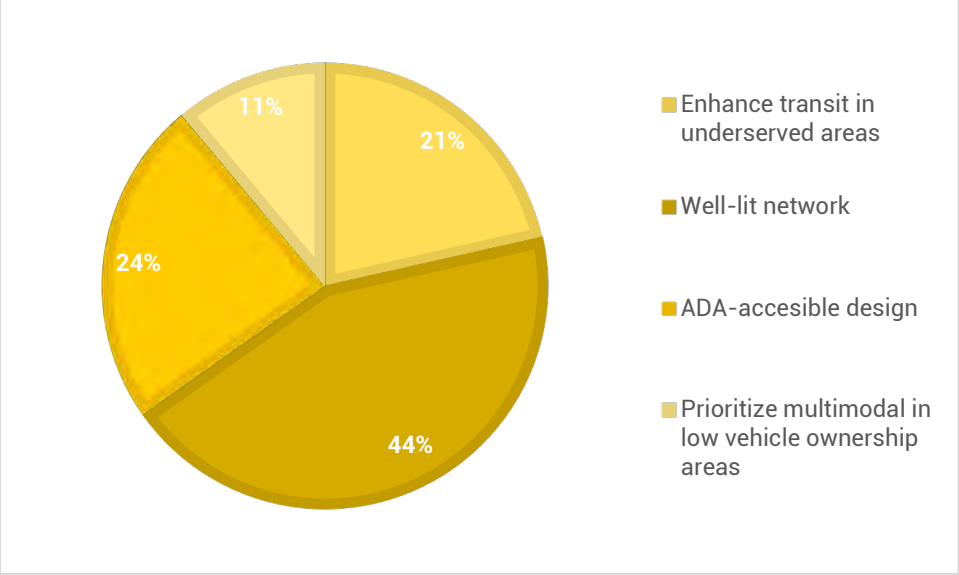


Figure 17 Total Responses for Goal #6 - Equity

The 'Equity' exhibit board highlighted the importance of ensuring accessible, affordable, and reliable transportation options for all ages and abilities. As the city continues to grow, Fort

Worth must develop a transportation system that prioritizes equity and ensures all residents can access essential services, employment, and economic opportunities.

Participants were asked to identify their priorities for equity in Fort Worth. A total of 135 responses were received, both in-person and online, with 'well-lit network' ranking the highest at 59 responses and 'prioritize multimodal in low vehicle ownership areas' ranking the lowest at 15 responses.

Figure 17 below indicates that District 9 prioritized 'equity' the most during the in-person Open House. Districts with "0" did not receive any feedback from attendees for this exhibit board.

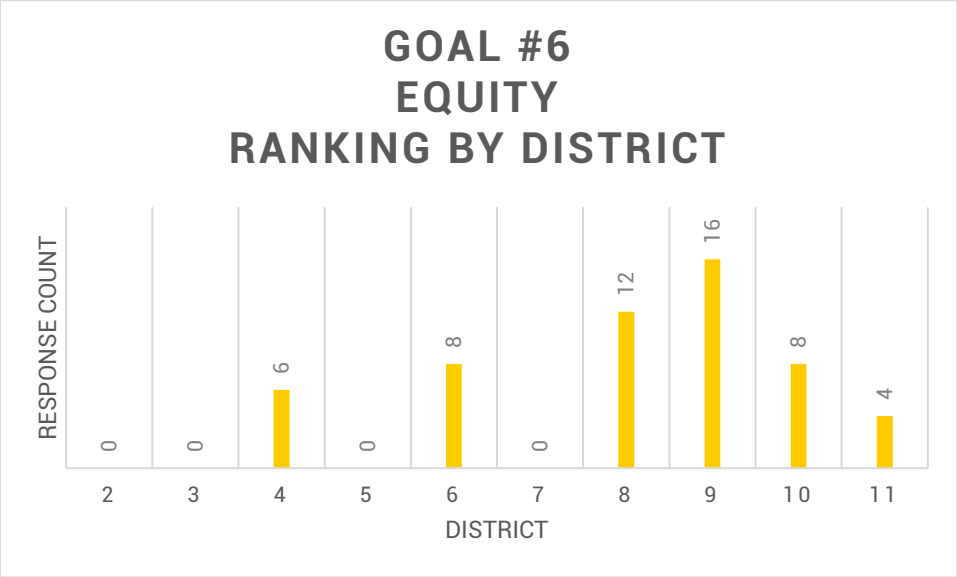


Figure 18 Ranking by District for Goal #6 - Equity

6.3 Share your Big Ideas

Participants were invited to share their own Big Ideas for enhancing mobility in Fort Worth. A total of 48 individuals provided responses to this online and 59 participants shared their own Big Ideas through comment cards or sticky notes in person. The following Big Ideas were proposed by multiple respondents:

- **Public transportation:**
  - Light rail system implementation
  - Urgent development of subway transit
  - Passenger rail connections
  - Improvement of existing bus system by adding additional stops in neighborhoods and improving routes.
  - Expand service of on-demand Trinity Metro service to locations such as South Hills
- **Sidewalks, biking, pedestrian access:**
  - Streets should have sidewalk traffic signalization

    - A Leading pedestrian interval lets pedestrians have a head start when crossing busy streets.
    - Bike and pedestrian paths between cities
    - Dedicated, protected bike lanes on main streets
    - Make all commercially owned property add sidewalks to their properties
- **Building more mixed-use developments:**
    - This would allow better connectivity in neighborhoods
    - Easier for people to access services without using cars

- **Reducing congestion**:
    - Widening roads and increasing the number of lanes would help improve congestion, especially in the following areas:
        - Avondale-Haslet and 287
        - 156 between Sendera Ranch and Bonds Ranch Road
        - Willow Springs to 287 South
        - Freeway 287
        - North Fort Worth
        - Avondale Haslet Road
        - Blue Mound Road
        - Bonds Ranch Road West of 287
    - Roundabouts were also suggested as a way of reducing congestion.
    - Timed traffic lights that facilitate smooth traffic flow
- **Pausing development:**
    - Development of new housing and facilities is outpacing the development of new roads and transportation systems. It was mentioned that pausing development would allow improvements to be made to address current problems and for future-proofing. Haslet was quoted by ten respondents as being a problem area.
    - Building roads before adding homes
    - Transportation impact fee for all developers
- **Railway overpasses or underpasses:**
    - These were suggested by six respondents specifically to address the congestion and delays caused by the railroad crossing at Avondale Haslet Rd near Highway 156.
    - Fewer railroad crossings to reduce back-up and congestion
    - Rail access for commodity transporting building materials, aggregate, waste, etc.
- **Economic development:**
    - Paid parking supports businesses
    - Increase urban housing to allow effective mass transit
    - Haslet area expressed concerns about lack of services and healthy food options
    - Build more shopping so travel across town is less frequent

Other Big Ideas that were suggested were smart traffic lights to help manage traffic flow, truck traffic law implementation, road repairs, and priority lanes for emergency service vehicles.

6.4 Do you have anything else to say or ask about transportation in Fort Worth? – online survey

Respondents to the online survey were asked if they had anything else to say about transportation in Fort Worth. 28 respondents answered this question. The key issues raised in answer to this question are as follows:

- Traffic Congestion: Respondents were frustrated with heavy traffic, especially in the Haslet area. Key causes included new housing developments and poorly timed traffic lights.
- Road Infrastructure: Respondents highlighted the need for road expansion and improvements. Specific concerns include the lack of bridges over train tracks, poor road conditions, and insufficient parking.
- Public Transportation: Lack of options was a common concern in Fort Worth especially for those who do not drive.
- Safety Concerns: Respondents raised concerns about pedestrian safety, cycling safety, and the impact of traffic on emergency response times.
- Community Involvement: Respondents wanted to know how the findings of the Open House will be communicated.

The proposed solutions to these issues were as follows:

- Development and Infrastructure Coordination: Ensuring that new developments are accompanied by adequate infrastructure improvements.
- Road Improvements: Building more roads, widening existing ones, and improving road conditions. Constructing bridges over train tracks was suggested to reduce traffic delays.
- Traffic Management: Solutions included improving traffic light timing, revised intersection design, and traffic flow management.
- Public Transportation: Expansion of bus services, introducing light rail or commuter rail options, and improving walking and cycling infrastructure.
- Law Enforcement: Increasing police presence to enforce traffic laws and improve safety.

6.5 Mapping Activities

6.5.1 Map Your Trips

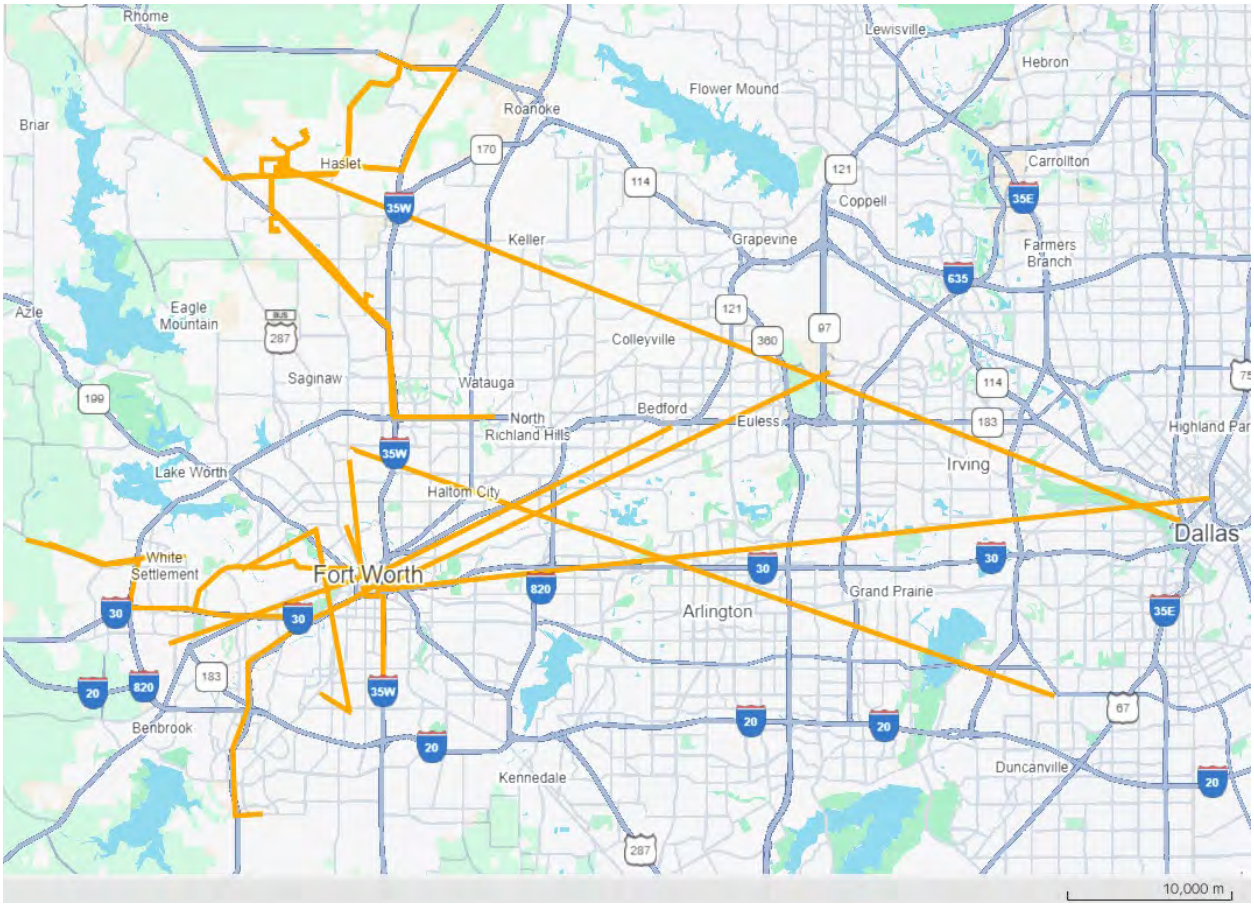


Figure 19: Map Your Trips results

34 trips were plotted online. Most trips plotted were connecting areas of Dallas and Fort Worth. Trips going between North and South of the City of Fort Worth were also popular responses. The most plotted trips were daily commutes or school drop offs. One comment highlighted the vast difference in time trips can take ranging from six to 45 minutes depending on the time of day.

6.5.2 Hotspot ID

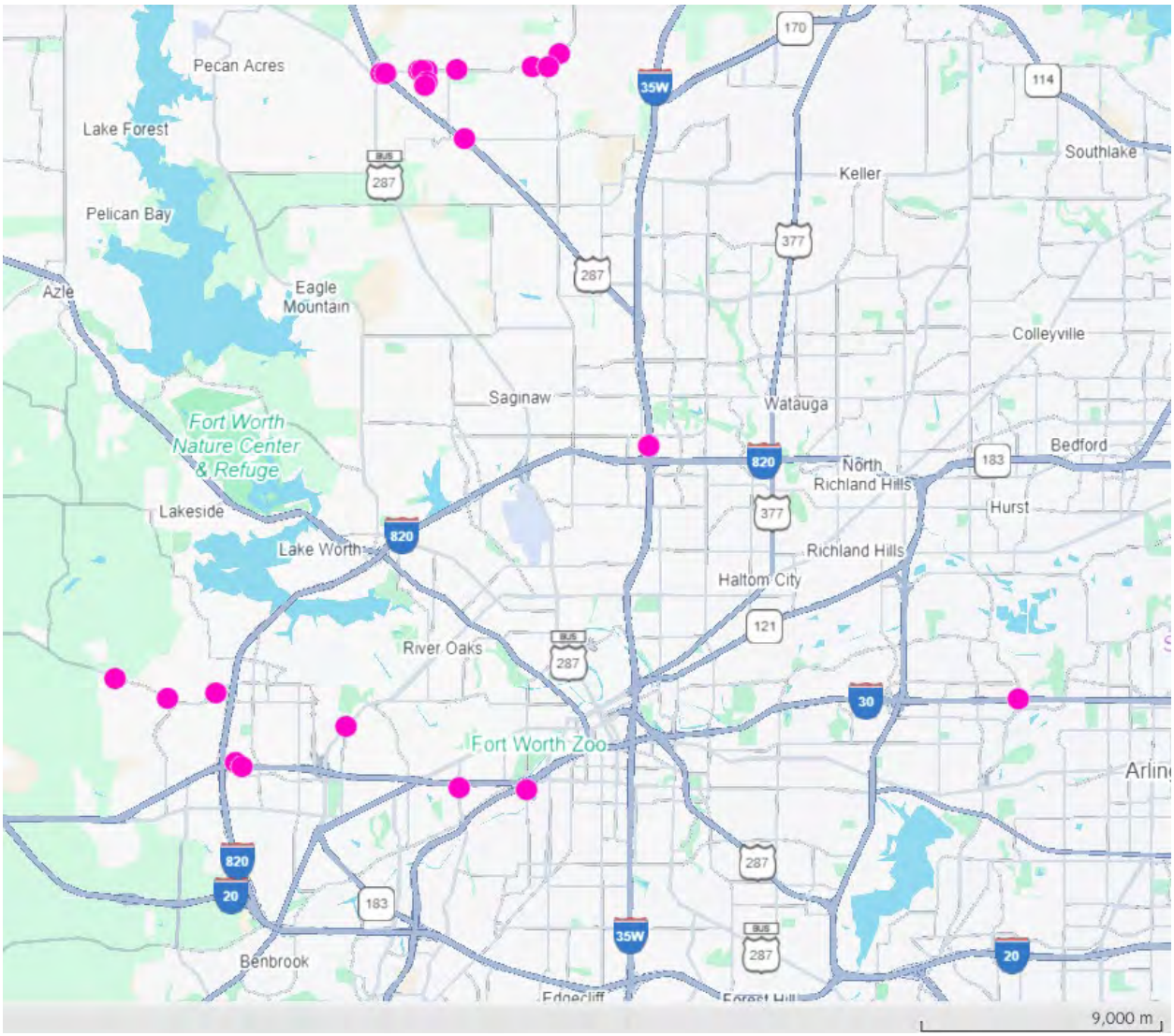


Figure 20: Hotspot ID results

28 Hotspots were identified from this activity. The most common comment was regarding congestion concerns in specific locations with the causes of congestion named as traffic lights and new housing. The second most common comment was regarding safety. Participants highlighted that safety in specific locations was a concern due to blind/unprotected left turns. There were also concerns about the impact of congestion on Emergency Services vehicles, especially as they often have to travel long distances to get to their destinations. Other concerns included areas of flooding, areas where trucks were more likely to get stuck due to road incline and poor road conditions e.g. potholes.

6.5.3 Map the Gaps

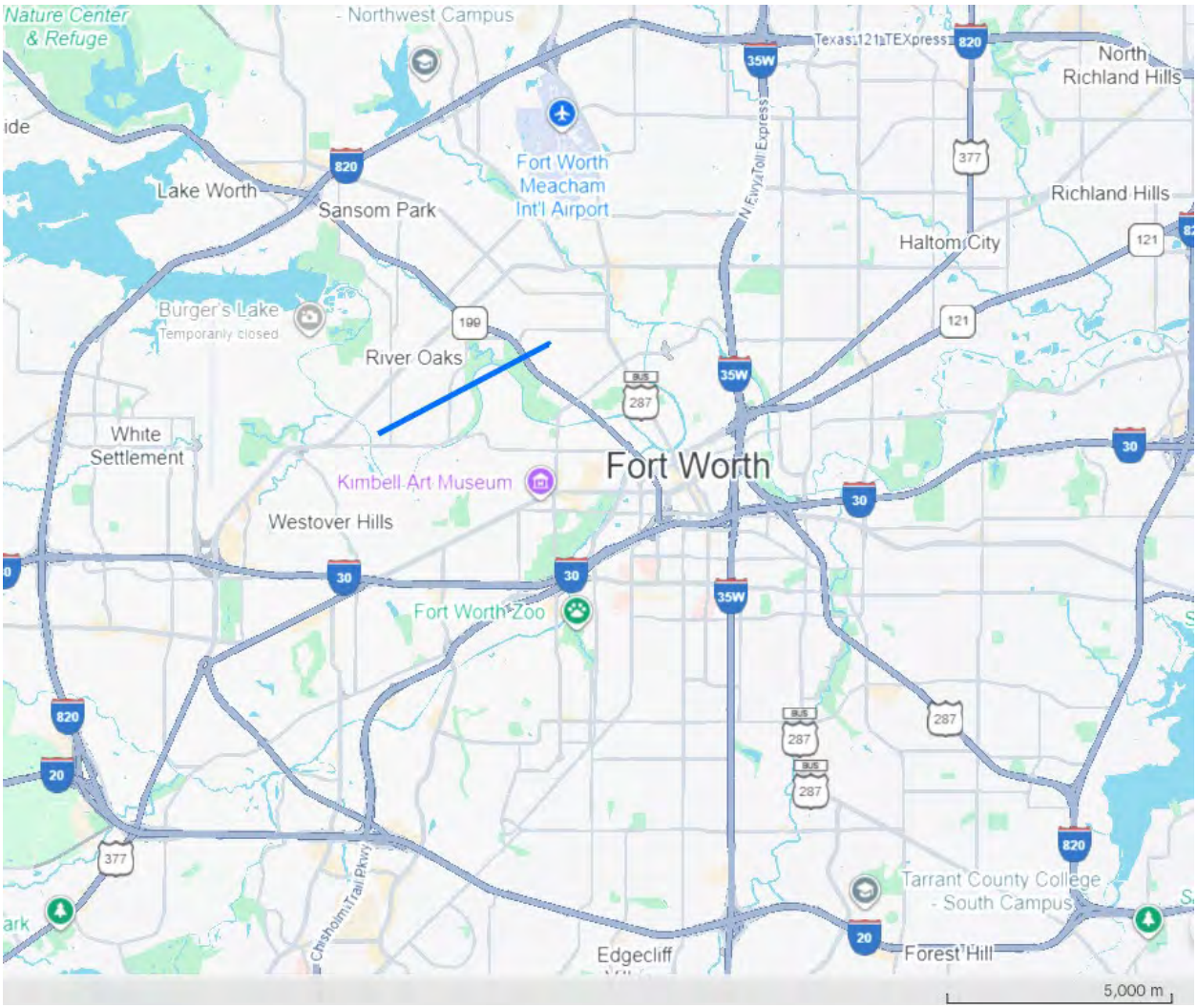


Figure 21: Map the Gaps result

Only one comment was received on this map. Lack of a bus route for commutes between the North Side and Westworth Village area was highlighted.

6.6 District 10 Follow Up Open House

Participants were asked if they agreed or disagreed with statements from the previous engagement regarding areas with the worst transportation issues in the district. The results of are shown below. The map showing the location of these comments is shown in Figure 21 below.

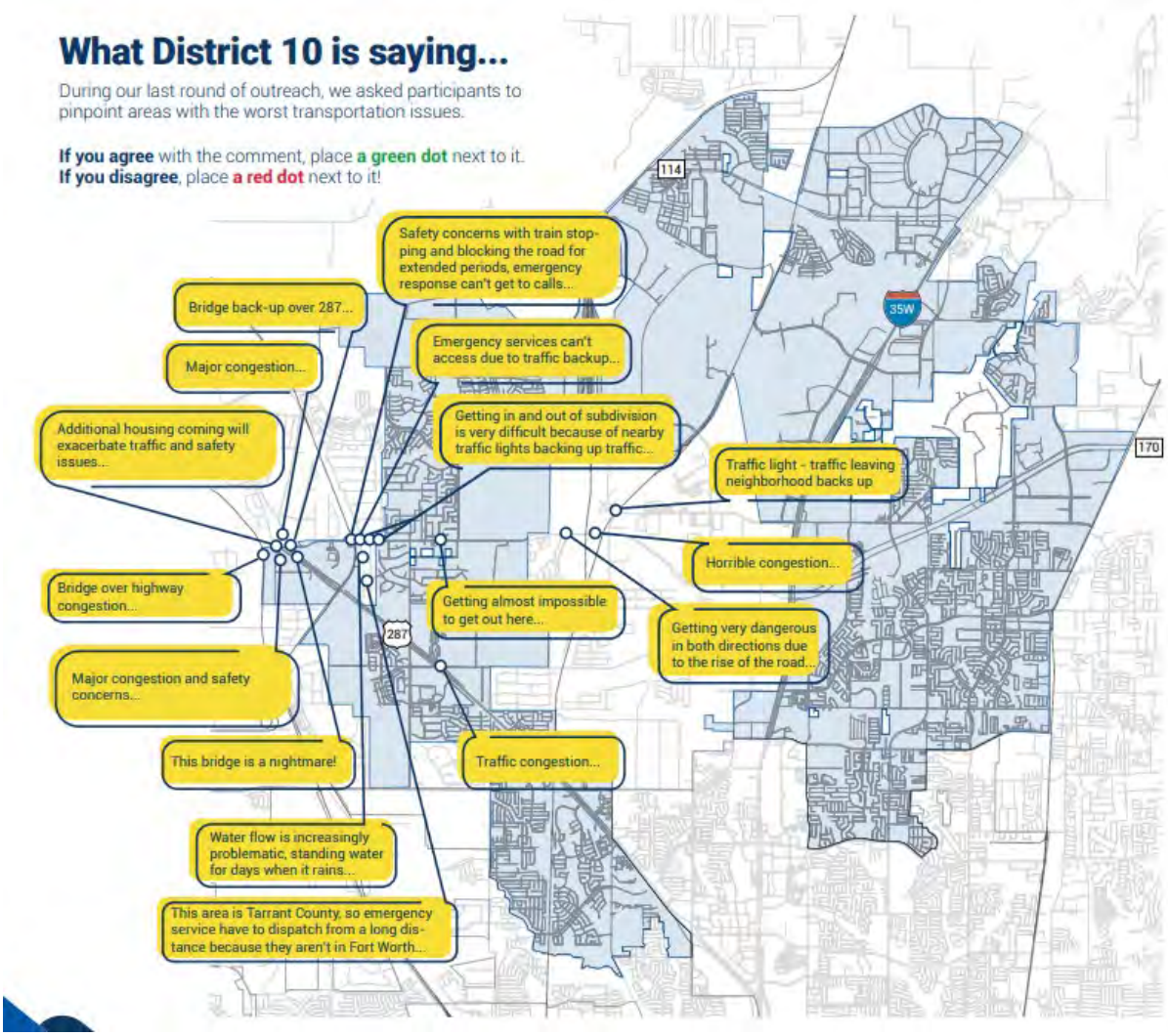


Figure 22 What District 10 is saying comments

Table 2 District 10 Follow Up Open House Support for Transportation Issues Statements

Comment	Agree	Disagree
Bridge over highway congestion	19	
Bridge backup over 287	16	
Additional housing coming will exacerbate traffic and safety issues	16	1
Getting in and out of subdivision is very difficult because of nearby traffic lights backing up traffic	16	
The bridge is a nightmare	15	
Traffic congestion	14	
Getting almost impossible to get out of here	12	
Safety concerns with train stop stopping and blocking the road for extended periods, emergency response can't get to calls	11	
Major congestion	11	
Horrible congestion	8	

Emergency services can't access due to traffic backup	7	
Major congestion and safety concerns	6	
Traffic light - traffic leaving neighborhood backs up	6	
This area is Tarrant County, so emergency services have to dispatch from a long distance because they aren't in Fort Worth	5	
Getting very dangerous in both directions due to the rise of the road	4	
Water flow is increasingly problematic, standing water for days when it rains	3	

When asked what else they would like to share, 19 comments were left, and these are summarized as follows:

- Opposition to New Development: There was strong opposition to development, housing specifically was cited, until the existing infrastructure can support the current and future population. This was the most supported comment which was written more than once and had multiple green stickers placed next to them. Concerns included:
    - Inability of schools to keep up with the growing population.
    - E. Bonds Ranch Rd from Harmon to US 287 is experiencing heavy traffic, and new warehouses will worsen the situation.
- Lack of Infrastructure Improvements: Residents shared frustration over the lack of road infrastructure improvements in Haslet over the past six years, despite promises.
- Developer Responsibility: Criticism was directed at developers for focusing on selling homes without addressing infrastructure needs. Sendera Ranch, approved 20 years ago, was cited as an example where infrastructure has lagged behind development.
- Traffic and Congestion Concerns: The following areas were cited as areas of concern:
    - Major backups occur at the intersection of Main St. and 156 in Haslet.
    - High school and apartment traffic at 287 & Blue Mound Rd.
    - Willow Springs Rd: The road is deteriorating south of 287.

  Multiple comments highlighted the need for specific road improvements, such as:
    - Widening the bridge over 287.
    - Adding designated left turn lanes and lengthening light cycles.
    - Removing stop signs and adding roundabouts.
    - Expanding entry points to 287 and improving access lanes.
    - More East-West Routes.
    - An off-ramp for Willow Springs
- Immediate Action Needed: Residents called for immediate plans to alleviate traffic congestion, especially with more homes being built. Suggestions included building bridges, overpasses, and additional lanes to handle increased traffic.
- Safety and Accessibility: Concerns about safety and accessibility were raised, particularly in areas like Dorado Ranch subdivision and Bonds Ranch Rd, where accidents are frequent and exiting the subdivision is challenging.

- Ongoing Construction: Harmon Rd is still under construction, but an active traffic signal is causing unnecessary backups. Respondents suggested deactivating the signal until the road is open could help.

7 One-to-One Stakeholder Briefings

In advance of formal adoption, the project team conducted a series of targeted, one-to-one stakeholder briefings with City leadership, regional partners, agencies, and key private stakeholders. These briefings were designed to provide early visibility into the draft Master Transportation Plan, answer questions, identify concerns, and build alignment prior to public release and formal hearings.

Each meeting was tailored to the stakeholder's role, district, or operational responsibility. Discussions generally focused on updates to the Master Roadway Network, roadway classification refinements, priority project investments, implementation strategy, and how the plan aligns with funding cycles and partner coordination. Feedback from these briefings informed final refinements prior to publication.

Table 3 2026 Stakeholder Briefings

Stakeholder / Group	Affiliation	Date	Status	Key Topics Discussed
Victor Vandergriff	Mayor's Office	Jan 26	Completed	Plan vision, capital alignment, implementation strategy
Rusty Fuller	Regional Partner	Jan 27	Completed	Regional coordination, MRN consistency
TxDOT	State Agency	Jan 27	Completed	State facility coordination, access management
Walsh / Dunaway (Isaac Manning / Richard Shaheen)	Development Community	Jan 28	Completed	Development impacts, classification changes
Green Space Team	City Department	Jan 28	Completed	Trail integration, open space connectivity
CFW Aviation (Greg Royster)	City Department	Jan 29	Completed	Airport access, freight corridors

District 9	Council District	Feb 2	Completed	District priorities, safety projects
District 6	Council District	Feb 4	Completed	Growth areas, roadway gaps
District 7	Council District	Feb 10	Completed	Capital priorities, district-specific projects
District 3	Council District	Feb 18	Completed	Western MRN updates, growth management
District 2	Council District	Feb 18	Completed	Equity considerations, multimodal gaps
District 8	Council District	Feb 18	Completed	Safety and corridor improvements
District 10	Council District	TBD	Pending	District review and feedback
District 4	Council District	TBD	Pending	District review and feedback
District 5	Council District	TBD	Pending	District review and feedback
District 11	Council District	TBD	Pending	District review and feedback
Tarrant County	County Partner	TBD	Pending	Interjurisdictional coordination
Parker County	County Partner	TBD	Pending	Regional connectivity
Wise County	County Partner	TBD	Pending	Regional roadway coordination
Denton County	County Partner	TBD	Pending	Cross-county mobility
TxDOT (Follow-Up)	State Agency	March 6 (anticipated)	Scheduled	Technical coordination, review comments
Western MRN Property Owners	Private Stakeholders	March 2–3 (anticipated)	Scheduled	Property impacts, alignment clarification

8 Appendix

Appendix A – Sign-in Sheets

District 4 Public Open House Sign-In Sheet (10/19/24)

Name	Zip Code	How did you hear about us?
Patty Yast*	76177	daughter
Jason Kim	76244	City email
Mason Arrizola	76137	Work
Susan Kenney	76137	email

District 11 Public Open House Sign-In Sheet (10/21/24)

Name	Zip Code	How did you hear about us?
Noble Reed	76102	E-mail
Clent Hoover	75102	CFW Transportation Management
Rachel Arellano	76102	District 11 CW Martinex Ofc
B. Licou*	76103	
Daniel Haase	76103	Dist 11 djhaase@charter.net
Jim Titsworth	76248	Email
Emily C. Edmondson	76111	Neighbor
Montse Arista	76111	"
Ale Cheda	76111	"

District 6 Public Open House Sign-In Sheet (10/21/24)

Name	Email	Zip Code	How did you hear about us?
Kaylin Bell		76123	I saw it
David Martinez		76115	My Input
Kristin Thurun			The Library
Pat Stevens		76133	
Mary Villari		76082	Word of mouth
Nelly Oyamfi		76123	Vision
Peter Irvin	Peter.irvin1994@gmail.com	76123	Thought there was early voting
Leti A		76123	Display at Library

* Text has been transcribed as accurately as possible, but due to illegibility, some errors may be present.

Scott Nishimura	Scott.nishimura@fortworthreport.org	76110	Press release
Randi Kellenberger		76123	Library

District 2 Public Open House Sign-In Sheet (10/22/24)

Name	Email	Zip Code	How did you hear about us?
Bernard Malone III		76107	City email
Roderick Alalay		76114	
Guadalupe Leon		76115	City email
Adriana Aguileta	aguiletaadriana@yahoo.com	75233	
Adrian Burgos	aburgosuservices@gmail.com		

District 9 Public Open House Sign-In Sheet (10/22/24)

Name	Zip Code	How did you hear about us?
Sheila L. Foster	76123	
Christine Johnson	76133	
Stan Johnson*	76133	Walk in
My Le		
Camille Gonzalez	76108	Walk in
Julio Samerro*	76108	Walk in
Tahlia Blair	76132	Walk in
Kayin Blair	76132	Walk-in
Lashann Williams	76132	Walk-in
Kayleen Lopez	76123	Walk-in
Micaela Dipsey	76133	Walk in
Ana Alvarez*	76134	Walk in
David Maro*	76133	Walk in
Jack Pankow	76133	Walk in
K. L-Chy	76133	Walk in
Not Legible	76133	Walk in

* Text has been transcribed as accurately as possible, but due to illegibility, some errors may be present.

Not Legible	76133	Walk in
Not Legible	76133	Walk in
Victoria Malone	76123	Walk-in
Lalvya Penn	76131	Walk-in
Angela Troupe	76123	Walk in
Peter Kring	76110	
Sophia Valadez	76133	
Adrienne Jackson	76123	“ “
Michelle Johnson	76133	Walk-in
Brie Carlson	76133	Walk in

District 3 Public Open House Sign-in Sheet (10/23/24)

Name	Zip Code	How did you hear about us?
Travis Buffa	76108	Email
James Buffa	76108	E-mail
Erin Fuller	76116	
Keionna Smith	76116	Walk in
Heidi I. Irgens	76109	Crain Phone Call

District 10 Public Open House Sign-In Sheet (10/23/24)

Name	Zip Code	How did you hear about us?
Nathan Thornburg	76052	Friends
Patti Thornburg	76052	Facebook
Tom Thompson	76052	Friend
Felicia Gideon	76052	Facebook
Liz Richey	76052	Facebook
David Richey	76052	
Donald Hickman	76052	
Calanne Hickman	76052	
James Edwards	76052	Friend
Katherine Edwards	76052	Friend
Mary L. Visoggio	76052	Facebook
Jana Doann	76052	BlayLock
Davis Doann	76052	Family

District 7 Public Open House Sign-In Sheet (10/24/24)

Name	Zip Code	How did you hear about us?
Melanie Ellis	76179	HOA mtg.
James Murphy	76179	HOA Meeting

Matthew LeBlanc	76114	EMS ISD
TW Thompson	76108	City Council #7

District 8 Public Open House Sign-In Sheet (10/24/24)

Name	Email	Zip Code	How did you hear about us?

District 5 Public Open House Sign-In Sheets (10/26/24)

Name	Email	Zip Code	How did you hear about us?
Leslie L. Thompson		76112	
David Lambertsen		76120	Voting location
Roselyn Nash		76120	Voting location
Emilio Sanchez		76112	Voting location
Laura Shelter		76112	Voting location
Shaun J Dorrick		76118	Voting location
Angela Lutts		76112	Voting location
Jaswinder Shuller		76112	Voting location
Ashmeet Uppal		76120	Voting location
Not Legible		76120	Voting location
Not Legible		76120	Voting location
Jeana Bowder		76120	Voting location
Not Legible		76120	TikTok
Paul Kerpoe		76112	Email
Judy Taylor		76112	HMCC
John Bartosienick		76112	Email
Carol Peters	cupxy@yahoo.com	76103	Email
Jhena Williams	Monthlyrpt.2020@gmail.com	76104	
Terri Bailey		76103	Mrs. Bivens
Nakia Cole		76105	
Rolonzo Williams		76133	
Angelia Young		76120	
Misty Farr		76102	Email
Avery Farr		76102	Email

District 10 Public Open House Sign-In Sheets (12/12/24)

Name	Email	Zip Code	How did you hear about us?
Jean Carpenter	jeanfrancene@gmail.com	76052	Email
Shanna Williams	cesar.martin@live.com	76052	HOA
David Caudillo	leadboy1@gmail.com	76052	HOA
Chrissi Jenkins	Chrissi.jenkins13@gmail.com	76052	District 10 page
Brian Brooks	Btjsb@hotmail.com	76052	Facebook
Tina Brooks		76052	Facebook
Don Davis	dondavis1014@gmail.com	76052	Facebook
Judy Davis		76052	Facebook
Ron Murtha	ronmurtha@msn.com	76052	Facebook
John Havenkorn	jmkorn2@gmail.com	76052	Facebook
Donald Slanken	Donald_Slanken@sbcglobal.net	76052	HOA
Melanie Crandall	melanieeras@gmail.com	76052	HOA
Ron Kleibrink	RonKleibrink@gmail.com	76052	HOA
Kathy Haenszel	kathy@haenszel.net	76052	HOA
Tom Haenszel		76052	HOA
Ed Peet	e.peet@yahoo.com	76052	HOA
Sam Peet		76052	HOA
Jim Behringer	jmbehringer@gmail.com	76052	HOA
Vicki Behringer		76052	HOA
Tameka Jackson	t.jackson@sbcmanagement.com	76052	HOA
Andrea Van Meter	andreavm66@yahoo.com	76052	HOA
Kevin Brown	dsmkbrown@hotmail.com	76052	Social media
Bob Whetson	bobwhetson@gmail.com	76052	Social media
Chuck Kelley	chuck@chuck-kelley.com	76052	Alan
Ryan Robinson	ryanrobinson11@gmail.com	76052	Sign
Steven Baxley		76052	Social media
Ivana Baxley		76052	Social media
Felicia Gideon		76052	Social media
Brian Gideon		76052	Social media

Jana Doam		76052	
Ryan Leaverton	rmleaverton@gmail.com	76052	
Vanessa Leaverton		76052	
Maryann Hanford	DHanford59@gmail.com	76052	Facebook
Cindy Boyce	ambahb@hotmail.com	76052	Ring App
Eric Crile	crizile@yahoo.com	76052	Email
Eric Johnson	ericdeej78@gmail.com	76131	Friend
Rich Thomlison	rthomlison@gmail.com	76131	FT Worth news email
Bill Edmondson	wedmundson@hotmail.com	76052	Email
Emily Wolf	emily.wolf@fortworthreport.org		Email
Cecil Lenzen	cecilia.lenzen@fortworthreport.org		Email
Coidy Carvalho	gabby8318@gmail.com	76052	
Kris Ramirez		76052	
Jennifer Ramirez		76052	
Bennie Shearer		76052	
Christine Shearer		76052	
CJ Patton	srcj8124@att.net	76052	
Sharon Patton		76052	
Glenn Hazlewood	ghazle01@gmail.com	76052	Facebook
Courtney Holt	courtney.holt@senate.texas.gov	76102	Invite
Cody Thorn	cthorn@communityimpact.com	76051	Media
Keisha Holmgren	keisha.holmgren@gmail.com	76052	Facebook
Joshua Moore	Joshuamoore1287@gmail.com	76087	
Nekisha Henry	nnq2000@gmail.com	76052	Ring App Post
Jeff Zimmerman		76052	Community Impact
Daniel Robison	danrobison6@gmail.com	76052	Facebook
Charles Luke	charles.luke@icloud.com	76052	Haslet Seniors
Mechele Williams	mechwlms@gmail.com	76052	Facebook
Dee Long	sdlong@tarrantcountytx.gov	76131	Email
Natalie Penner	natalie.penner@hotmail.com	76052	MS

Rick	rick2drum@yahoo.com	76052	HOA
Jeanne	jeanne_stewart@hotmail.com	76052	HOA
Oscar Almaraz	oscar.almaraz88@yahoo.com	76051	HOA
Mika Malone	mikagage87@yahoo.com	76052	PTA
Kevin Mosley	Mosley@yahoo.com	76052	SBB email
Elizabeth Ribble	elizabethribble1@gmail.com	76052	Facebook
Dale Stephens	dale.stephens@me.com	76052	SBB email
Barbara Wright	barbiejwright@att.net	76052	Nextdoor
Bill Wright	brobillw5@att.net	76052	Nextdoor

Online Survey

Email	Zip Code
Email not provided	76109
Mnunez486@gmail.com	76133
Email not provided	76104
choteaukammel@gmail.com	76102
Email not provided	76110
brianbenton@sbcglobal.net	76123
Email not provided	76102
Email not provided	76109
Npjcab6@gmail.com	Zip Code not provided
jased001@gmail.com	Zip Code not provided
Raaboss78@gmail.com	Zip Code not provided
KATIEMAE513@GMAIL.COM	Zip Code not provided
chickma101@sbcglobal.net	Zip Code not provided
chipylaser@sbcglobal.net	Zip Code not provided
super_nudge@hotmail.com	Zip Code not provided
Chelsea.r.angles@gmail.com	Zip Code not provided
candiw22@yahoo.com	Zip Code not provided
janabroughton@hotmail.com	Zip Code not provided
Sdbaxley@yahoo.com	Zip Code not provided
Amandadennis@martinrealtygroupdfw.com	Zip Code not provided
mpena0116@gmail.com	Zip Code not provided
Jerrymontes02@gmail.com	Zip Code not provided
pauljohnbaker@gmail.com	Zip Code not provided
monthlyrpt.2020@gmail.com	76104
Email not provided	76102
Email not provided	76102
Email not provided	76108

jll042@hotmail.com	76104
Email not provided	76104
bsbllc21@gmail.com	Zip Code not provided
Vaneraimondo@gmail.com	Zip Code not provided

Appendix B - Event Photos



District 2: Tuesday, October 22 – Northside Community Center



District 4: Saturday, October 19 – Basswood Elementary School



District 5: Saturday, October 26 – Handley Meadowbrook Community Center



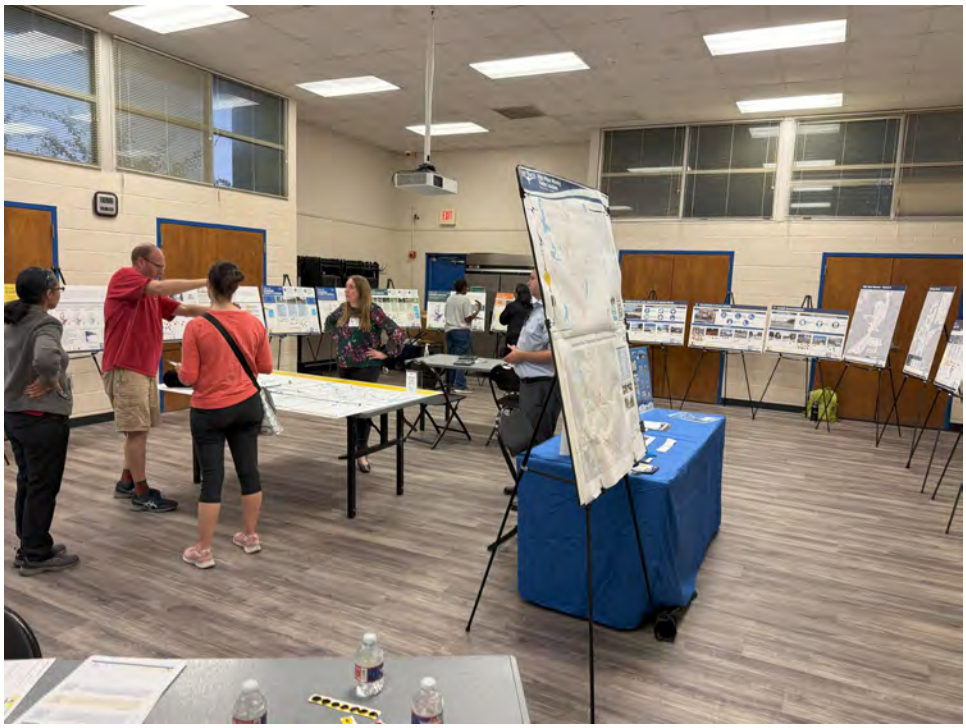
District 6: Monday, October 21 – Vivian J. Lincoln Branch Library



District 7: Thursday, October 24 – Eagle Mountain-Saginaw ISD Admin. Building



District 8: Thursday, October 24 – Everman Civic Center



District 9: Tuesday, October 22 – Southwest Community Center



District 10: Wednesday, October 23 – Truett Wilson Middle School

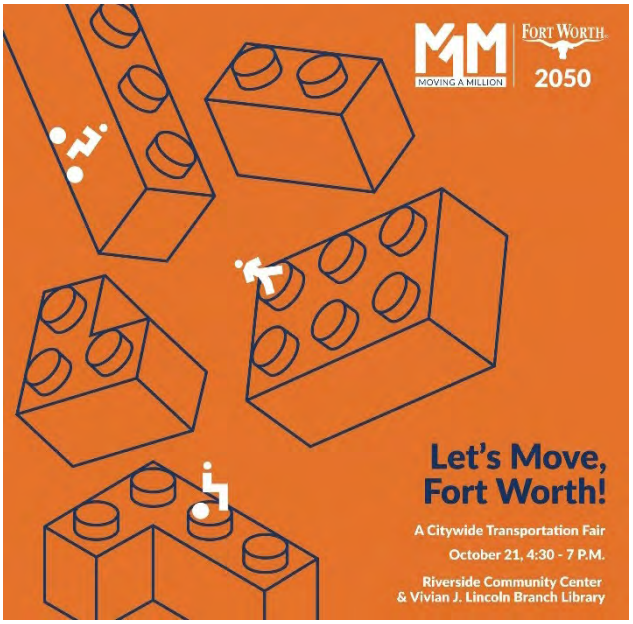


District 11: Monday, October 21 – Riverside Community Center

Appendix C - Social Media Graphics

Content	Graphic

Post 1 – October 16 Let's move, Fort Worth! Join us at any of our ten citywide transportation fairs October 19-26! Learn about Moving A Million and the latest updates of the Master Transportation Plan and Vision Zero Safety Action Plan. You'll also hear about other ongoing plans and how we're coordinating to prepare for #FortWorth2050. For more info, visit MovingaMillion.org. You won't want to miss this!	
Post 2 – October 16 It's go time, Fort Worth! The City of Fort Worth is making big plans, and we need your input. Join friends, family, neighbors, and community leaders at the upcoming citywide transportation fairs across Fort Worth—beginning THIS WEEKEND. Learn about how Fort Worth is gearing up to Move A Million with the Master Transportation Plan, Vision Zero Safety Action Plan, and other mobility projects. This is your Fort Worth, your future. Let's build it together! For more info and to find a location near you, visit MovingaMillion.org. You won't want to miss this!	

Post 3 – October 20 District 11 Transportation Fair Riverside Community Center Citywide Transportation Fair Monday, October 21 4:30 – 7:00 P.M. 3700 E Belknap St, Fort Worth, 76111 District 6 Transportation Fair Vivian J. Lincoln Branch Library Citywide Transportation Fair Monday, October 21 4:30 – 7:00 P.M. 8829 McCart Ave, Fort Worth, 76123 Join the M1M team tomorrow at a Citywide Transportation Fair to hear the latest details of Moving A Million and other City of Fort Worth planning initiatives. Let your voice be heard NOW!	
Post 4 – October 21 District 2 Transportation Fair Northside Community Center Citywide Transportation Fair Tuesday, October 22 4:30 – 7:00 P.M. 1100 NW 18th St, Fort Worth, 76164 District 9 Transportation Fair Southwest Community Center Citywide Transportation Fair Tuesday, October 22 4:30 – 7:00 P.M. 6300 Welch Ave, Fort Worth, TX 76133 Join the M1M team tomorrow at a Citywide Transportation Fair to hear the latest details of Moving A Million and other City of Fort Worth planning initiatives. Let your voice be heard NOW!	

Post 5 – October 22: District 3 Transportation Fair LVTRise Community Center Citywide Transportation Fair Wednesday, October 23 4:30 – 7:00 P.M. 8201 Calmont Ave, Fort Worth, 76116 District 10 Transportation Fair Truett Wilson Middle School Citywide Transportation Fair Wednesday, October 23 5:30 – 7:30 P.M. 14250 Sendera Ranch Blvd, Haslet, 76052 Join the M1M team tomorrow at a Citywide Transportation Fair to hear the latest details of Moving A Million and other City of Fort Worth planning initiatives. Let your voice be heard NOW!	
Post 6 – October 23: District 7 Transportation Fair Eagle Mountain-Saginaw ISD Admin. Building Citywide Transportation Fair Thursday, October 24 4:30 – 7:00 P.M. 1600 Mustang Rock Rd, Fort Worth, 76179 District 8 Transportation Fair Everman Civic Center Citywide Transportation Fair Thursday, October 24 4:30 – 7:00 P.M. 213 N Race St, Everman, 76140 Join the M1M team tomorrow a Citywide Transportation Fair to hear the latest details of Moving A Million and other City of Fort Worth planning initiatives. Let your voice be heard NOW!	

Post 7 – October 24: District 5 Transportation Fair Handley Meadowbrook Community Center Citywide Transportation Fair Saturday, October 26 10:30 A.M. – 1:00 P.M. 6201 Beaty St, Fort Worth, 76112 Join the M1M team on Saturday at the Handley Meadowbrook Community Center Citywide Transportation Fair to hear the latest details of Moving A Million and other City of Fort Worth planning initiatives. Let your voice be heard NOW!	

Appendix D - Open House Materials

Project Overview Handout



Moving a Million

MOVING A MILLION

Vision Zero Safety Action Plan

Scan Me

FORT WORTH®

Open House Purpose:

Learn about the transportation planning process and the City of Fort Worth's goals.

Help the City of Fort Worth prioritize investment in our BIG IDEAS and share your own BIG IDEAS.

Map your most frequent trips and identify specific locations where improvements are needed to help the city plan and prioritize projects.

2 The City of Fort Worth is developing a variety of plans that *work together* to improve quality of life, safety, and mobility.



MOVING A MILLION

This plan ensures consistency and transparency by developing a single resource for Fort Worth's transportation vision, goals, policies, and project priorities. It will also integrate the upcoming Vision Zero Safety Action Plan.

THE 2050 COMPREHENSIVE PLAN

The plan will establish a shared vision for the City. It will determine the goals, objectives, strategies, and policies to ensure a high quality of life for all members of the community.

PARKS, RECREATION, AND OPEN SPACE MASTER PLAN

This is a comprehensive strategy for the development, maintenance, and enhancement of public parks, aiming to create accessible and sustainable outdoor spaces that meet the recreational, environmental, and social needs of the community.

Steps to Success: Master Transportation Planning Process

3

With the help of the community, the City of Fort Worth is making big plans to Move a Million (M1M). The M1M Master Transportation Plan will unify all Fort Worth's transportation-related plans into ONE VISION. The result will be a capital program tied to city policies and funding realities, grounded in the wants and needs of the Fort Worth community. The graphic below shows the steps to developing a successful M1M Plan.



MOVING A MILLION

Scan Me

Scan & learn more at **movingamillion.org**

FORT WORTH®

4

At our first open house, we presented the overview of the plan, goals, and timeline, and collected feedback on the public's transportation needs.

A desire for ***road and street improvements***

TRAFFIC CONGESTION

41%

of survey respondents said reducing traffic jams and other congestion was very important.

ROAD QUALITY

over 66%

thought improving road quality (pavement, lane markings, lighting, etc.) was very or somewhat important.

Expansion of rail services/access and comfort of public transportation

PUBLIC TRANSIT

49%

of respondents said that they would use public transit more often if improvements were made

The top 3 recommended improvements to the transit system were:

FREQUENCY
Buses, trains, or other public transit options that come and go more often

TIME
Taking transit needs to be similar or quicker in travel time to driving

DESTINATIONS
Buses, trains, or other public transit options that go more places

Prioritize pedestrian and bicycle infrastructure

BIKE PATHS

over 45%

of respondents thought adding bicycle paths was important.

PEDESTRIAN SAFETY

83%

of respondents think keeping people safe when they walk is important.

Improvement of quality of life through better infrastructure

PARKING

57% want more places to be able to park.

HIGH-SPEED INTERNET ACCESS

47% thought it was very important or somewhat important to enhance high-speed internet access.

SHORTER COMMUTE

49% thought it was important to have good job options close to where they live.

SERVICES

67% thought having services such as groceries, pharmacies, cafés and libraries closer to where they live is important so they can walk, bike, or roll.

5

Transportation Priorities
Based on the feedback from the 1st Round of Engagement

OVERALL

- Reduce traffic congestion
- Improve the quality of roads
- Increase pedestrian safety

SAFETY CONCERNS

- Drivers using phones
- Aggressive driving
- Speeding

INFRASTRUCTURE

- More sidewalks
- Well-lit infrastructure
- Better connectivity

This input was used in the development of goals, objectives and Big Ideas.

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Feedback Themes

Road and Street Improvements

- Planning new streets to accommodate future traffic.
- Improved timed traffic lights to improve flow.

Transit Options

- Expanding public transit options like Trinity Metro.
- Concerns with walking long distances to reach bus stops which decreases ridership, and comments for not funding underutilized services.

Pedestrian, Bicycle and Wheelchair Infrastructure

- More crosswalks, ramps for wheelchair users, and a designated bike lane system to connect neighborhoods.
- The lack of shaded sidewalks and rest areas for pedestrians, including the unhoused.

Expansion of Rail Services

- Development of rail services, including commuter trains to suburbs, a train service in southwest Fort Worth, expansion of existing rail services, and the introduction of light rail options.

Accessibility

- Clear signage and more inviting buses or shuttles.
- Lack of usage and the impracticality of buses due to weather conditions during the summer.
- Better access to entertainment, shopping, and park areas.
- Efforts to combat traffic violations like speeding and running red lights.
- Attention to the needs of special populations such as the elderly and those without personal transportation.

NEXT STEPS...

- **Document**, **evaluate** and **address** public input.
- **Collect** and **analyze** additional data.
- Begin **prioritizing** projects and **identifying** need for policy changes.
- **Encourage** and **request** additional public input in the future.

Project Timeline



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Fact Sheet



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FORT WORTH MOVING A MILLION

2 The City of Fort Worth is developing a variety of plans that *work together* to improve quality of life, safety, and mobility.



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This plan ensures consistency and transparency by developing a single resource for Fort Worth's transportation vision, goals, policies, and project priorities. It will also integrate the upcoming Vision Zero Safety Action Plan.

THE 2050 COMPREHENSIVE PLAN

The plan will establish a shared vision for the City. It will determine the goals, objectives, strategies, and policies to ensure a high quality of life for all members of the community.

PARKS, RECREATION, AND OPEN SPACE MASTER PLAN

This is a comprehensive strategy for the development, maintenance, and enhancement of public parks, aiming to create accessible and sustainable outdoor spaces that meet the recreational, environmental, and social needs of the community.

Steps to Success:
Master Transportation Planning Process

3

With the help of the community, the City of Fort Worth is making big plans to Move a Million (M1M). The M1M Master Transportation Plan will unify all Fort Worth's transportation-related plans into ONE VISION. The result will be a capital program tied to city policies and funding realities, grounded in the wants and needs of the Fort Worth community. The graphic below shows the steps to developing a successful M1M Plan.



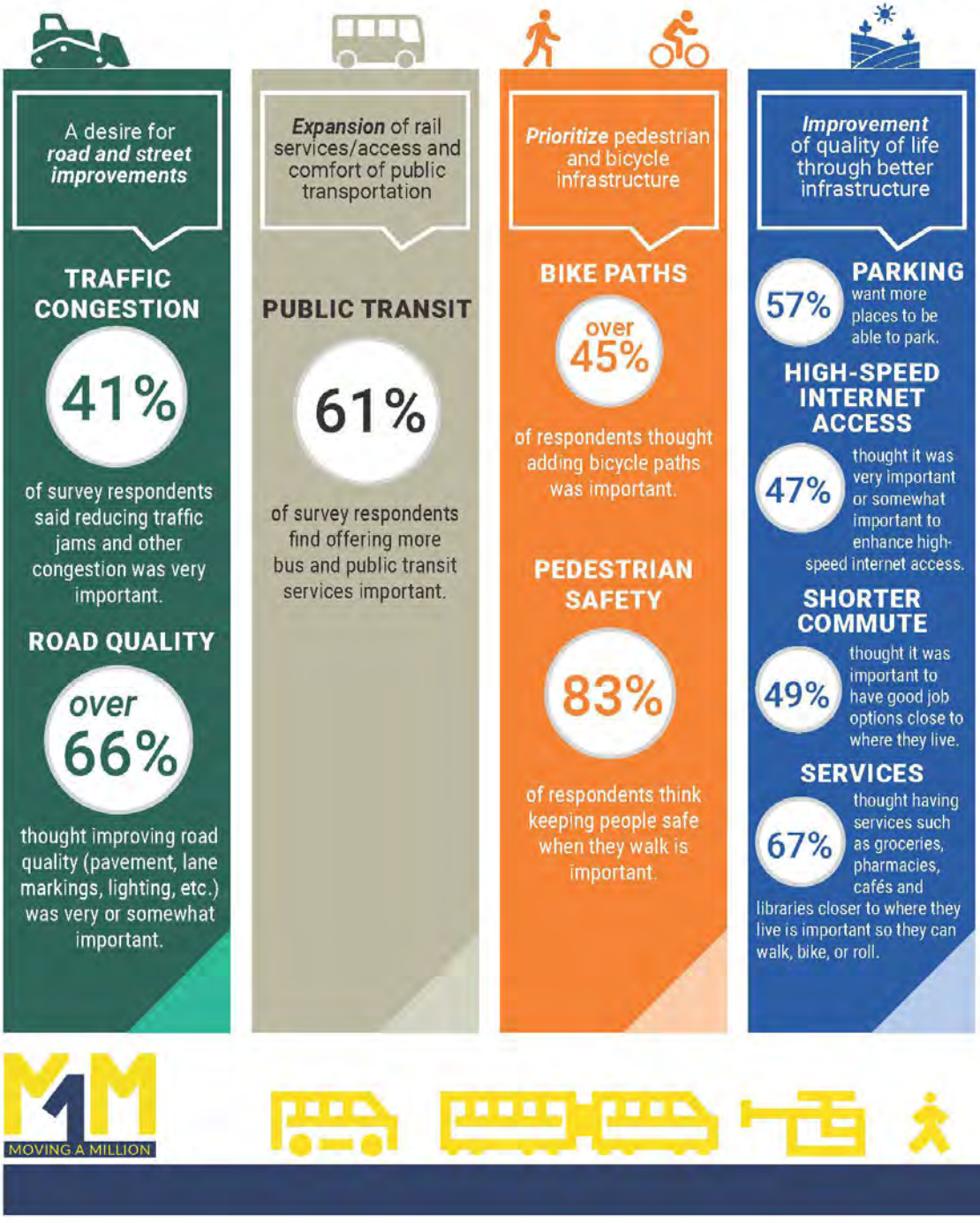
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4

At our first open house, we presented the overview of the plan, goals, and timeline, and collected feedback on the public's transportation needs.



Transportation Priorities

Based on the feedback from the 1st Round of Engagement

OVERALL

- Reduce traffic congestion
- Improve the quality of roads
- Increase pedestrian safety

SAFETY CONCERNS

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6

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Project Timeline



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FORT WORTH MOVING A MILLION

Open House Exhibits



Defining Objectives and Big Ideas:

With our goals defined, the City of Fort Worth must now identify **objectives**—the specific, actionable outcomes that clarify how the goals will be achieved. From there, we define the projects, policies, or initiatives aimed at realizing the objectives. These are our **Big Ideas**.

Share Your Priorities!

The City of Fort Worth will soon begin to prioritize projects and policy changes, and we need your input. Share your priorities by distributing your six color dots across the City's six goal exhibits, under our Big Ideas, where indicated. You can distribute them however you choose! The more dots a Big Idea receives, the higher the community's preference is for that Big Idea.

Thank you for your input!

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Goals are outcomes the City of Fort Worth *intends to achieve*.

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Goal #1 Safety First

Implement safety measures that reduce crashes and eliminate traffic fatalities and injuries across all transportation modes and trips.

Goal #2 Fix It First

Ensure cost-effectiveness of transportation assets throughout their life cycle.

Goal #3 Human Comfort

Create a network that is convenient, connected, and considerate for community use.

Goal #4 Economic Competitiveness

Support businesses, improve regional and global connectivity, facilitate trade and investment, promote labor mobility, and enhance prosperity.

Goal #5 Technology

Embrace flexible and resilient technology to adapt to evolving transportation needs and challenges.

Goal #6 Equity

Ensure accessible, affordable, and reliable transportation options for all ages and abilities.

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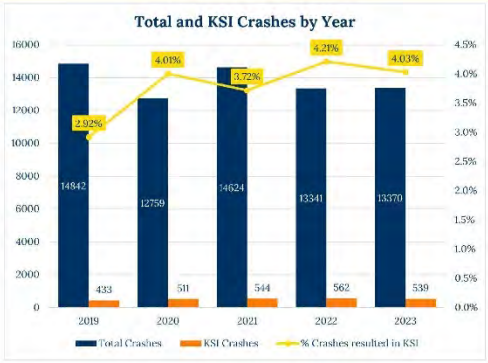
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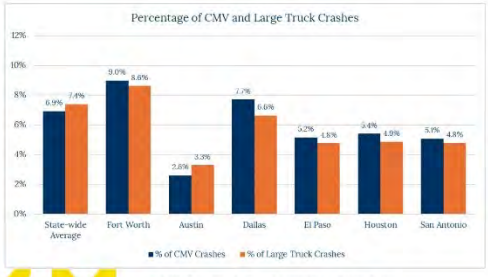
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GOAL #1
SAFETY FIRST

Implement safety measures that reduce crashes and eliminate traffic fatalities and injuries across all transportation modes and trips. Supported by the Safety Action Plan.

In the five years from 2019 to 2023, 68,936 crashes happened in the City of Fort Worth and 2,056 of those crashes resulted in serious injury or death. The Vision Zero Safety Action Plan aims to eliminate fatal and serious injury (KSI) crashes by 2045 by prioritizing safe, accessible, and equitable transportation for all users.

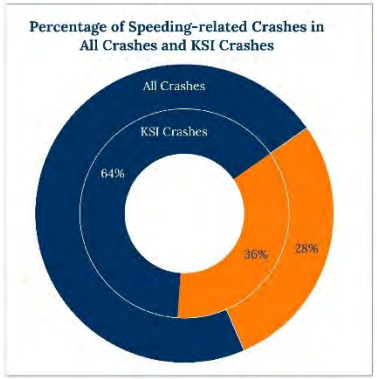


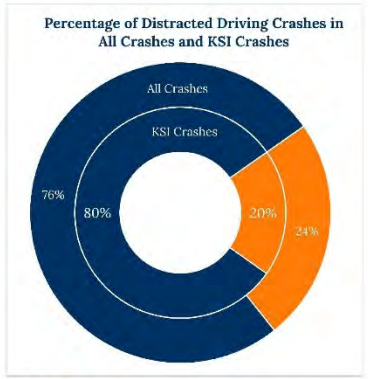


- **5-year period: 2019-2023**
- **533 fatal crashes**
- **2,056 serious injury crashes**
- **68,936 total crashes**

- **Large truck-involved crashes** are more serious in Fort Worth than in Texas peer cities

CMV crashes: crashes involve a commercial motor vehicle
Large truck crashes: crashes involve a vehicle with a body type of truck tractor or semi-trailer





Percentage of speeding-related crashes
Not speeding-related crashes

- **Speeding** and **Distracted Driving** are the top contributing factors
- **Speeding-related crashes** tend to result in more severe outcomes

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GOAL #1
SAFETY FIRST

OBJECTIVE #1:
Build a culture of safety through city policies, strategic partnerships and public communication.

OBJECTIVE #2:
Design roadways and intersections that account for human mistakes and vulnerability.

OBJECTIVE #3:
Implement speed management strategies and safe infrastructure design to support safer travel speeds.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS?
Share them in this space



STREETS DESIGNED FOR DESIRED SPEEDS:
Streets are engineered with features that promote safer driving speeds (Speed humps, chicanes, diagonal parking, etc.)



ARTERIAL SPEED MANAGEMENT:
Balancing the need for capacity with strategies to manage speed (variable speed limits, roadway design, etc.)



SEPARATED PEDESTRIAN AND BIKE PATHS:
Physical separations for pedestrians and cyclists, giving them dedicated paths away from traffic.



EFFECTIVE TRAFFIC SAFETY MESSAGING:
Public education via media campaigns, signs, etc. to raise awareness and promote safer behaviors.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS?
Share them in this space

SHARE YOUR PRIORITIES!
Distribute your colored dots in the categories above.

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SPEED MANAGEMENT

Existing Condition



Traffic Safety Countermeasures

- **Appropriate Speed Limits for All Road Users**
- **Roadway Configurations**
- **Variable Speed Limit**

Examples

PLACE YOUR FEEDBACK BELOW: Which one of these examples would make you feel more comfortable walking, riding a bike, or driving? What you like about these examples?











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VULNERABLE ROAD USERS

Existing Condition



Traffic Safety Countermeasures

- Bicycle Lanes
- Crosswalk Visibility Enhancements
- Pedestrian Hybrid Beacons
- Medians and Pedestrian Refuge Islands
- Walkways

Examples

PLACE YOUR FEEDBACK BELOW: Which one of these examples would make you feel more comfortable walking, riding a bike, or driving? What you like about these examples?











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COMPLICATED AND UNSAFE INTERSECTIONS

Existing Condition



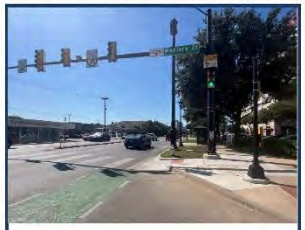
Traffic Safety Countermeasures

- Stoplight with Reflective Borders
- Corridor Access Management
- Dedicated Left and Right Turn Lanes at Intersections
- Reduced Left Turn Conflict Intersections
- Roundabouts
- Multiple Low-Cost Countermeasures at Stop Controlled Intersections

Examples

PLACE YOUR FEEDBACK BELOW: Which one of these examples would make you feel more comfortable walking, riding a bike, or driving? What you like about these examples?











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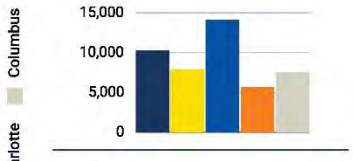
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GOAL #2
FIX IT FIRST

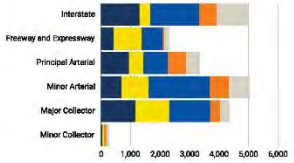
Ensure cost-effectiveness of transportation assets throughout their life cycle.

M1M embraces a "fix it first" approach, which emphasizes the importance of upgrading and preserving existing systems while ensuring that new transportation assets are built with long-term maintenance in mind, balancing immediate needs with future growth and service demands.

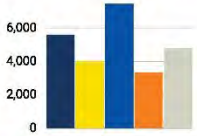
Total Lane Miles Comparison
Data Source: TxDOT, NCDOT, ODOT



Lane Miles by Functional Classification
Data Source: TxDOT, NCDOT, ODOT



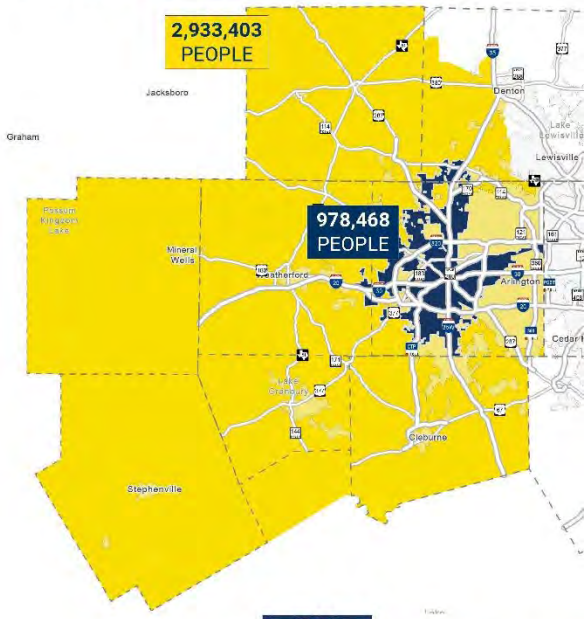
Local Street Lane Miles Comparison
Data Source: TxDOT, NCDOT, ODOT



- Fort Worth's roadway network is extensive, second only to San Antonio in the peer cities comparison below. Its local lane miles are significantly more than Austin and Columbus and it is second only to San Antonio in interstate miles, supporting its role as a key hub for regional and long-distance travel.
- While the City of Fort Worth has a population of nearly 1 million people, the "Greater Fort Worth" region is home to about 2.9 million.
- The surrounding areas contribute to the flow of commuters, freight, and services into and out of the city, influencing traffic volumes on key corridors and creating demands for expanded infrastructure.

Fort Worth's expansive roadway network and regional population underscore the urgent need for consistent maintenance and infrastructure upgrades to manage growing traffic volumes and ensure the longevity of its local and interstate corridors.

Greater Fort Worth Region
Data Source: NCTCOG, 2022 ACS 5-Year Estimates



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FORT WORTH

GOAL #2
FIX IT FIRST

OBJECTIVE #1:
Implement "life cycle management."

OBJECTIVE #2:
Proactively manage maintenance and upgrades.

OBJECTIVE #3:
Promote land use that generates sustainable revenue for the city, balancing development costs with long-term financial returns.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS?
Share them in this space



CONNECT THE GRID: Improving the grid helps reduce the strain on existing roads by distributing traffic more evenly, which reduces wear and tear and helps maintain road conditions longer.



BACKAGE ROADS: By rerouting traffic from major arterials, backage roads decrease congestion and reduce the maintenance needed on heavily trafficked main roads, extending their lifespan.



LIFECYCLE PLANNING: This approach ensures that maintenance is planned from the beginning, focusing on the long-term durability of roads, which minimizes costly repairs and prolongs infrastructure use.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS?
Share them in this space

SHARE YOUR PRIORITIES!
Distribute your colored dots in the categories above.

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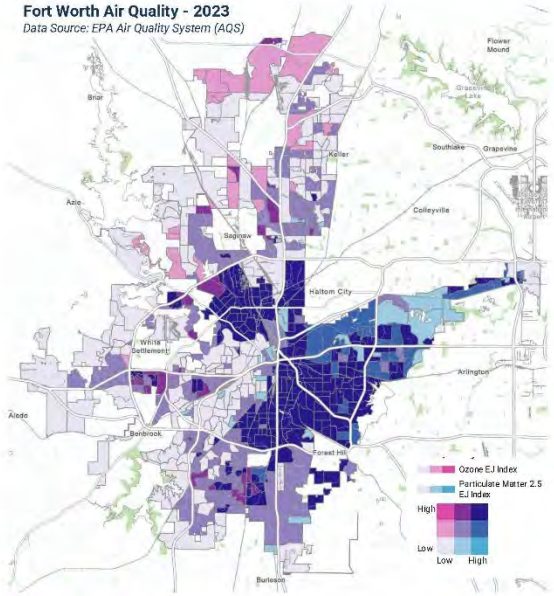
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GOAL #3
HUMAN COMFORT

Create a network that is convenient, connected, and considerate for everyone and our environment.

Transportation should be about choices, efficiency and comfort. We're focused on easing congestion, keeping traffic flowing smoothly, enhancing alternatives like biking and transit, and improving connections throughout the city. We also want to improve air quality to create a healthier and more comfortable place to live.

Fort Worth Air Quality - 2023
Data Source: EPA Air Quality System (AQS)



Proximity to high-traffic areas is typically correlated with poor air quality. Communities in the **central** and **southeast** are disproportionately affected by poor air quality.

Fort Worth's development pattern and car reliance create challenges in reducing travel times. Some denser areas, like the central and southeast, experience higher traffic-related air quality concerns. This calls for solutions that address both mobility and environmental health.

Fort Worth's average travel time is similar to that of many peer cities, despite having more lane miles and lower density. This can be attributed to longer travel distances and reliance on cars, which offset the benefits of relatively less congestion.

Average Trip Duration Comparison
Data Source: Replica, 2023





FORT WORTH
Lane Miles: 10,260
Population: 978,468
Weighted Density: 4,249.8/sq mi

AUSTIN
Lane Miles: 7,921
Population: 974,447
Weighted Density: 5,242.8/sq mi

SAN ANTONIO
Lane Miles: 14,128
Population: 1.47 million
Weighted Density: 5,560.1/sq mi

CHARLOTTE
Lane Miles: 5,637
Population: 897,720
Weighted Density: 3,635.2/sq mi

COLUMBUS
Lane Miles: 7,536
Population: 907,971
Weighted Density: 5,560.1/sq mi

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GOAL #3
HUMAN COMFORT

OBJECTIVE #1: Alleviate traffic congestion and improve the flow of traffic on major roadways.

OBJECTIVE #2: Promote sustainable transportation modes to reduce vehicle emissions and encourage cycling and walking.

OBJECTIVE #3: Improve integration of transportation modes and street connectivity for more efficient and convenient travel experiences.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS? Share them in this space



PERMEABLE AND COOLING PAVEMENT: A strategy to reduce heat in urban areas, making walking more comfortable, especially during hot months.



MORE BUS SHELTERS: Waiting for transit should be comfortable, which will encourage more people to use public transportation.



EXPANDED TREE CANOPY: Adding shade makes getting around more comfortable by cutting down on heat, and it can also help boost air quality in key areas.



GRADE-SEPARATED RAILROAD CROSSINGS: Will make traffic move more smoothly and safely, cutting down on delays for drivers and pedestrians.



HIGH-CAPACITY CITY & REGIONAL TRANSIT: Will give people faster, more comfortable alternatives to driving.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS? Share them in this space

SHARE YOUR PRIORITIES!
Distribute your colored dots in the categories above.

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FORT WORTH

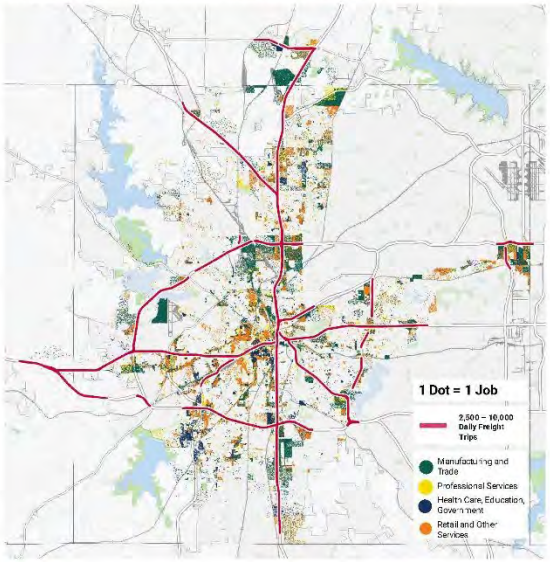
GOAL #4
ECONOMIC COMPETITIVENESS

Support businesses, improve regional and global connectivity, facilitate trade and investment, promote labor mobility, and enhance prosperity.

Fort Worth's economic success relies on efficient transportation and balancing the needs of both freight and commuters. Addressing congestion, optimizing routes, and enhancing connections between job centers are key to supporting long-term growth and economic vitality.

Employment + Most Frequent Freight Trips

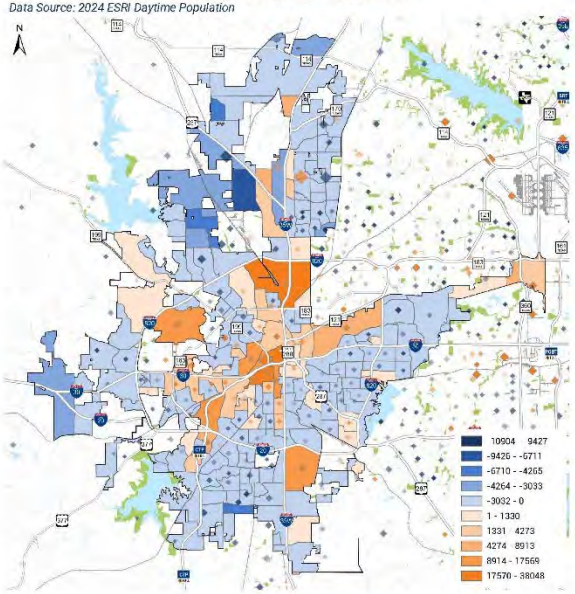
Data Source: Longitudinal Employer Household Dynamics (LEHD), 2021 | Replica, 2023



- Freight traffic follows the major highways and roads passing through **densely populated areas and employment centers**. These routes include both the central part of the city and the surrounding areas.
- Freight routes with the most frequent trips overlap with key job clusters, potentially **causing congestion** in highly trafficked zones, such as those near downtown or along key economic corridors.
- Additionally, much of Fort Worth loses population during the day, reducing the number of people who are available to **shop, dine, and engage** in other economic activities during business hours.

Fort Worth Daytime Population Change by Census Tract

Data Source: 2024 ESRI Daytime Population



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GOAL #4
ECONOMIC COMPETITIVENESS

OBJECTIVE #1:
Invest in modernization and expansion of key freight corridors to reduce bottlenecks and improve the flow of goods.

OBJECTIVE #2:
Develop and upgrade facilities and connections between rail, road, and air to streamline operations and increase efficiency.

OBJECTIVE #3:
Create an environment that attracts people to stay, work, and engage during the day.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS?
Share them in this space



TRANSIT-ORIENTED DEVELOPMENT AND CORRIDORS: This idea creates dense, mixed-use developments along transit corridors, encouraging people to live, work, and shop in areas with easy access to public transportation.



MIXED USE CENTERS: Develop hubs where residential, commercial, employment, and recreational spaces are conveniently co-located, making it easy to access daily needs and amenities.



RELIEF ROUTES FOR FREIGHT: By building designated freight relief routes, heavy trucks stay out of the city center, reducing congestion and wear on local roads, while maintaining efficient transportation for goods.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS?
Share them in this space

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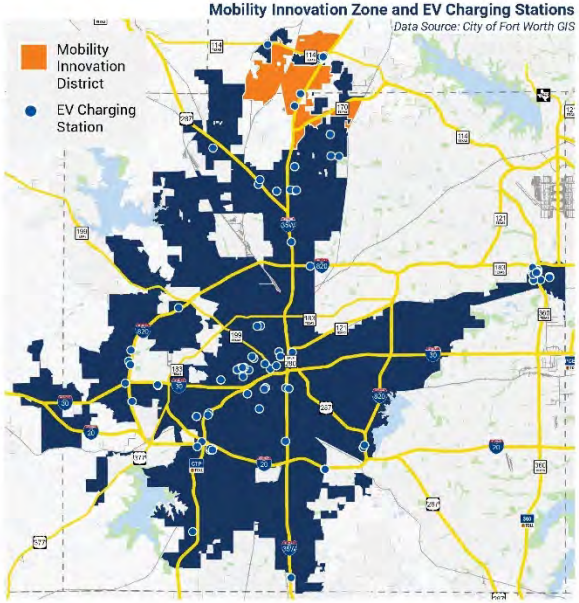
GOAL #5
TECHNOLOGY

Embrace flexible and resilient technology to adapt to evolving transportation needs and challenges.

Fort Worth is making big strides in transportation technology. However, rapid population growth is putting pressure on existing infrastructure, creating a gap between what's currently in place and the technology needed to keep up with future transportation demands.

Mobility Innovation Zone and EV Charging Stations

Data Source: City of Fort Worth GIS



The table to the right indicates different Smart Technologies and their alignment with M1M goals. Highlighted areas have been implemented in some capacity.

Fort Worth is rapidly becoming a leader in transportation innovation, leveraging advanced technologies like real-time traffic management systems and pioneering mobility solutions.

Smart Technologies and Focus Areas

Data Source: City of Fort Worth GIS

Goal	Smart Application
Safety	• Speed Monitoring and Compliance • Pedestrian and bicyclist phasing at traffic signals • Emergency Vehicle preemption
Fix It First	• Resident Infrastructure Maintenance Reporting • Predictive Infrastructure Maintenance • Smart Streetlights
Human Comfort	• Real-time public transit information • EV Charging Stations • Transit signal priority • Smart park and ride system
Economy	• Smart Freight and Logistics Coordination • Smart Parking Management • Smart Metering for Parking
Technology	• Connected and autonomous vehicle technology • Real-time public transit app • Video and data analytics
Equity	• Real-Time Multilingual Public Transit Information Systems • On-Demand Transit Services • Bicycle and Pedestrian Counters

ADVANCED TRAFFIC MANAGEMENT: Real-time traffic monitoring and signal adjustments through the Traffic Management Center

INNOVATION IN MOBILITY: The Alliance Mobility Innovation Zone drives autonomous vehicle technologies, drone deliveries, and hydrogen fuel cells.

CLEANER TRANSPORTATION: Fort Worth is expanding its EV charging network, supporting the transition to electric vehicles.

"HOT CORRIDOR": Along East Lancaster that includes fiber, E/V charging, premium transit amenities, WiFi, and other smart cities improvements.

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GOAL #5
TECHNOLOGY

OBJECTIVE #1:
Expand upon existing smart infrastructure initiatives to enhance responsiveness and efficiency.

OBJECTIVE #2:
Enhance public transportation systems with adaptive technologies.

OBJECTIVE #3:
Promote sustainable and resilient transportation modes.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS?
Share them in this space



AUTONOMOUS FREIGHT AND TRANSIT:
This involves implementing self-driving technology for freight and public transit, which can improve efficiency, reduce costs, and enhance safety on our roads.



REAL-TIME TRAFFIC AND TRANSIT TRACKING:
These systems provide up-to-the-minute data on traffic conditions and transit locations, allowing for better traffic flow and a more reliable public transportation experience.



SYNCHRONIZED TRAFFIC SIGNALS:
Coordinating traffic signals across key corridors helps reduce delays, improve travel times, and increase overall efficiency for both vehicles and pedestrians.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS?
Share them in this space

SHARE YOUR PRIORITIES!
Distribute your colored dots in the categories above.

MOVING A MILLION

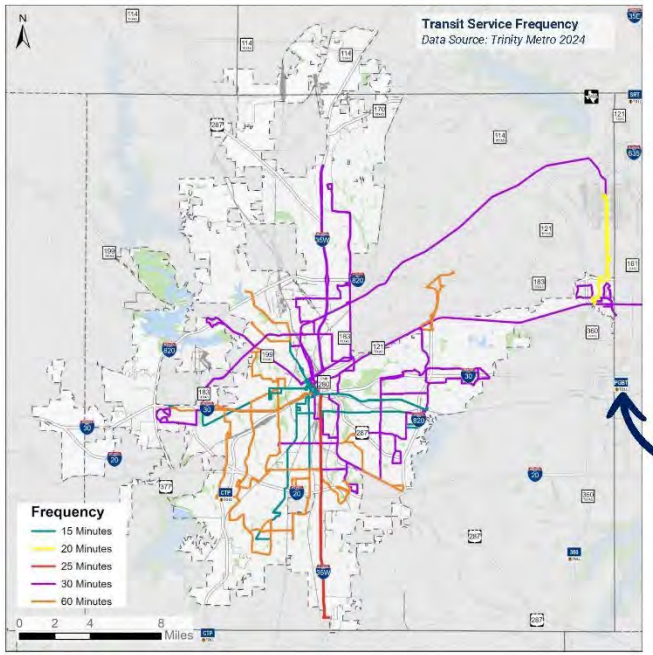
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GOAL #6
EQUITY

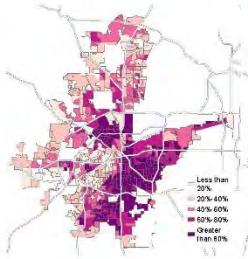
Ensure accessible, affordable, and reliable transportation options for all ages and abilities.

Many Fort Worth residents experience barriers to accessing essential services, employment opportunities, and community resources due to limited transit coverage and the costs of vehicle ownership. As the city continues to grow, we must develop a transportation system that prioritizes equity and ensure all residents can access essential services, employment, and economic opportunities.

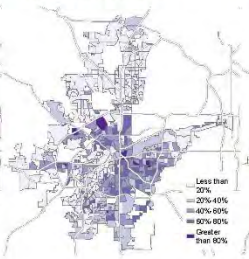


Households without cars, along with people of color, low-income individuals, and those with limited English proficiency, are primarily concentrated in the **core and southeast**.

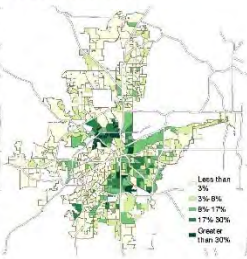
Percent People of Color
Data Source: EPA EJ Screen



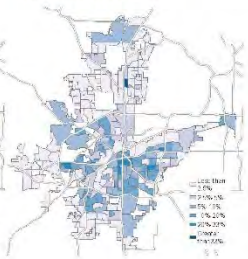
Percent Low Income
Data Source: EPA EJ Screen



Limited English Proficiency
Data Source: EPA EJ Screen



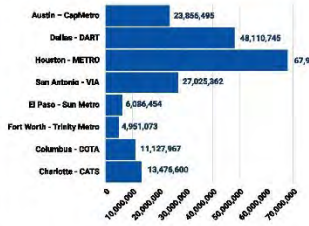
Percent No Vehicle
Data Source: EPA EJ Screen



Gaps in the high-frequency network include:

- **South FW, along I-35W**: Disadvantaged Populations
- **Central FW, between I-820 and Hwy 183**: Disadvantaged Populations
- **West FW, along I-30**: Elderly and Disabled Populations

2023 Transit Ridership Peer City Comparisons
Data Source: TxDOT, COTA, CATS



Trinity Metro's 2023 ridership stands at **4.95 million**, significantly lower than similarly-sized cities like Austin, Columbus, and Charlotte.

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GOAL #6
EQUITY

OBJECTIVE #1: Enhance public transit accessibility and coverage, particularly in transit-dependent areas.

OBJECTIVE #2: Improve transportation affordability for low-income residents.

OBJECTIVE #3: Ensure reliability and safety across all modes of transportation, particularly for vulnerable road users.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS?
Share them in this space



ENHANCE TRANSIT IN UNDERSERVED AREAS: We need to improve transit options in neighborhoods that currently lack adequate services, ensuring everyone has access to reliable transportation.



WELL-LIT NETWORK: Prioritizing better lighting along roadways, sidewalks, and paths will increase safety and make these spaces more usable, especially during evening hours.



ADA-ACCESSIBLE DESIGN: Incorporating designs that are accessible for people with disabilities ensures that public spaces and transportation services are inclusive for all.



PRIORITIZE MULTIMODAL IN LOW VEHICLE OWNERSHIP AREAS: Focusing on areas where vehicle ownership is low, we will prioritize public transit, biking, and walking options to ensure mobility for everyone.

BIG IDEAS

WHAT ARE YOUR BIG IDEAS?
Share them in this space

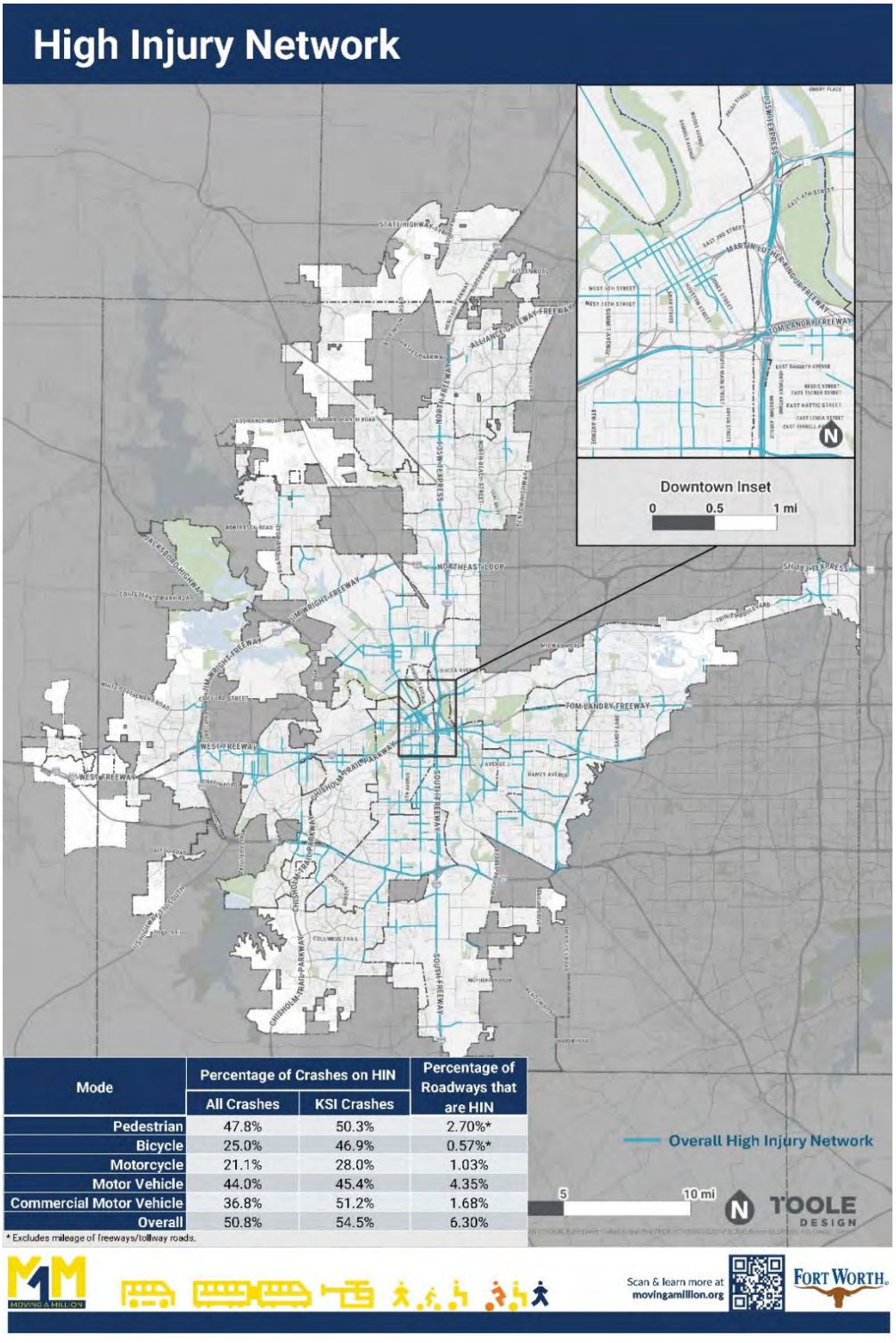
SHARE YOUR PRIORITIES!
Distribute your colored dots in the categories above.

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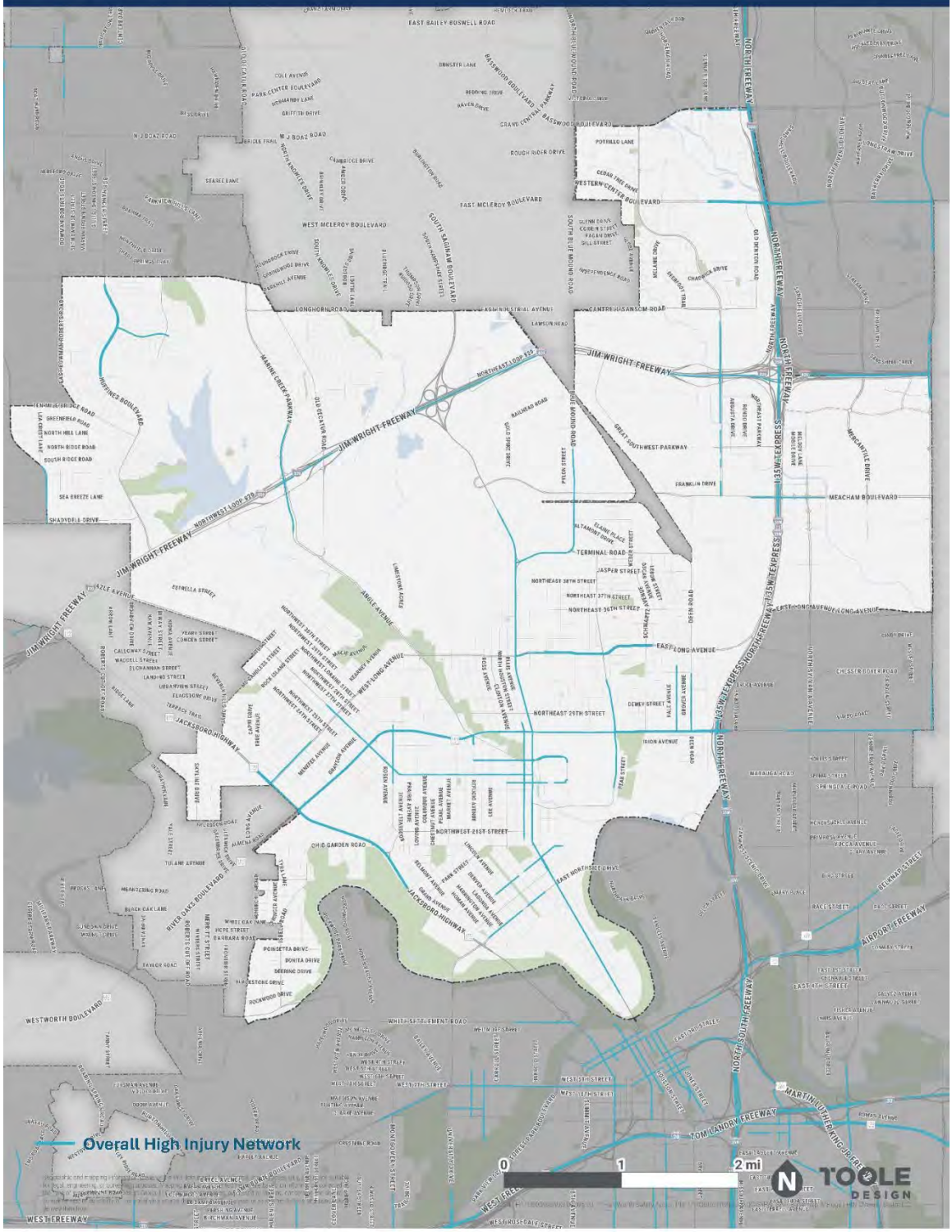
Safety Action Plan High Injury Networks



Mode	Percentage of Crashes on HIN		Percentage of Roadways that are HIN
	All Crashes	KSI Crashes	
Pedestrian	47.8%	50.3%	2.70%*
Bicycle	25.0%	46.9%	0.57%*
Motorcycle	21.1%	28.0%	1.03%
Motor Vehicle	44.0%	45.4%	4.35%
Commercial Motor Vehicle	36.8%	51.2%	1.68%
Overall	50.8%	54.5%	6.30%

* Excludes mileage of freeways/tollway roads.

High Injury Network – District 2

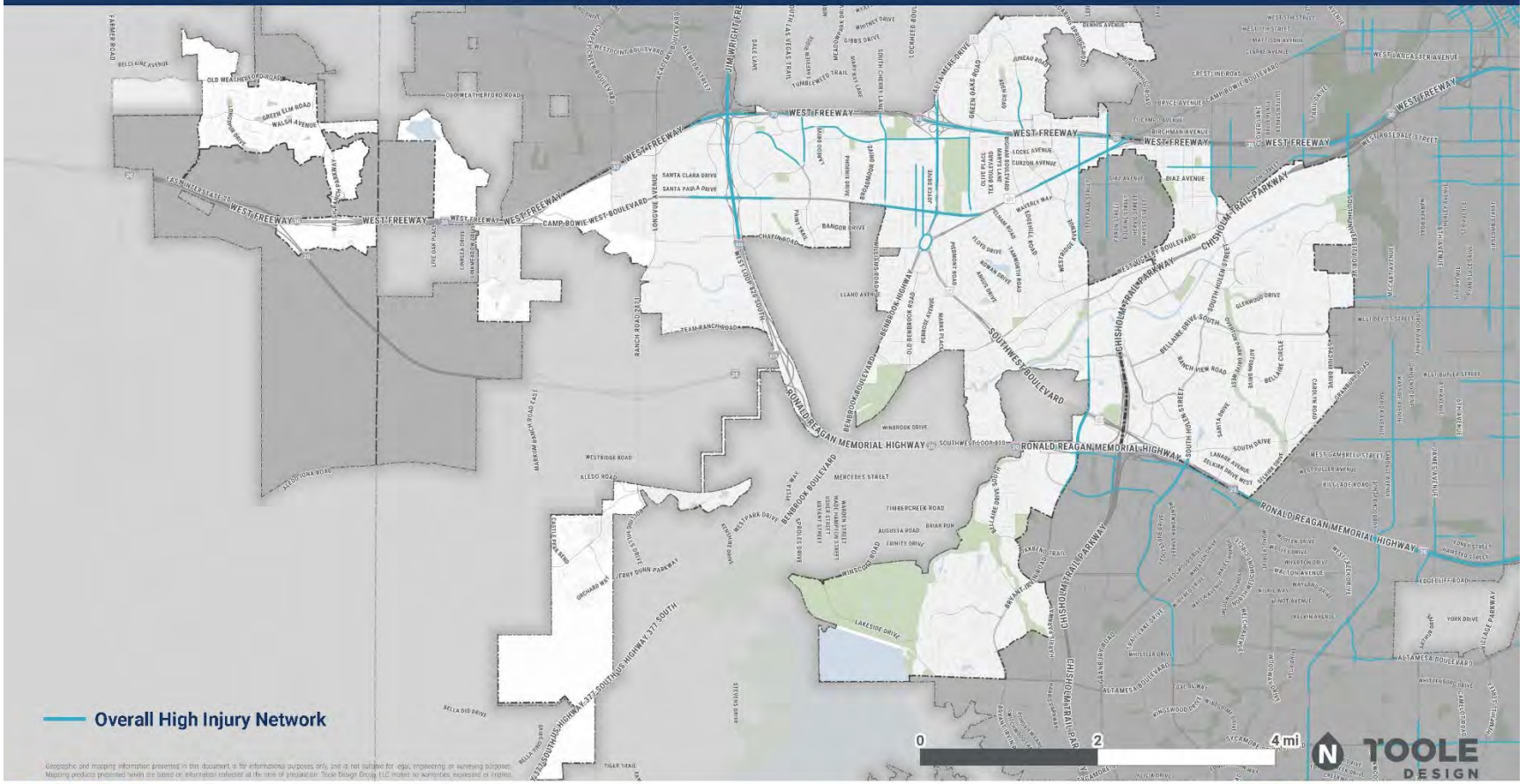


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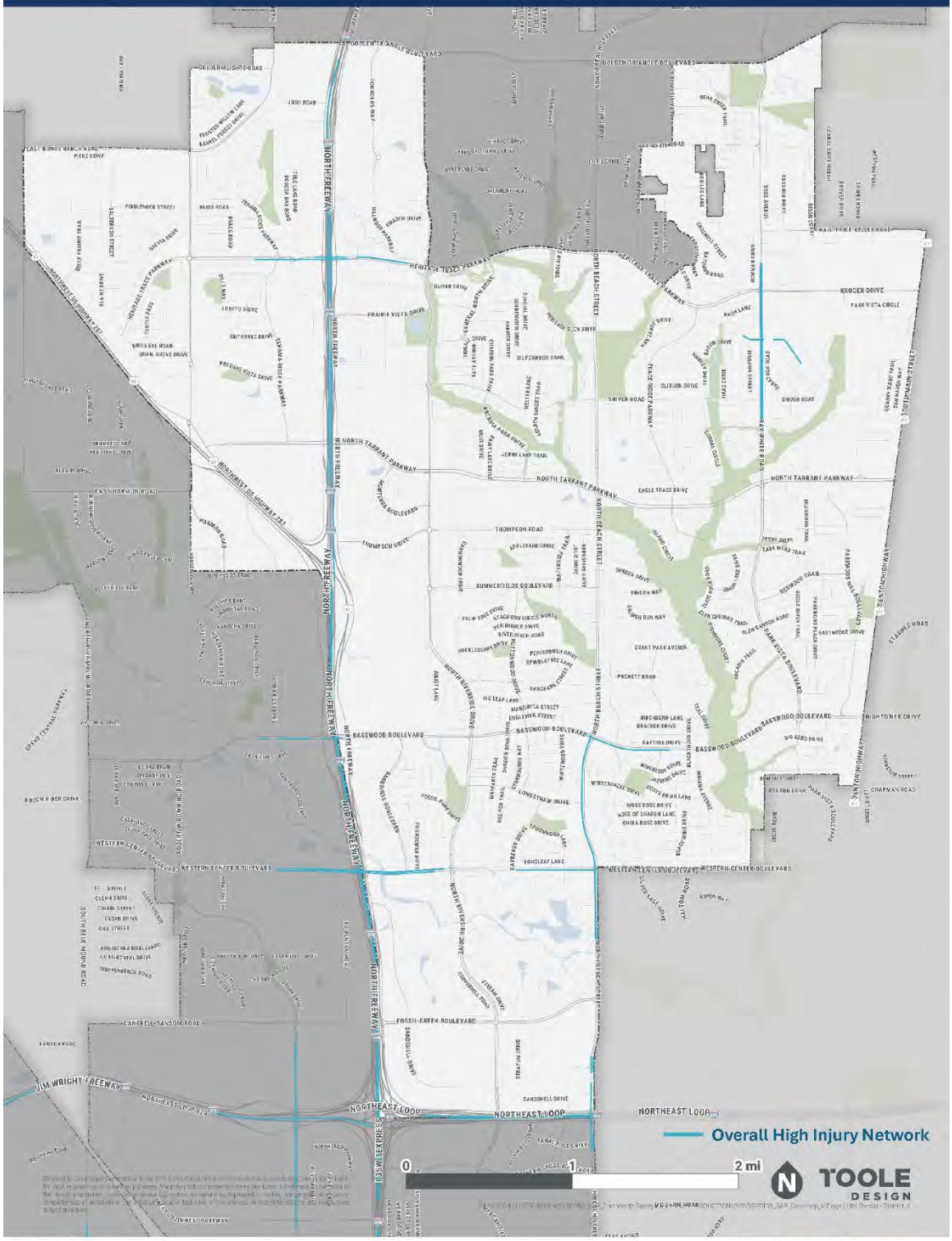
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FORT WORTH

High Injury Network – District 3


Overall High Injury Network
0
2
4 mi
WEST FREEWAY
CAMP BOWIE WEST BOULEVARD
RONALD REAGAN MEMORIAL HIGHWAY
SOUTHWEST BOULEVARD
CHISHOLM TRAIL PARKWAY
BENBROOK BOULEVARD
SOUTHWEST BOULEVARD
ALTAMESA BOULEVARD
LAKESIDE DRIVE
WINSCOTT ROAD
TIMBERCREEK ROAD
MERCEDES STREET
WESTBRIDGE ROAD
ALEDO ROAD
OLD WEATHERFORD ROAD
GREEN ELM ROAD
WALSH AVENUE
JIM WRIGHT FREEWAY
GREEN OAKS ROAD
LOCKE AVENUE
BIAZ AVENUE
WAVERLY WAY
SANTA CLARA DRIVE
SANTA PAULA DRIVE
BANGOR DRIVE
LLANO AVENUE
RANCH ROAD 1886
WEST FORK DRIVE SOUTH
BENBROOK HIGHWAY
OLD BENBROOK ROAD
WINBROOK DRIVE
WESTBRIDGE ROAD
ALEDO ROAD
MERCEDES STREET
TIMBERCREEK ROAD
AUGUSTA ROAD
BRIAR RUN
TRINITY DRIVE
WESTPARK DRIVE
BENBROOK BOULEVARD
FERT DUNN PARKWAY
LAKESIDE DRIVE
SOUTH HIGHWAY 377
SOUTH HIGHWAY 377
BELLA DIO DRIVE
TIGER TRAIL
ALLENDALE ROAD
FARMER ROAD
BELCLAIRE AVENUE
OLD WEATHERFORD ROAD
GREEN ELM ROAD
WALSH AVENUE
WEST FREEWAY
CAMP BOWIE WEST BOULEVARD
LONGVIEW AVENUE
SANTA CLARA DRIVE
SANTA PAULA DRIVE
BANGOR DRIVE
CHAPIN ROAD
WEST FORK DRIVE SOUTH
TEAM RANCH ROAD
RANCH ROAD 1886
LLANO AVENUE
BENBROOK HIGHWAY
OLD BENBROOK ROAD
WINBROOK DRIVE
WESTBRIDGE ROAD
ALEDO ROAD
MERCEDES STREET
WESTPARK DRIVE
BENBROOK BOULEVARD
FERT DUNN PARKWAY
LAKESIDE DRIVE
SOUTH HIGHWAY 377
SOUTH HIGHWAY 377
BELLA DIO DRIVE
TIGER TRAIL
ALLENDALE ROAD
FARMER ROAD
BELCLAIRE AVENUE
OLD WEATHERFORD ROAD
GREEN ELM ROAD
WALSH AVENUE
JIM WRIGHT FREEWAY
GREEN OAKS ROAD
LOCKE AVENUE
BIAZ AVENUE
WAVERLY WAY
SANTA CLARA DRIVE
SANTA PAULA DRIVE
BANGOR DRIVE
LLANO AVENUE
RANCH ROAD 1886
WEST FORK DRIVE SOUTH

High Injury Network – District 4

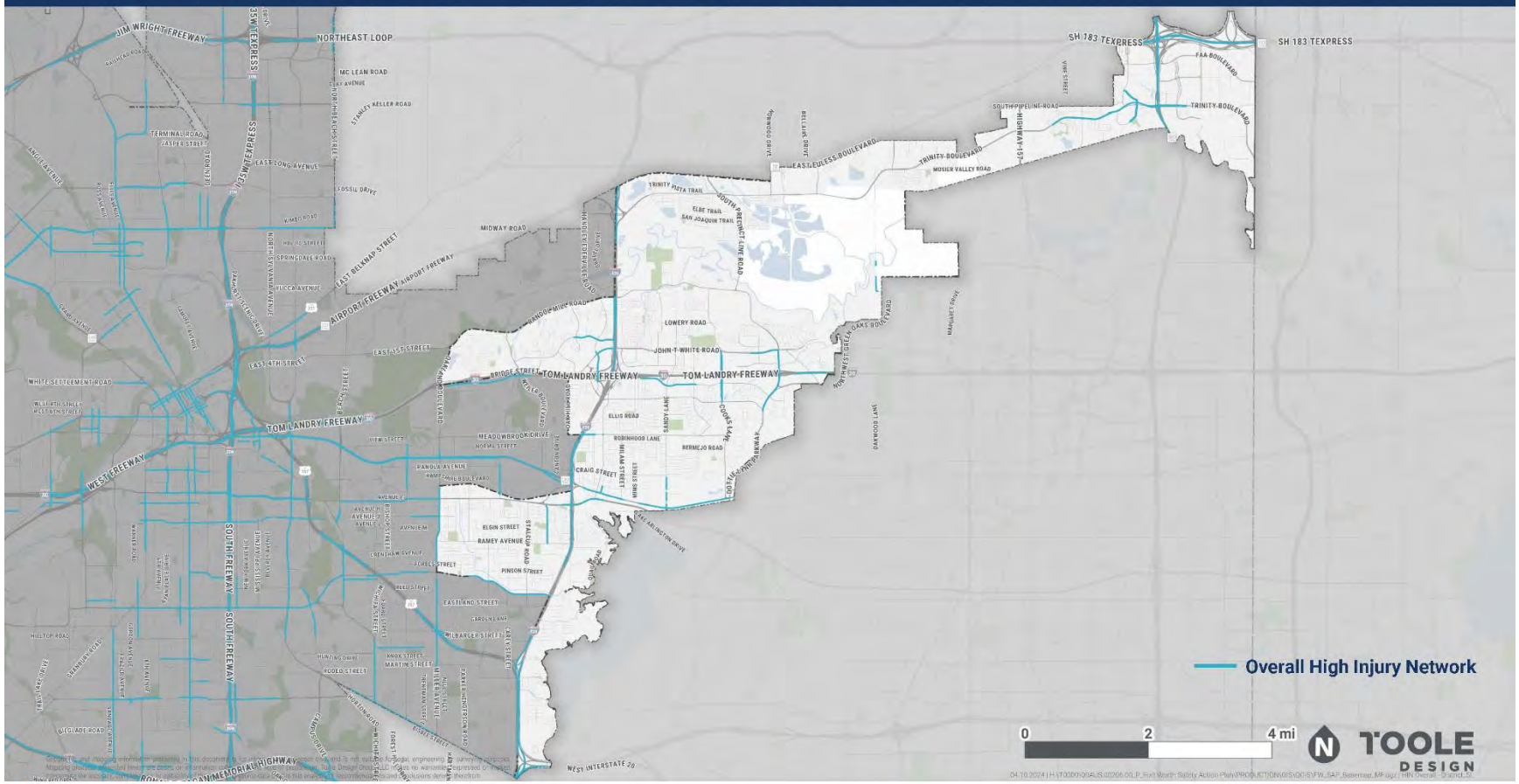


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High Injury Network – District 5

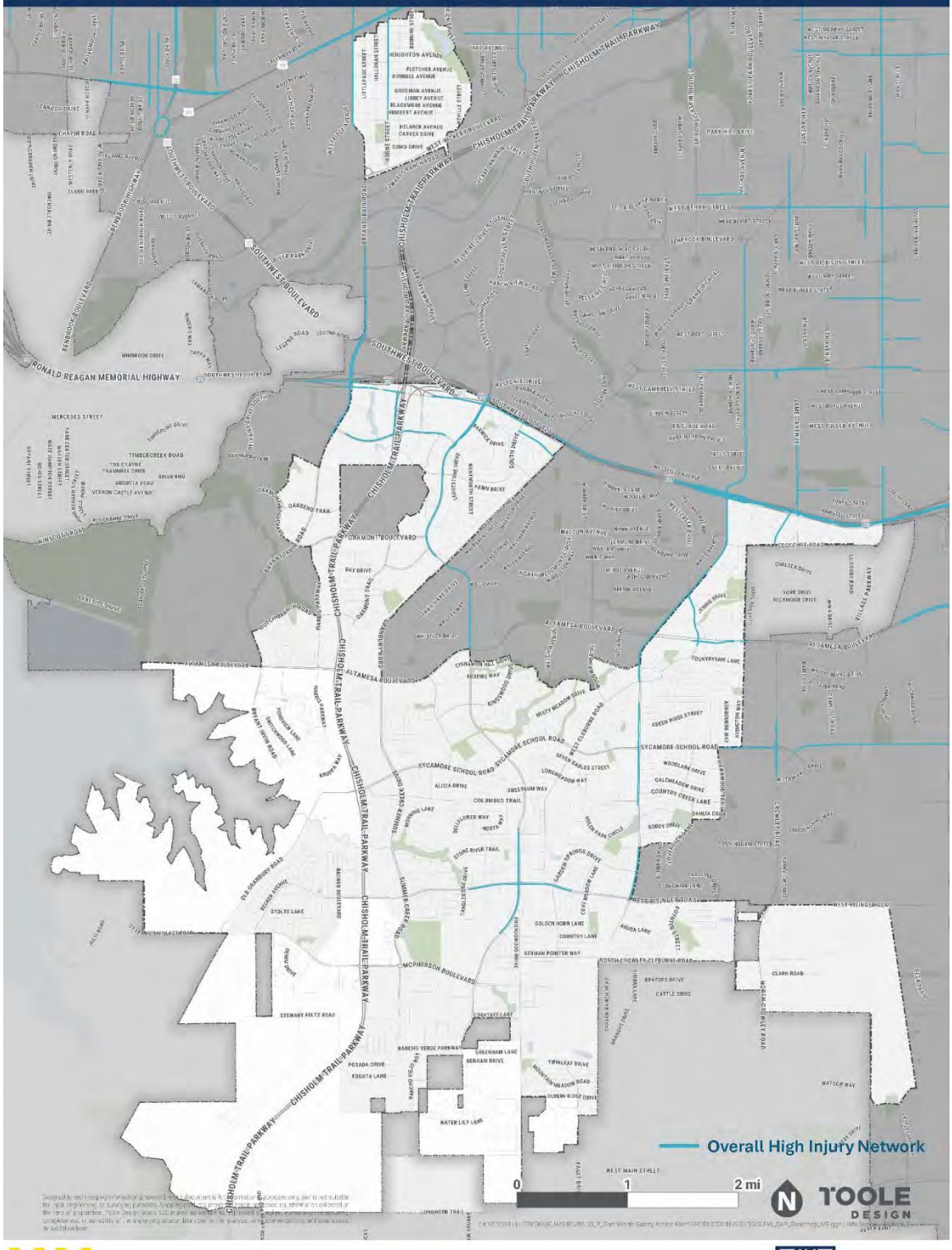


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High Injury Network – District 6



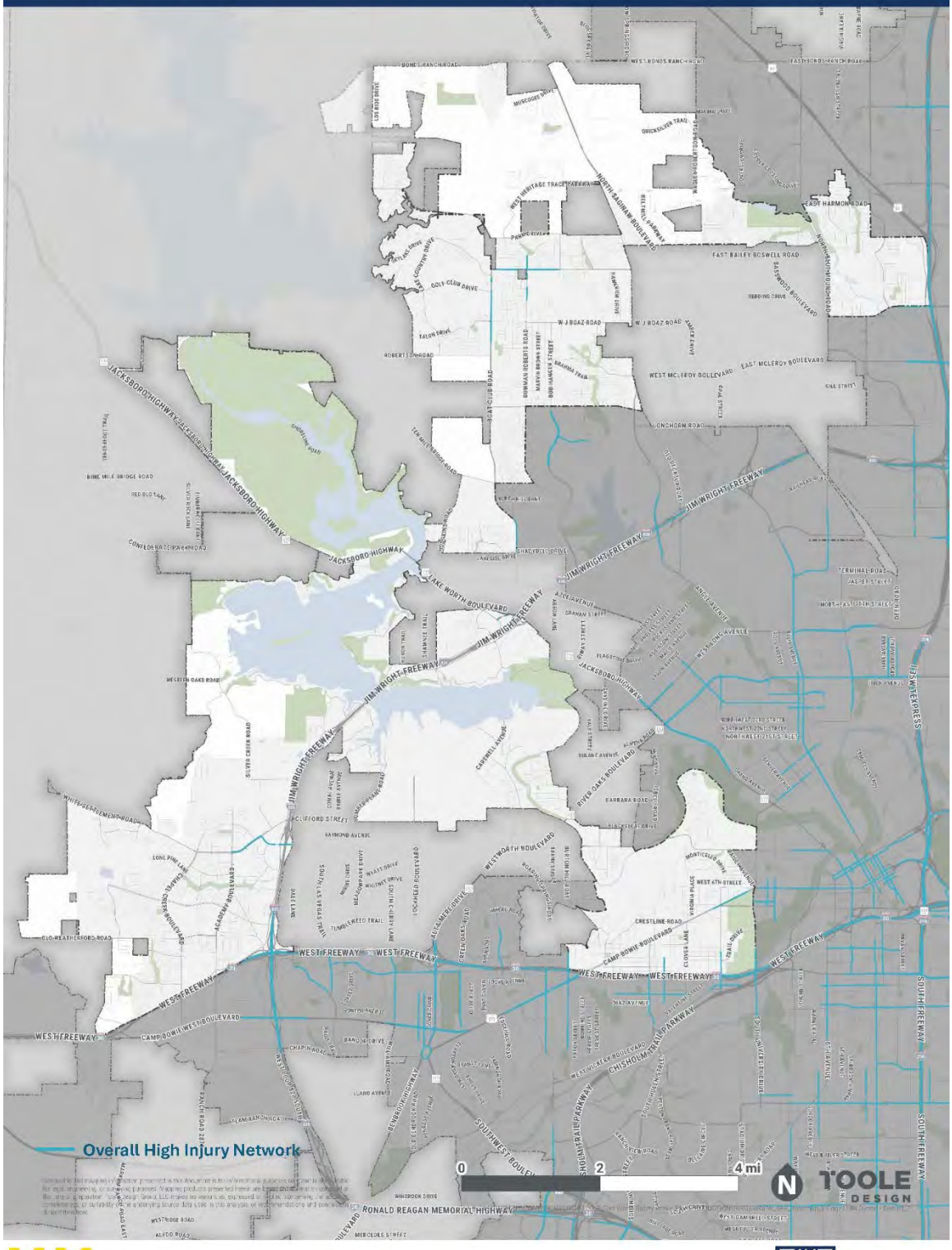
TOOLE DESIGN

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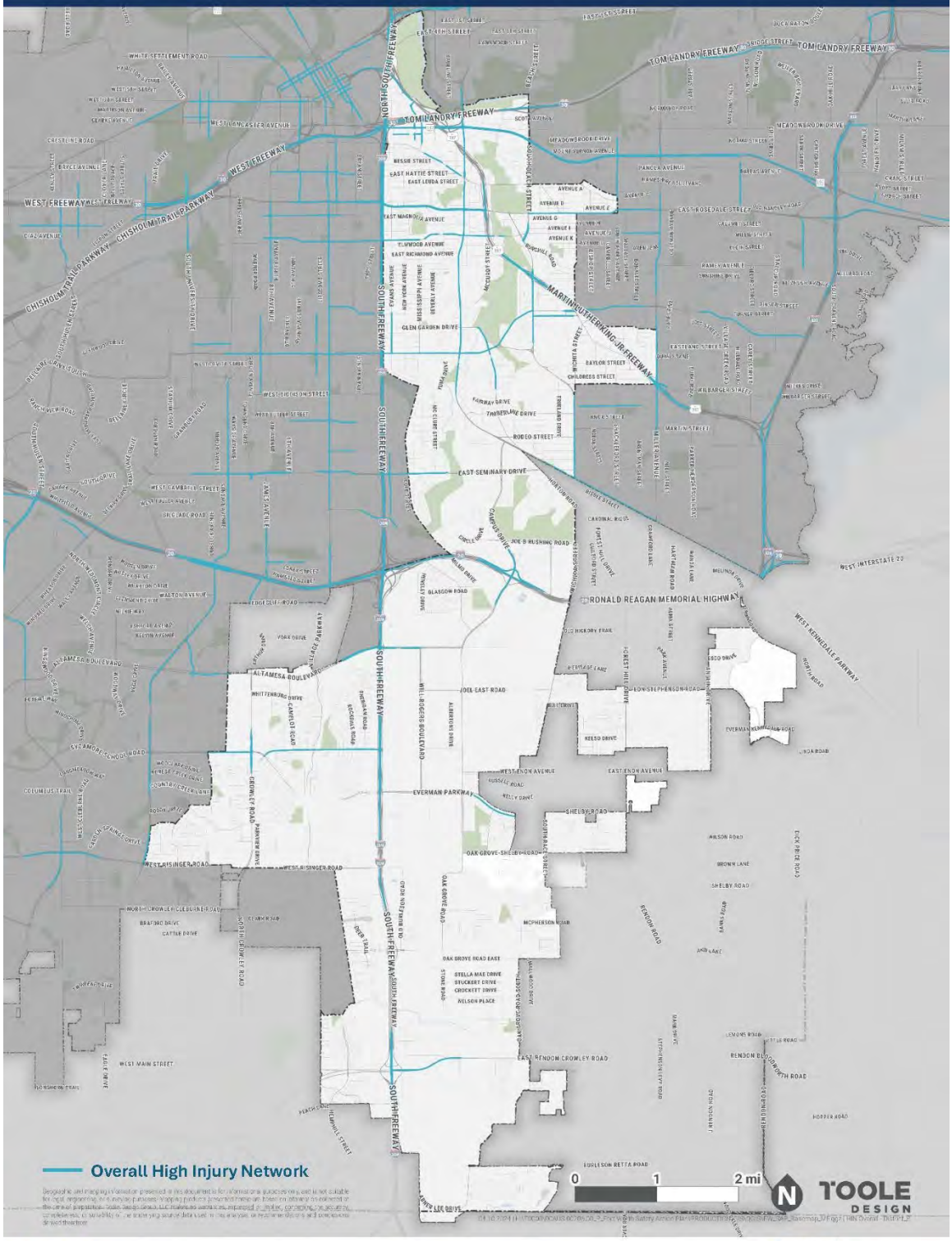
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High Injury Network – District 7


Overall High Injury Network
0
2
4 mi
N
TOOLE DESIGN
JACKSBORO HIGHWAY
JIM WRIGHT FREEWAY
WEST FREEWAY
LAKE WORTH BOULEVARD
RIVER OAKS BOULEVARD
WESTWORTH BOULEVARD
CAMP BOWIE WEST BOULEVARD
CAMP BOWIE BOULEVARD
CHISHOLM TRAIL PARKWAY
SOUTH FREEWAY
RONALD REAGAN MEMORIAL HIGHWAY
EAST BAILEY BOSWELL ROAD
EAST HARMON ROAD
WEST MCLEROY BOULEVARD
EAST MCLEROY BOULEVARD
LONGHORN ROAD
BOAT CLUB ROAD
WEST BONDS RANCH ROAD
EAST BONDS RANCH ROAD
GOLF CLUB DRIVE
W J BOAZ ROAD
ROBERTS RANCH ROAD
NORTH BASSWOOD BOULEVARD
WEST HERITAGE TRACE PARKWAY
QUICKSILVER TRAIL
PARK RIVERS
EAST COUNTRY DRIVE
ATLAS DRIVE
TALON DRIVE
BASSWOOD BOULEVARD
BOWMAN ROBERTS ROAD
MARVIN BROWN STREET
BOB HANGER STREET
BRAHMA TRAIL
TEN MILE BRIDGE ROAD
NINE MILE BRIDGE ROAD
RED BUD LANE
CONFEDERATE PARK ROAD
SHORELINE ROAD
SHADYDELL DRIVE
ANEGAD DRIVE
AZLE AVENUE
GRANAN STREET
MAIN STREET
ENGLE AVENUE
TERMINAL ROAD
EAST 1ST STREET
NORTHEAST 28TH STREET
NORTHEAST 21ST STREET
WESTERN OAKS ROAD
SILVER CREEK ROAD
SHANNYLE TRAIL
HIDDEN TRAIL
CARNELL AVENUE
ALAMEDA AVENUE
VILLANY AVENUE
BARBARA ROAD
CLIFFORD STREET
RAYMOND AVENUE
WHITE SETTLEMENT ROAD
LONE PINE LANE
CHAPEL CREEK BOULEVARD
ACADEMY BOULEVARD
OLD HEATHERFORD ROAD
MEADOWPARK DRIVE
MEADOWPARK COURT
MEADOWPARK EAST DRIVE
MEADOWPARK DRIVE
TIMBERCREEK TRAIL
TIMBERCREEK COURT
TIMBERCREEK DRIVE
TIMBERCREEK TRAIL
TIMBERCREEK BOULEVARD
CREEK OAKS ROAD
CRESTLINE ROAD
MONTICELLO DRIVE
WEST 6TH STREET
VIRGINIA PLACE
CLOVER LANE
TRAIL DRIVE
WEST 7TH AVENUE
WEST 6TH AVENUE
WEST 5TH AVENUE
WEST 4TH AVENUE
WEST 3RD AVENUE
WEST 2ND AVENUE
WEST 1ST AVENUE
WEST BOULEVARD
WEST CREEK DRIVE
SOUTHWEST BOULEVARD
SOUTHWEST PLACE
SOUTHWEST DRIVE
SOUTHWEST PARKWAY
SOUTHWEST TRAIL
SOUTHWEST CIRCLE
SOUTHWEST COURT

High Injury Network – District 8

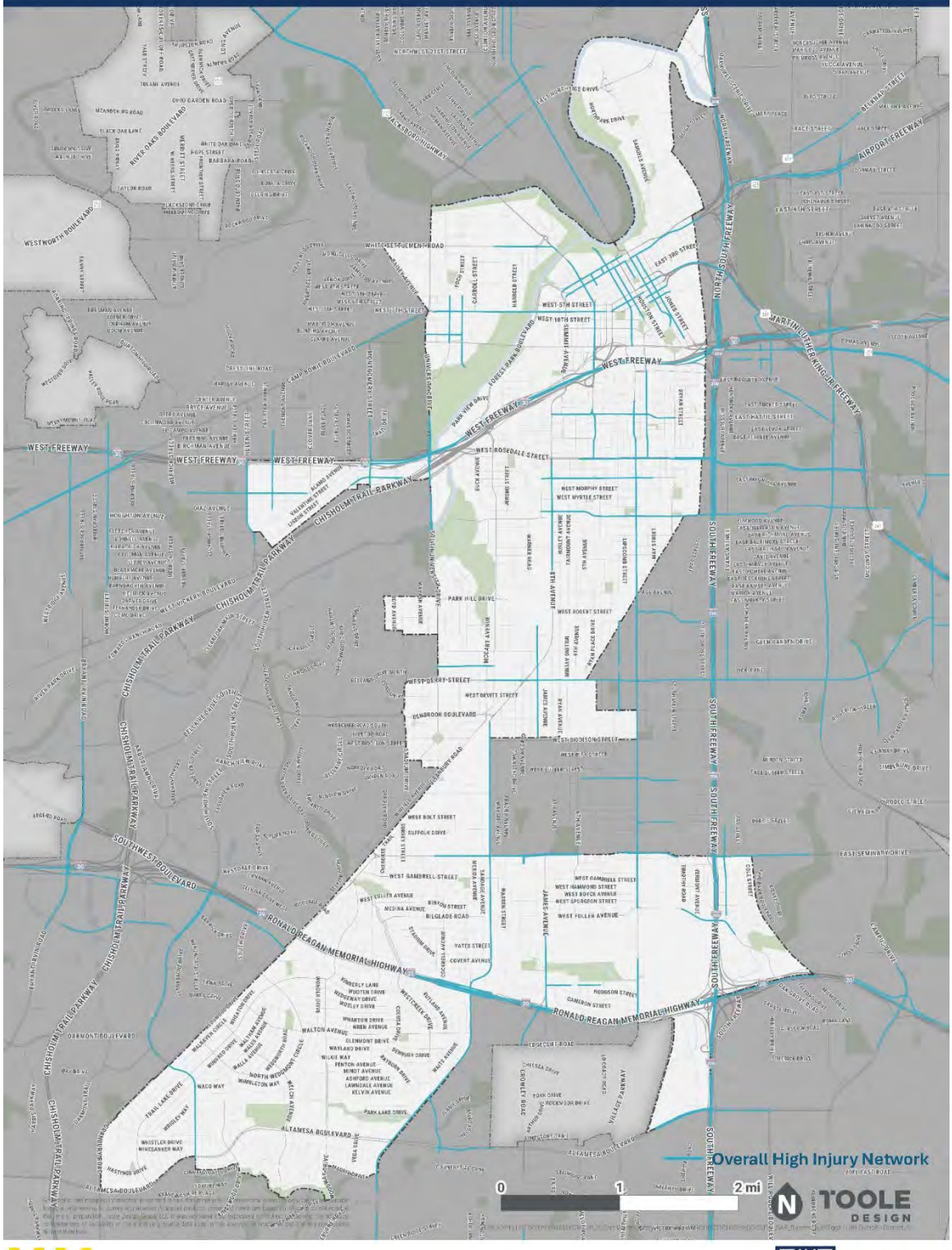


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High Injury Network – District 9

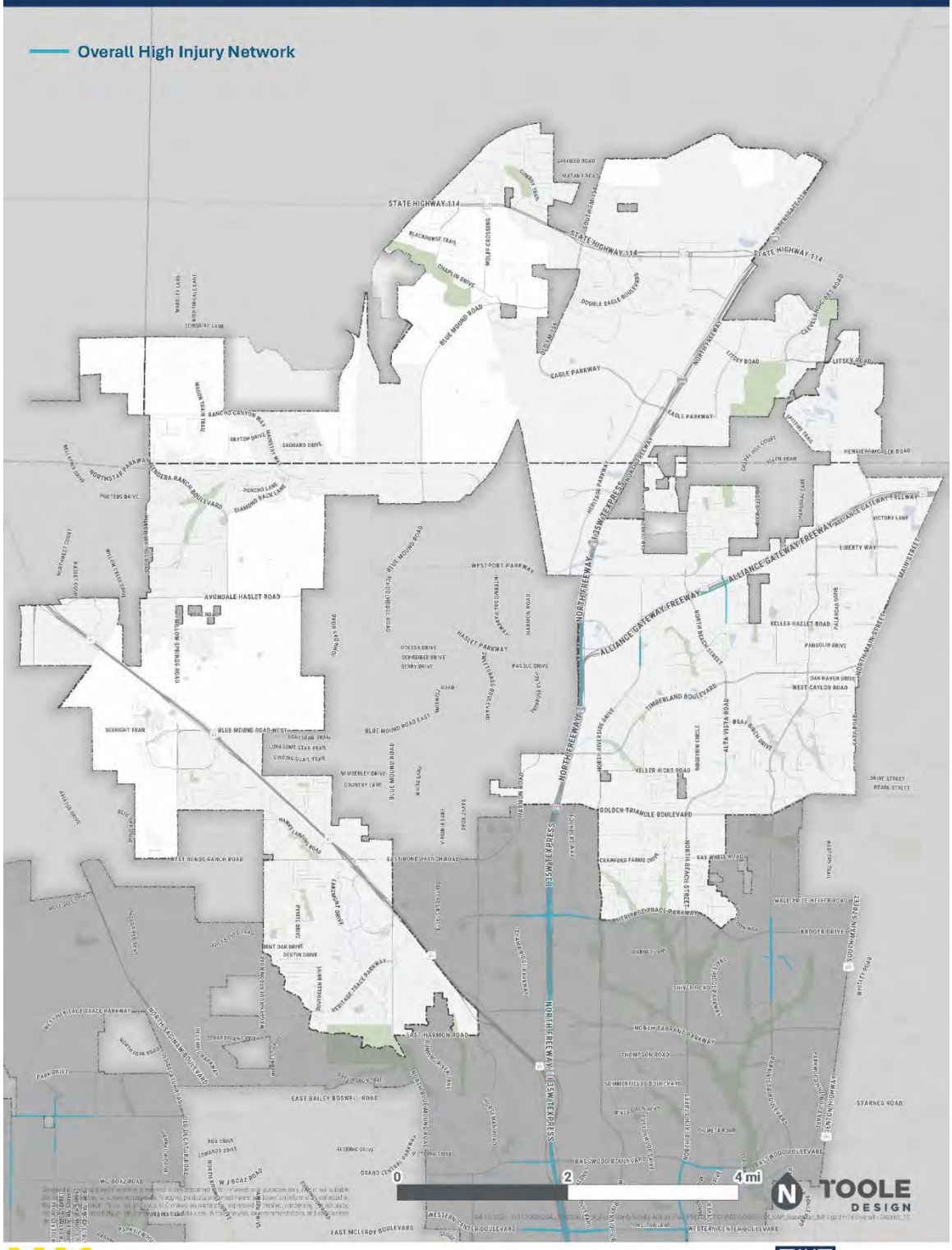


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High Injury Network – District 10

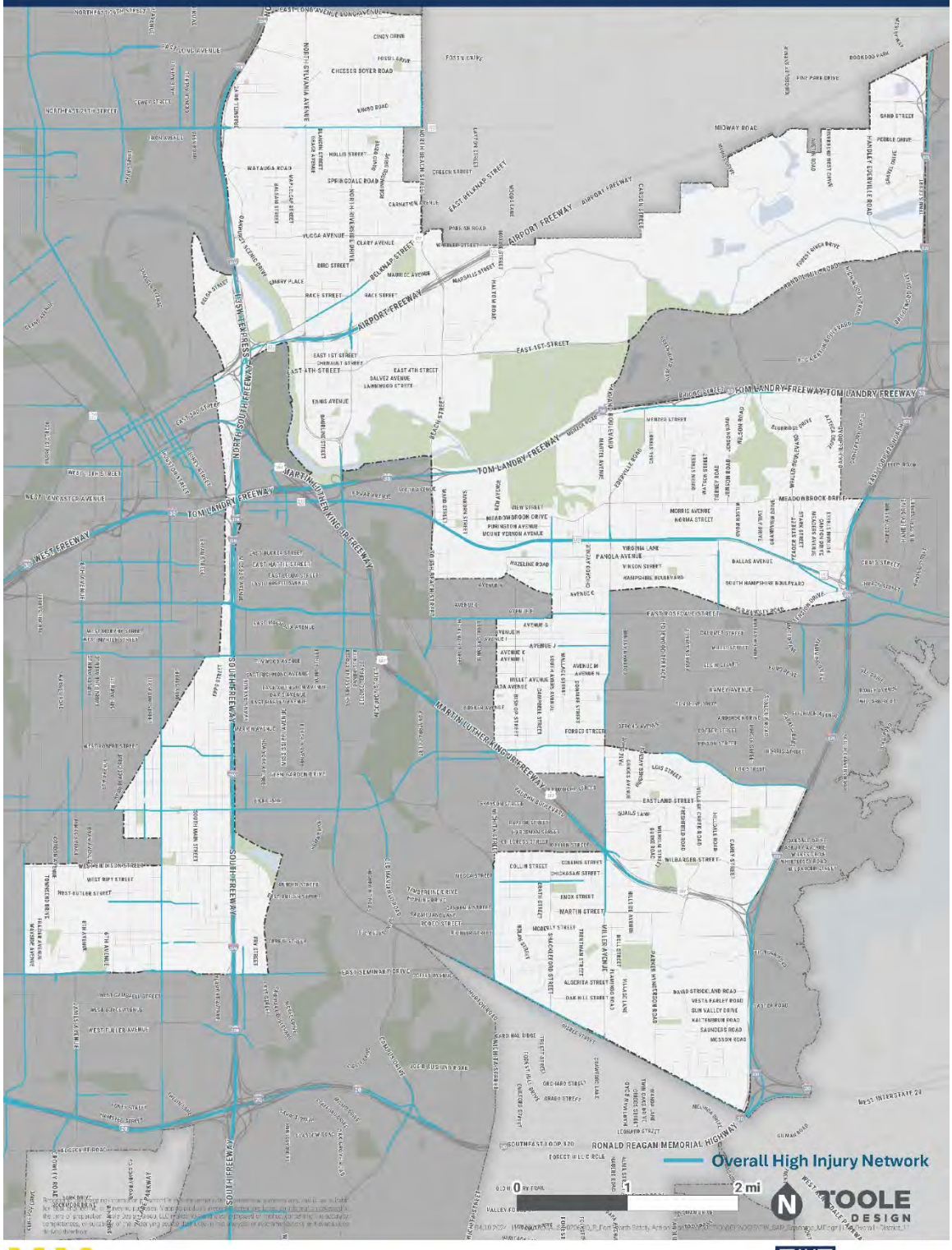


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High Injury Network – District 11



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District 10 Open House Exhibits

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District 10 Network Performance





What is Level of Service (LOS) and Why Does It Matter?

Level of Service (LOS) is a way to measure how well roads handle traffic. Think of it as a report card for our roadways, ranging from A (free-flowing traffic) to F (severe congestion). LOS takes into account things like speed, travel time, and traffic density to help us understand how efficiently people can get around. LOS directly impacts:

- **Commute times** – Nobody likes sitting in traffic for hours.
- **Air quality** – More congestion means more emissions.
- **Quality of life** – Better traffic flow means easier access to jobs, schools, and services.

What's Happening in District 10?

District 10, outlined in black on the map, faces some of the worst congestion in Fort Worth. Major corridors like Highway 114, Avondale Haslet, and Highway 170 are already struggling, with many segments at LOS D or worse. The situation is only projected to get worse by 2045, even with planned improvements.

What the 2045 Map Tells Us

The 2045 map shows what the network will look like with planned improvements, but it's clear that those upgrades won't be enough to handle the explosive growth in this area. Segments that are already congested are expected to move into LOS F, meaning severe delays and gridlock. Without additional interventions, District 10 residents will face longer commute times, reduced access to services, and overall frustration with their daily travel.

How We're Using This Data

The Moving a Million (M1M) plan is taking a data-driven approach to tackle these challenges. By analyzing LOS and intersection volumes, M1M is identifying the biggest problem areas in District 10 and across Fort Worth. Here's how this information helps:

- **Pinpointing performance gaps**: LOS data highlights where congestion is worst, so resources can be focused on the most critical areas.
- **Planning for the future**: By understanding how traffic patterns are expected to change, M1M can propose solutions that address not just today's issues, but tomorrow's challenges too.
- **Targeted improvements**: Whether it's adding capacity, improving intersections, or enhancing multimodal options, M1M is working to deliver solutions that make travel easier and more efficient.

A BETTER FUTURE FOR DISTRICT 10

District 10 residents deserve a transportation network that works for them—one that's efficient, safe, and accessible. Using a data-driven approach, M1M is creating a roadmap to address the area's most pressing issues. Together, we can ensure that by 2045, Fort Worth's transportation system supports the growth and prosperity of its communities—starting with District 10.

District 10's Intersection Hotspots

To determine which intersections experience the most traffic in District 10, PM peak-hour traffic volumes for left turns, right turns, and through movements were aggregated and analyzed, and the top 10 intersections experiencing the highest volumes were identified.

Key Challenges:

- **Overloaded turn lanes**: Left-turn and right-turn lanes are often maxed out, spilling into through lanes and creating gridlock.
- **Major corridor bottlenecks**: High-traffic intersections along routes like Highway 114 and Avondale Haslet struggle to accommodate peak-hour demand.
- **Ripple effects**: Delays at one intersection can quickly cascade to nearby roads, compounding congestion issues.

Top 10 High-Volume Intersections



Smart Fixes for Big Traffic Problems

While long-term solutions take time, interim improvements can provide immediate relief at these key intersections, bridging the gap between addressing current issues and laying a strong foundation for the future. These measures are designed to tackle congestion head-on and keep traffic moving more smoothly.

INTERIM IMPROVEMENTS







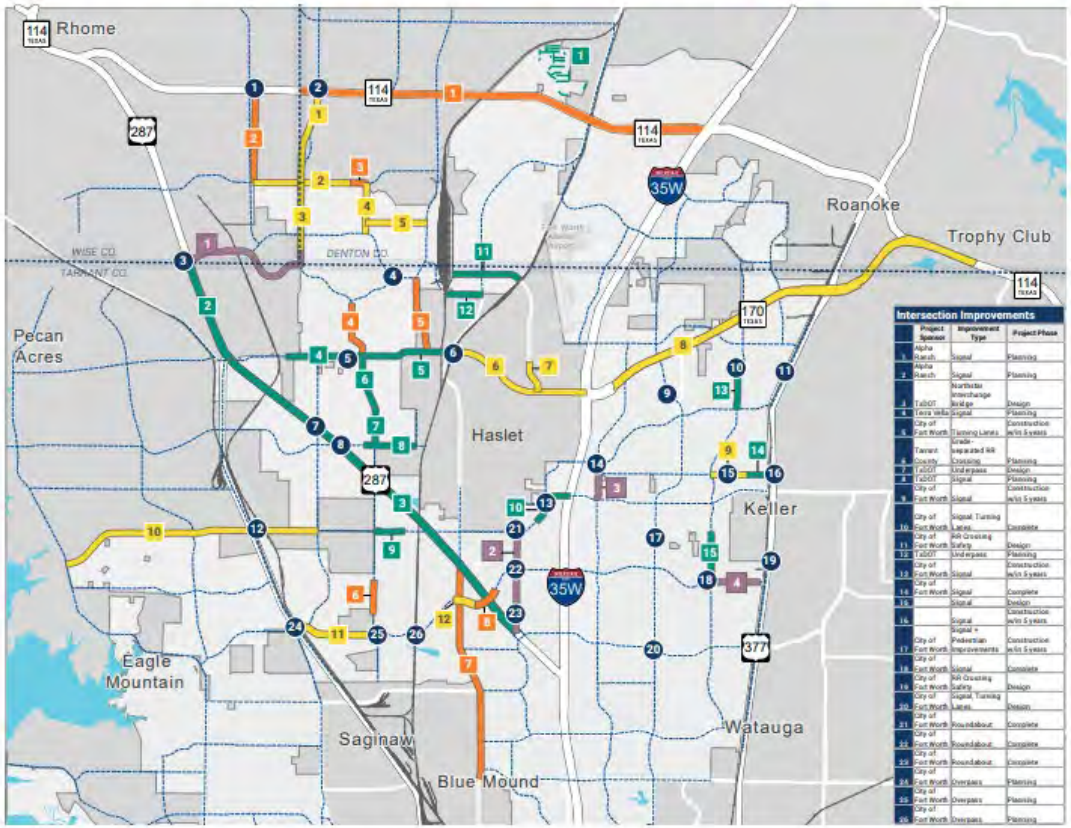


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www.movingamillion.org

transportation@fortworthtexas.gov

District 10 Transportation Projects



Intersection Improvements

	Project Sponsor	Improvement Type	Project Phase
1	Alpha Ranch	Signal	Planning
2	Alpha Ranch	Signal	Planning
3	TxDOT	Northstar Interchange Bridge	Design
4	Terra Vella	Signal	Planning
5	City of Fort Worth	Turning Lanes	Construction w/in 5 years
6	Tarrant County	Grade-separated RR Crossing	Planning
7	TxDOT	Underpass	Design
8	TxDOT	Signal	Planning
9	City of Fort Worth	Signal	Construction w/in 5 years
10	City of Fort Worth	Signal, Turning Lanes	Complete
11	City of Fort Worth	RR Crossing Safety	Design
12	TxDOT	Underpass	Planning
13	City of Fort Worth	Signal	Construction w/in 5 years
14	City of Fort Worth	Signal	Complete
15		Signal	Design
16		Signal	Construction w/in 5 years
17	City of Fort Worth	Signal + Pedestrian Improvements	Construction w/in 5 years
18	City of Fort Worth	Signal	Complete
19	City of Fort Worth	RR Crossing Safety	Design
20	City of Fort Worth	Signal, Turning Lanes	Design
21	City of Fort Worth	Roundabout	Complete
22	City of Fort Worth	Roundabout	Complete
23	City of Fort Worth	Roundabout	Complete
24	City of Fort Worth	Overpass	Planning
25	City of Fort Worth	Overpass	Planning
26	City of Fort Worth	Overpass	Planning

Construction (within 5 years)

	Project Sponsor	Project Name	Limits	Description	Est. Complete
1	City of Fort Worth	Harlan Creek Ranch Street Improvements	Various streets within subdivision	Street rehabilitation to include damaged concrete panel replacement and damaged sidewalks and driveways replacement	2025
2	TxDOT	US 287 Frontage Roads	Northstar Pkwy to Avondale Haslet	Frontage road conversion from 2-way to 1-way	TBD
3	TxDOT	US 287 Frontage Roads	Avondale Haslet to Harmon Rd	Construction of frontage roads and ramp reconfigurations. Avondale-Haslet Bridge not included	TBD
4	City of Fort Worth	Avondale Haslet	BNSF to Windchase	2 lanes to 4 lanes	2027
5	TxDOT	Avondale Haslet	Windchase to FM 156	4 lanes	2023
6	Nance Ranch	Wagley Robertson	From Avondale Haslet	2 lanes of Wagley Robertson with adjacent phases	2027
7	La Prella	Wagley Robertson	To Blue Mound Rd W	4 lanes	2026
8	La Prella	Blue Mound Rd W	N Blue Mound to Dove Valley Tr	2 lanes	2027
9	City of Fort Worth	Bonds Ranch Rd	Wagley Robertson to Fossil Springs Dr	4 lane arterial with water/sewer improvements	2027
10	City of Fort Worth	Golden Triangle Blvd	I-35 to Misty Redwood Trail	4-lane arterial	2025
11	City of Fort Worth	Intermodal Pkwy Alliance	BNSF yard entrances to Old Blue Mound Rd	4-lane arterial by reconstructing existing two lanes and adding 2 new lanes	2025
12	City of Haslet	Keller-Haslet Rd	BNSF to FM 156	Construct 4 lane arterial road	2024
13	City of Fort Worth	Park Vista Boulevard Phase II	Keller Haslet Rd to Timberland Blvd	Expand existing 3-lane to 4-lane divided road with a median	2025
14	City of Fort Worth	Keller Hicks Phase I	BNSF to Lauren Way	3-lane undivided concrete pavement	2025
15	City of Fort Worth	Ray White Rd	Mirage Dr to the bridge north of Camrose St	Widen to 4 lanes	2027

In Design

	Project Sponsor	Project Name	Limits	Description
1	Alpha Ranch	Sendera Ranch Blvd	SH 114 to Ramhorn Hill	2 lanes currently in design, other 2 lanes to be constructed with later phases
2	Madero	Ram Horn Hill	Graben to Songbird Ln	2 lanes to be constructed
3	Madero	Sendera Ranch Blvd	Ramhorn Hill to Dreamcatcher Dr	Madero has completed 2 lanes; will complete other 2 lanes with later phases
4	Terra Vella	Terra Vella Collector Network	Ramhorn Hill to Rancho Canyon Way	To be constructed before Phase 4
5	Terra Vella	Terra Vella Collector Network	to John Day Rd	
6	TxDOT	Haslet Pkwy	Avondale Haslet to I-35W	Connect Avondale Haslet to I-35W
7	TxDOT	Intermodal Pkwy	Transport Dr to Haslet Pkwy	Connect Transport Dr to Haslet Pkwy
8	TxDOT	State Hwy 170 - Alliance Gateway Freeway	0.5 miles east of I-35 to Trophy Club Dr.	Construct 4 lanes
9	City of Fort Worth	Keller Hicks PH II	Park Vista to Lauren Way	Construction of 3-lane undivided concrete pavement
10	Tarrant County	Bonds Ranch Rd	Morris Dido Newark to Willow Springs Rd	Construct 4 lane arterial road
11	City of Fort Worth	Heritage Trace Pkwy	N Saginaw Blvd to Wagley Robertson Rd	4 lane divided new road
12	City of Fort Worth	Heritage Trace Pkwy	Blue Mound to future 287 Interchange	4 lane divided new road

Complete

	Project Sponsor	Project Name	Limits	Description	Complete
1	Northstar	Northstar Parkway	Sendera Ranch to US 287	4 lane road	2024
2	City of Fort Worth	Harmon Rd	Golden Triangle Blvd to US 287	4 lane road	2023
3	City of Fort Worth	North Riverside Dr	Keller Hicks Rd to Golden Triangle Blvd	4 lane road	2023
4	City of Fort Worth	Kroger Drive	Ray White Rd to Park Vista Circle	Roadway improvements	2023

Planned

	Project Sponsor	Project Name	Limits	Description
1	TxDOT	SH 114	County line to I-35W	6 lane urban arterial to a 6 lane freeway
2	Alpha Ranch	Graben	SH 114 to Comanchero Way	2 lanes constructed by Alpha Ranch during adjacent phases
3	Terra Vella	Ram Horn Hill	Songbird Ln to John Day Rd	2 lanes to be constructed by Terra Vella during adjacent phase
4	TBD	Sendera Ranch Blvd	Diamondback Ln to Avondale Haslet Rd	4 lanes of Sendera Ranch Boulevard Place in consideration for 2026 Bond funding
5	City of Haslet	John Day Rd Extension	Extension to Avondale Haslet Rd	John Day Rd extension to Avondale Haslet
6	City of Fort Worth	Wagley Robertson Rd	Quickstriver Ct to Coneflower Tr	Widen to 5-lane
7	City of Fort Worth	Blue Mound Rd/FM 156	US 287 to Watauga Smithfield Rd	Reconstruct and widen
8	City of Fort Worth	Heritage Trace Pkwy/287 Interchange	Intersection of Heritage Trace and 287	New facility

District 10 is a critical hub for transportation within Fort Worth and surrounding areas, with a range of projects in the pipeline spanning multiple jurisdictions, including city, county, and state. These projects reflect a shared commitment to addressing congestion, enhancing safety, and improving travel experiences for all modes of transportation. From intersection improvements to road widenings and reconstructions, the initiatives in District 10 demonstrate a **cohesive approach** to managing the needs of a growing population and an expanding economy.

Moving a Million (M1M) serves as the **guiding framework** for these efforts, providing the strategic vision and coordination necessary to align these diverse projects under a **unified goal**. M1M will ensure that every project—from planning stages to completion—doesn't just **solve today's problems** but also fits into a long-term vision for the future.

LEGEND

- MASTER THOROUGHFARE PLAN (MTP)
- RAILROAD
- WATER
- CITY OF FORT WORTH
- COUNTY LINE

District 10 Key Corridor Improvements

1 Avondale Haslet Improvements

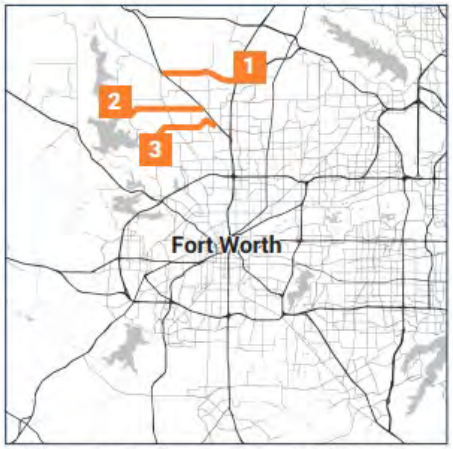


2 Bonds Ranch Road Improvements



3 Heritage Trace Parkway Improvements





Enhancing Key Corridors for Improved Traffic Flow and Reduced Congestion

The **District 10 Key Corridor Improvements** aim to address critical transportation challenges in Fort Worth by enhancing connectivity, improving traffic flow, and alleviating congestion in rapidly growing areas. These projects focus on strategic, phased enhancements to deliver **immediate benefits** while ensuring alignment with long-term transportation goals.

Key Improvements:

- **Avondale-Haslet Improvements**: Expanded capacity, new turning lanes, and upgraded connections to I-35W and US 287 to streamline traffic flow and improve safety.
- **Bonds Ranch Road Enhancements**: A multi-segment approach to provide better east-west connectivity, including widened roads, intersection upgrades, and a future interchange at US 287.
- **Heritage Trace Parkway Enhancements**: Roadway extensions, gap unification, and intersection improvements to support local and regional traffic demands.

Moving a Million (M1M): A Cohesive Approach to Planning

Through M1M, these projects are developed with a holistic and future-focused perspective, ensuring they meet current needs while preparing for anticipated growth. By integrating advanced planning and engaging stakeholders, M1M ensures these projects provide immediate congestion relief and establish a foundation for a sustainable and connected transportation network.

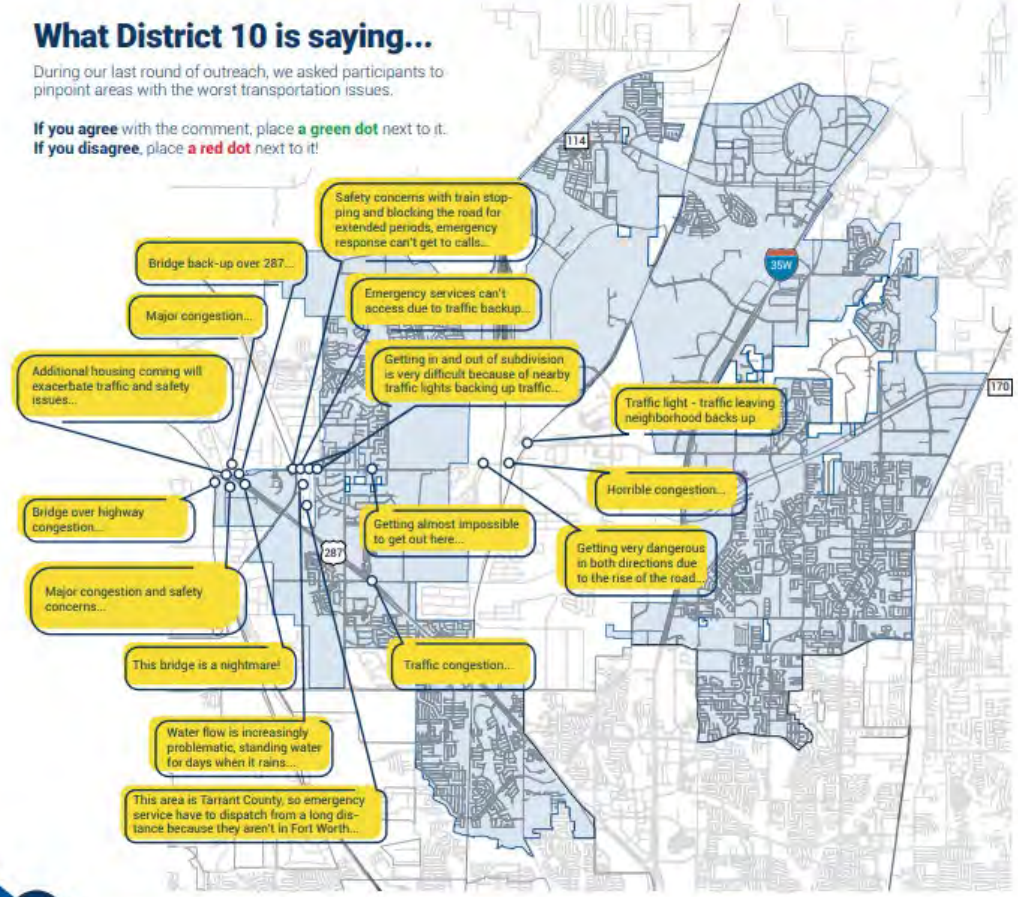
This proactive approach highlights Fort Worth's commitment to investing in infrastructure that not only addresses today's challenges but also ensures long-term benefits for residents and businesses alike.

What We've Heard in District 10

What District 10 is saying...

During our last round of outreach, we asked participants to pinpoint areas with the worst transportation issues.

If you agree with the comment, place **a green dot** next to it.
If you disagree, place **a red dot** next to it!



What else should we know?

We want to hear your thoughts! Use a post-it to share your thoughts and/or add any additional input in this section. Your feedback helps shape the future of our transportation system in Fort Worth.

What is Moving a Million?

Fort Worth is making big plans to move a million people.

We're developing a 25-year plan that is the central framework for all transportation initiatives in Fort Worth, offering the strategic direction and coordination needed to bring various projects together under a **shared objective**. Moving a Million (M1M) ensures that each project—from its inception to completion—not only addresses **immediate challenges** but also contributes to a cohesive long-term **vision for the future**. The plan will:

- Examine existing **plans, policies, and projects**
- Develop a **connected transportation network** (pedestrian, bike, transit, freight, vehicles) with supportive land use
- **Prioritize** projects
- Focus on quality of life and **sustainability**
- Developing **a single resource** for Fort Worth's transportation vision, goals, policies, and project priorities

Our Vision for Fort Worth's Future

Fort Worth is growing, and with that growth comes the need for a transportation system that meets the demands of tomorrow. By 2050, we envision a city where everyone has access to a **safe, reliable, and resilient transportation network** that offers choices, fosters economic opportunity, connects communities locally and globally, and enhances the quality of life for all.

This vision is driven by sustainable funding, active community involvement, and innovative approaches to managing congestion. It's not just about moving people—it's about creating a world-class system that truly reflects the needs and aspirations of the people it serves. Together, we're building a transportation future Fort Worth can be proud of.

Vision Statement

In 2050, Fort Worth envisions a safe, reliable, and resilient transportation system that empowers all to choose from a range of options, supports economic vitality, connects communities locally and globally, and enhances quality of life. Through sustainable funding, active community engagement, and congestion management strategies, this world-class system will reflect the needs of those it serves.

The Planning Process



Our Goals

Goal #1 Safety First

Implement safety measures that reduce crashes and eliminate traffic fatalities and injuries across all transportation modes and trips.

Goal #2 Fix It First

Ensure cost-effectiveness of transportation assets throughout their life cycle.

Goal #3 Human Comfort

Create a network that is convenient, connected, and considerate for community use.

Goal #4 Economic Competitiveness

Support businesses, improve regional and global connectivity, facilitate trade and investment, promote labor mobility, and enhance the overall prosperity of Fort Worth.

Goal #5 Technology

Embrace flexible and resilient technology to adapt to evolving transportation needs and challenges.

Goal #6 Equity

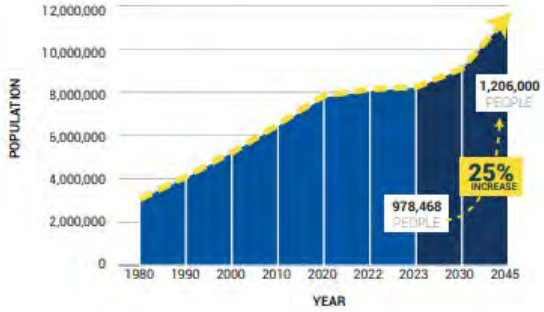
Ensure accessible, affordable, and reliable transportation options for all ages and abilities.

www.movingamillion.org
transportation@fortworthtexas.gov

Mobility Mantras

Fort Worth is at a pivotal moment in its growth.

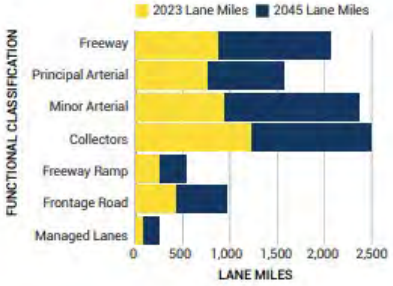
As one of the nation's fastest-growing cities, the need for a comprehensive transportation plan has never been greater. For years, our transportation network has evolved reactively, meeting immediate needs without a unified vision. While this approach worked in the short term, it has left us with **congestion, connectivity gaps, limited accessibility, and challenges maintaining aging infrastructure.**



Fort Worth is expected to welcome over 200,000 new residents in the next two decades—equivalent to adding a city the size of Frisco to our community. This rapid growth underscores the pressing need to expand infrastructure and services to meet increasing demands.

By 2045, Fort Worth's road network is planned to expand from 4,706 lane miles to 6,392—a 36% increase. This requires strategic investments across all functional classifications to meet rising travel demands.





Everything has its place.

Every community has a role to play, whether it's a quiet neighborhood with cul-de-sacs or a bustling district with a tight street grid. Success comes from appropriate solutions to fit the context, creating a system that works for everyone.

- **Context-Sensitive Density:** Match density levels to the preferences and scale of each community.
- **Connectivity as a Balance:** Provide links where needed while preserving and enhancing the unique character of neighborhoods.
- **Encouraging Use Diversity:** Bring homes, businesses, and services closer together to shorten trips, enhance convenience, and broaden the tax base.

All the easy projects are done.

It's time for transformational projects that require significant investment to meet the demands of our growing city.

- **Completing Network Gaps:** Close gaps created by railroads, rivers, and other barriers to improve connectivity.
- **Rebuilding Aging Infrastructure:** Address critical repairs to ensure resilience for future generations.
- **Investing in More Transportation Options:** Offer more mobility choices that fit everyone's needs.
- **Tackling Regional Challenges:** Implement projects that link communities, cut down on traffic, and strengthen our position in the broader economy.

A good transportation plan is a good land use plan.

How we move around is deeply tied to how we live, work, and connect—and the relationship works both ways. For this reason, M1M will be closely linked to 2050 Re-Imagine Fort Worth Comp Plan.

OUR PRIORITIES

FIX IT FIRST
To meet growing demand, M1M offers an approach that balances preserving existing infrastructure with building for the future.

PROJECT PRIORITIES + PREDICTABILITY
Our transportation system has developed in a fragmented way, but M1M offers a cohesive plan for project delivery and funding priorities.

BROADENING THE TAX BASE
Building a sustainable transportation future means connecting to our region and to the globe to attract commercial investment.

MANAGING RAPID GROWTH
Our transportation network must evolve to meet the needs of our growing population. M1M provides a roadmap to support this growth sustainably.

MORE WAYS TO GET AROUND
M1M is about connecting Fort Worth's neighborhoods with faster, more efficient options. Better connections make it easier for residents to get to jobs, schools, and essential services, improving everyday life.

FORT WORTH

www.movingamillion.org

transportation@fortworthtexas.gov

APPENDIX B

TECHNICAL MEMO 2: STATE OF THE SYSTEM

STATE OF THE SYSTEM



MOVING A MILLION

MOVING A MILLION

FORT WORTH 2050

February 2025

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01 OVERVIEW

The Moving a Million (M1M) State of the System Report takes a look at travel today and sets the stage for Fort Worth's transportation future.

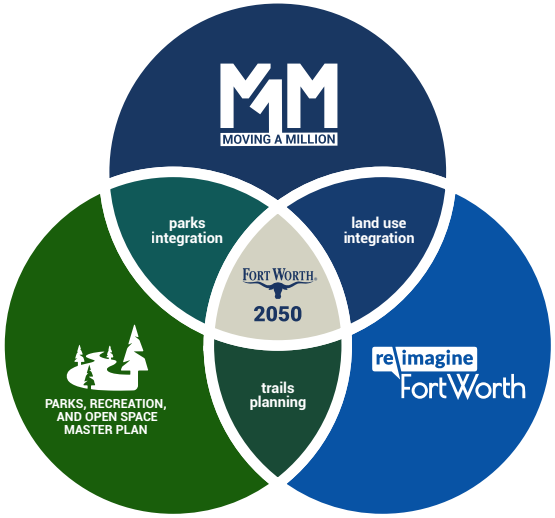
In this section, we're taking a deep dive into where we are now and laying out a clear path for where we want to go. It's not just about roads and transit—it's about making sure everyone can get where they need to go safely, easily, and efficiently. We'll outline the planning process, share our vision and goals for a stronger, more connected transportation network, and tackle the big question of how we're going to grow.

Whether it's by car, bike, transit, or foot, M1M is focused on ensuring we're building a system that works for everyone.

1.1 PLANNING CONTEXT

Fort Worth's planning framework is shaped by the need to manage growth, improve mobility, and enhance economic competitiveness. The city's transportation network must accommodate the unique needs of its urban, suburban, and rural communities, balancing diverse land uses and infrastructure development to meet growing population demands.

The City of Fort Worth is currently developing two key long-range plans that work together with M1M to improve quality of life, safety, and mobility: Re-Imagine Fort Worth, which is the City's 2050 Comprehensive Plan, and Play Big, the City's Parks, Recreation, and Open Space plan.



MOVING A MILLION
MASTER TRANSPORTATION PLAN

reimagine FortWorth
2050 COMPREHENSIVE PLAN

PARKS, RECREATION AND OPEN SPACE MASTER PLAN

CLIMBING THE RANKS

Fort Worth recently became the 12th largest city in the United States, surpassing San Jose in population last year.

EXPANSIVE CITY

Fort Worth spans a vast 359 square miles of land area.

OPEN SPACES

Nearly half of Fort Worth's land—48.9% or 169,066 acres—is categorized as vacant, agricultural, or underdeveloped.



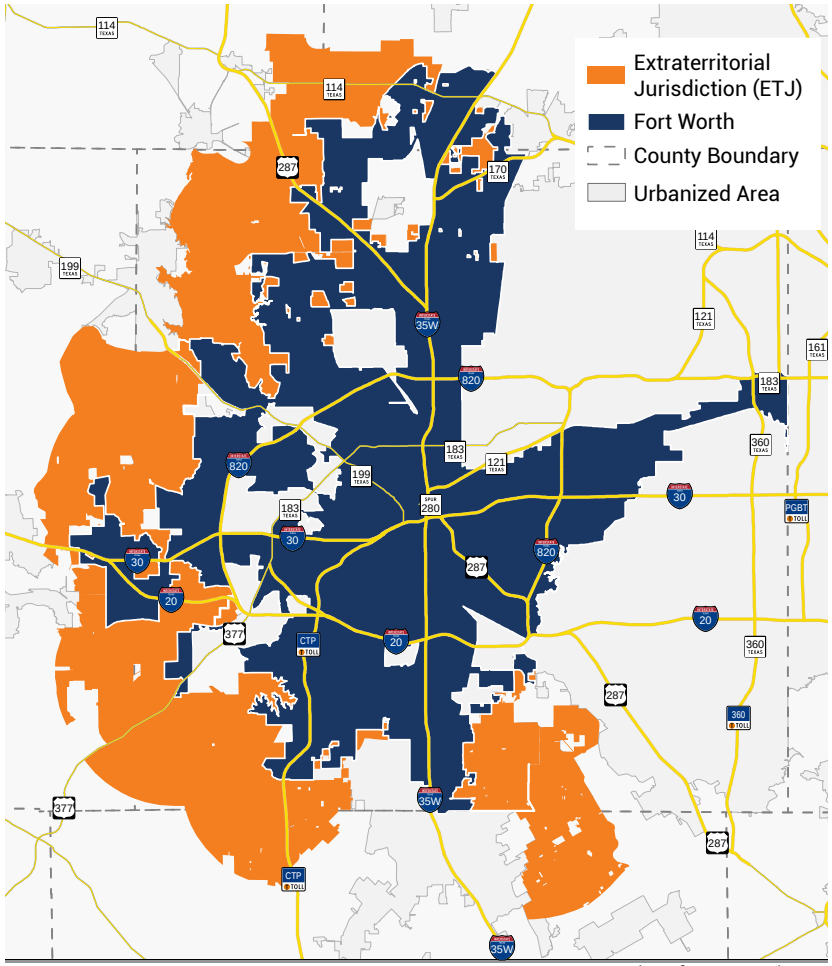
Study Area

The project study area extends beyond city limits to include Fort Worth's extraterritorial jurisdiction (ETJ) and portions of surrounding counties. The ETJ spans about 265 square miles, which is roughly the size of El Paso. This expansive footprint plays a critical role in shaping the interconnected travel patterns and economic activities of the broader region. By including the ETJ, the plan anticipates future urban growth and infrastructure needs in areas likely to see development, providing a framework for expanding the transportation system in alignment with compatible land uses.

Similarly, portions of the surrounding region contribute to the flow of commuters, freight, and services into and out of the city, influencing traffic volumes on key corridors and creating demands for expanded infrastructure. The growth and development in these counties directly affect Fort Worth's transportation network, necessitating a coordinated regional approach to address congestion, enhance connectivity, and ensure efficient movement across county lines. By considering the ETJ and surrounding counties, the plan considers both local and regional mobility needs, fostering more efficient connections between Fort Worth and its neighboring suburbs. **Figure 01-1** shows the boundaries of these geographies.

While the City of Fort Worth has a population of nearly 1 million people, the "Greater Fort Worth" region is home to about 2.9 million of the 8

Figure 01-1: M1M Study Area



Data Source: City of Fort Worth GIS

Fort Worth is the fastest-growing city among the top 30 most populous cities, with a 2.2% increase in the past year and a 6.5% rise since 2020.

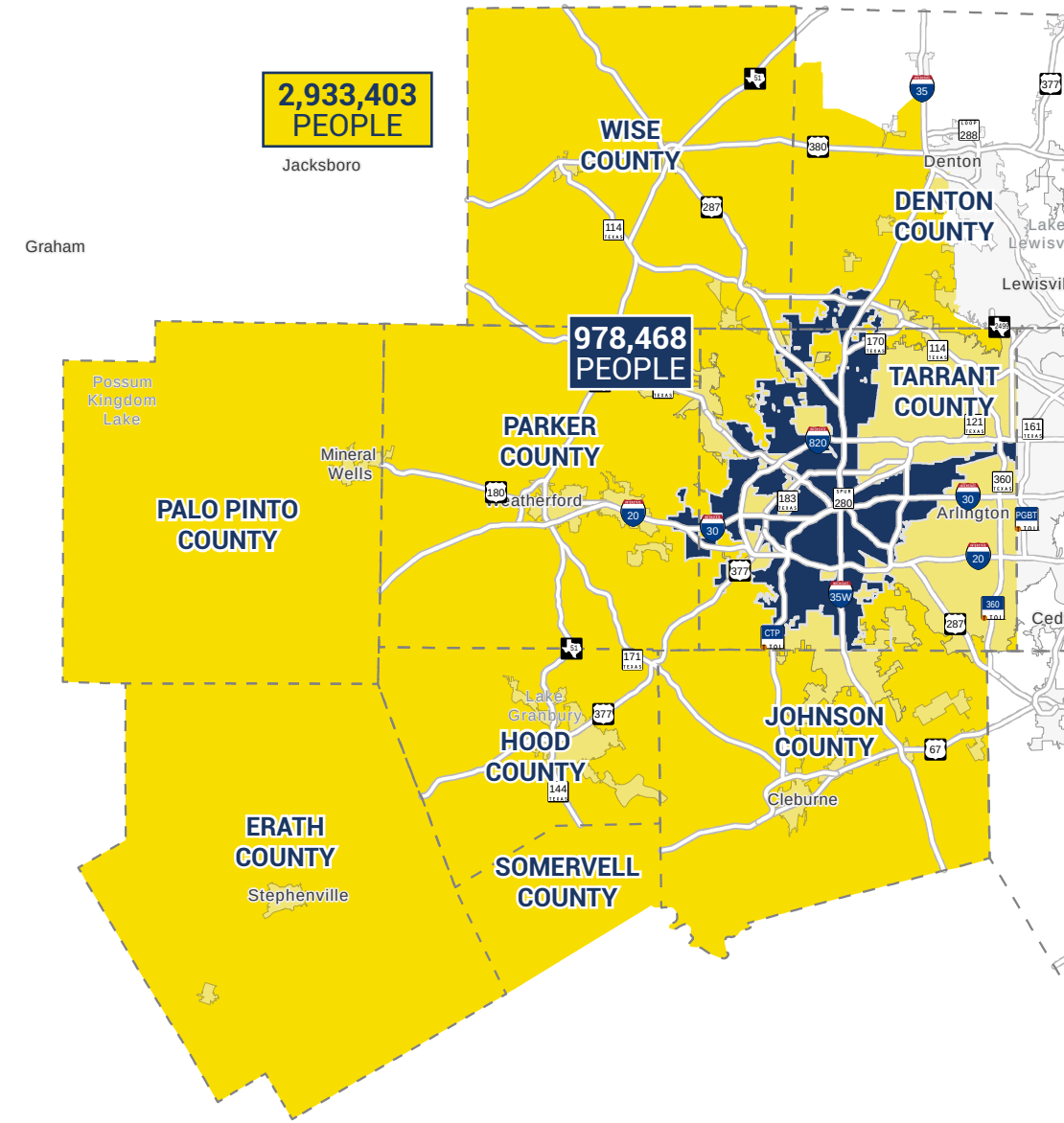
US Census Bureau, Population and Housing Unit Estimates, Vintage 2023

million residents in the Fort Worth/Dallas Metroplex, as **Figure 01-2** illustrates. Fort Worth is supporting a much larger regional population that relies heavily on the city for jobs, services, and connections to the wider metroplex. This dynamic places Fort Worth at the core of a growing network of communities including Johnson, Parker, Wise, and parts of Denton County that rely heavily on the city for employment, services, and connectivity. As these neighboring areas continue to expand, Fort Worth's transportation infrastructure must support both its internal population and the additional 2 million residents in the surrounding region.

This reality creates significant challenges for the city's transportation system. Key corridors like US 287, US 377, and SH 114 are already feeling the strain, acting as critical links between Fort Worth and these surrounding areas. As these outlying communities continue to grow, Fort Worth's transportation network will experience more pressures to handle both local traffic and a large volume of regional commuters. Without careful planning and strategic upgrades, congestion and delays could become the norm, impacting quality of life and economic opportunities across the region.

Addressing this strain will involve planning for cross-city mobility solutions that not only accommodate the city's growth but also anticipate the future needs of the broader region. Fort Worth's role as an anchor for Greater Fort Worth means that its transportation strategies must be scalable and forward-thinking, ensuring smooth and reliable access for the entire 3-million-strong population that depends on the city as a regional hub.

Figure 01-2: Greater Fort Worth

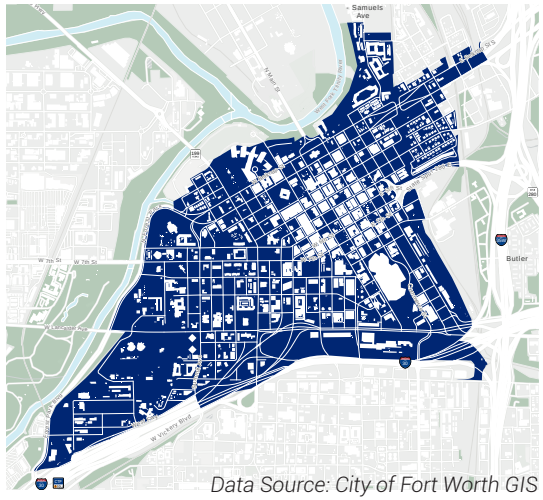


Data Source: NCTCOG, 2022 ACS 5-Year Estimates

Study Area Conditions

The study area comprises a diverse set of conditions that influence the transportation system. Within the city, the transportation network includes a mix of urban, suburban, and industrial land uses, each with distinct infrastructure demands. As shown in **Figure 01-3,** the downtown core features high-density development and a complex network of roadways, transit options, and pedestrian facilities. This area is a central hub of economic, cultural, and social activities, featuring a dense mix of commercial, residential, and institutional uses. Downtown experiences significant traffic congestion, especially during peak hours, and has a high demand for parking and public transportation services. The infrastructure here supports a bustling environment with a focus on multimodal transportation options, including buses, commuter rail, and micromobility options to accommodate the diverse needs of residents, workers, and visitors.

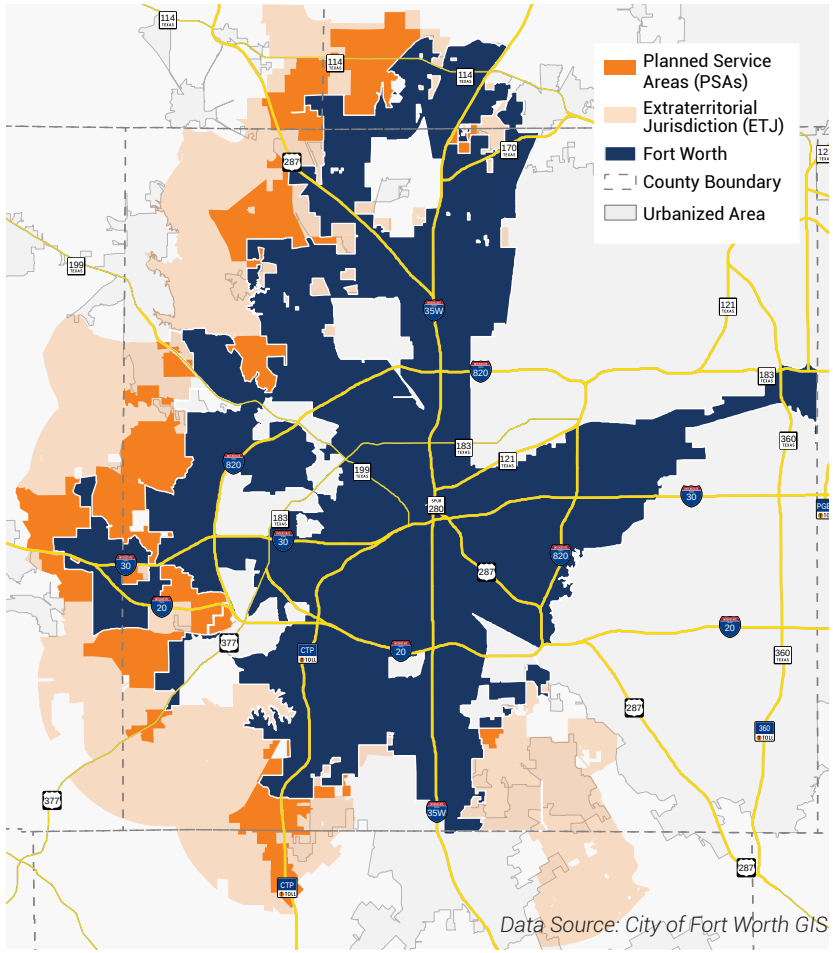
Figure 01-3: Downtown Urban District



Data Source: City of Fort Worth GIS

The rapidly growing suburban areas face challenges in extending roadways and transportation options for the increasing population, while the ETJ has a more rural, low-density residential development pattern. Much of the existing infrastructure in the ETJ requires significant upgrades to accommodate future growth. To address this, Planned Service Areas (PSAs) within the ETJ are designated for future infrastructure investments, including roads, utilities, and public services. These PSAs are designed to support anticipated growth while ensuring that development is coordinated and sustainable. **Figure 01-4** shows the locations of the PSAs.

Figure 01-4: Planned Service Areas (PSAs)



Data Source: City of Fort Worth GIS

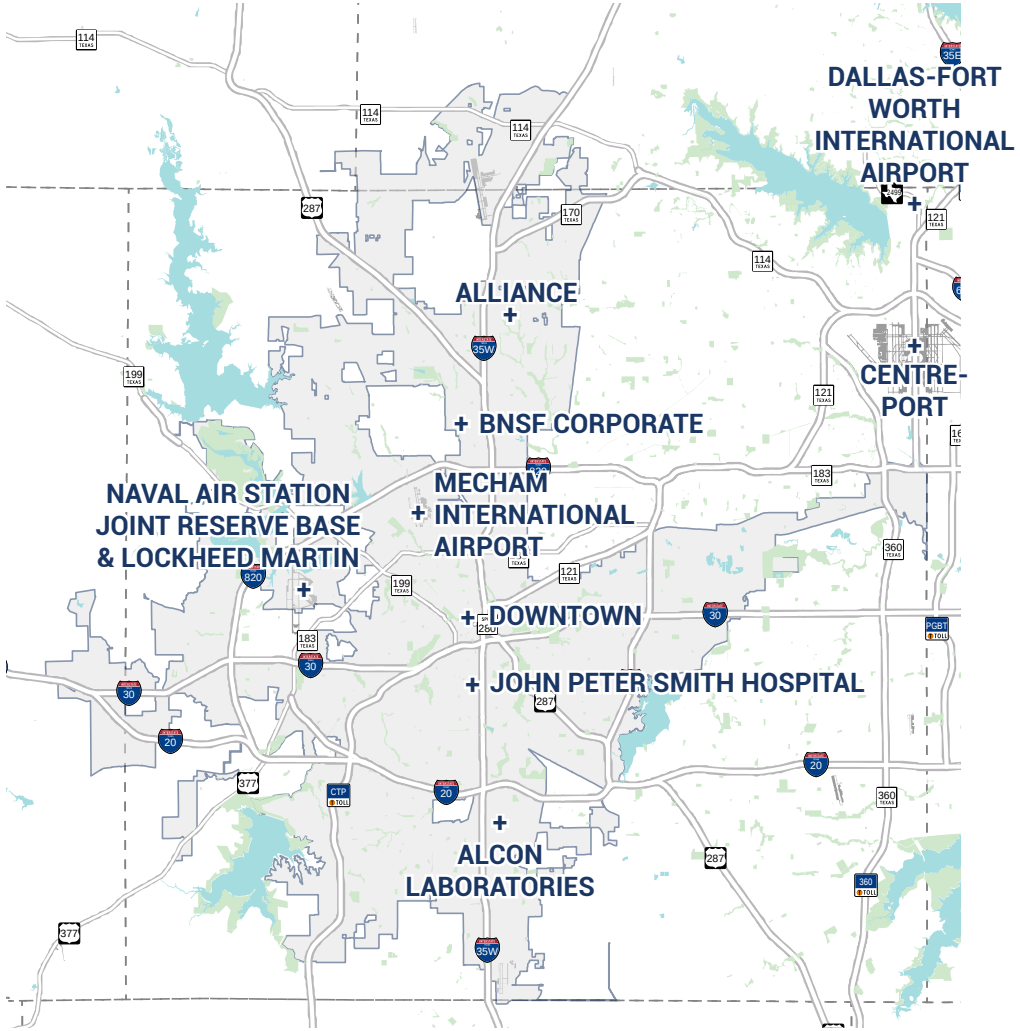
The study area also includes key economic hubs that contribute to Fort Worth's economic vitality, shown in **Figure 01-5**.

- Dallas/Fort Worth International Airport (DFW)
- Fort Worth Meacham International Airport, there is:
- The Alliance area, a major logistics hub
- CentrePort, a prominent industrial and distribution center
- The BNSF Railway Corporation
- Naval Air Station Joint Reserve Base
- Lockheed Martin
- The Downtown core

These hubs are critical for facilitating the movement of freight and passengers, bolstering business operations, and supporting the region's growing economy. Maintaining strong transportation connections between these hubs and the broader region is essential for fostering continued economic growth and ensuring that Fort Worth remains a central player in the regional and national transportation networks.

The diverse conditions across Fort Worth create a range of opportunities for enhancing the transportation network. Downtown Fort Worth, with its high-density development, offers the chance to strengthen multimodal options and improve congestion management to support its vibrant economic and cultural activities. The rapidly expanding fringe areas present opportunities to enhance connectivity by extending roadways and public transit services, accommodating growing populations while integrating with the urban core. In the ETJ, the Planned Service Areas are a tool to proactively plan infrastructure upgrades that effectively integrate with the broader transportation network. Overall, these varied conditions allow for targeted improvements that can enhance mobility, support economic development, and foster balanced growth across the entire region.

Figure 01-5: Major Economic Hubs



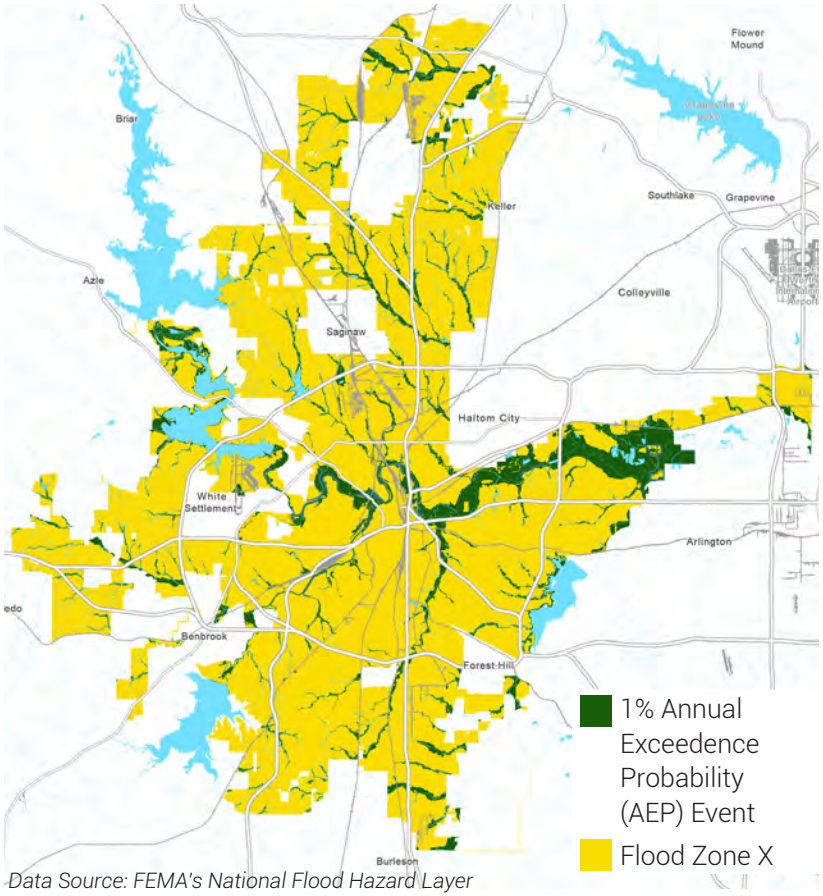
Environmental Constraints

WATER BODIES AND FLOOD RISKS

Figure 01-6 indicates FEMA flood zones, which impact both design and construction of transportation infrastructure. Zone A and Zone AE, the high-risk flood areas, require structures to be built with heightened flood resilience, such as elevated bridges with robust floodplain management practices. Zone AO, with its shallow flooding, also necessitates flood-resistant designs. Zone X are defined as areas with minimal flood risks by FEMA, however the City has defined additional flood risk areas within this designation.

The City's Flood Risk Areas (CFRA) are areas with known high-risk flooding and require structures to be built with heightened flood resilience. The CFRA is outside of the FEMA Flood Zones A, AE, and AO but within Zone X.

Figure 01-6: FEMA Flood Hazard Areas



Data Source: FEMA's National Flood Hazard Layer

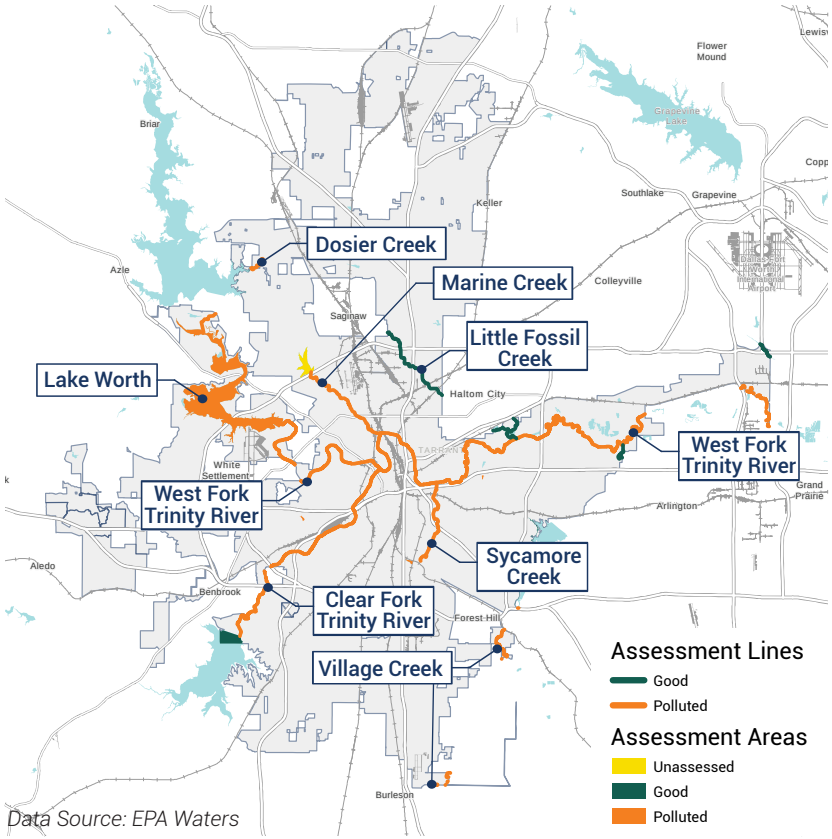
The majority of Fort Worth falls within Zone X, which poses minimal flood risk compared to higher-risk areas like Zone A or Zone AE. Levees along the Trinity River protect adjacent development from flood risk, particularly in denser areas near Downtown.

This means that while much of the city's land area is not classified within FEMA-designated floodplains, approximately 50 square miles of FEMA floodplain and 33 square miles of non-FEMA flood risk have been mapped. This allows for more flexibility in infrastructure planning in some areas while still necessitating careful consideration of flood risk. The more significant challenge for transportation planning is overcoming the physical barriers created by the river and addressing connectivity gaps across these natural divides.

The key challenge: bridging barriers and closing connectivity gaps.

These water bodies are also vital for maintaining water quality in the region, and transportation infrastructure presents risks associated with runoff and pollutants. Impervious surfaces can increase the number of pollutants, such as oils, heavy metals, and sediments, that enter water bodies through runoff. These pollutants can degrade the quality of the Trinity River, creeks, and lakes, impacting aquatic ecosystems and drinking water supplies. **Figure 01-7** shows water quality assessments for Fort Worth's major water bodies from ATTAINS, the EPA's Assessment, Total Maximum Daily Load Tracking and Implementation System. The assessments are based on monitoring data collected by states and other agencies. The primary issues in Lake Worth, West Fork Trinity River, and Clear Fork Trinity River are dioxins, including polychlorinated biphenyls (PCBs). Escherichia Coli (E. coli) is an impaired parameter in Dosier, Marine, Sycamore, and Village Creeks. While addressing these contaminants with green infrastructure (GI) is challenging, it is feasible.

Figure 01-7: ATTAINS Water Quality Map



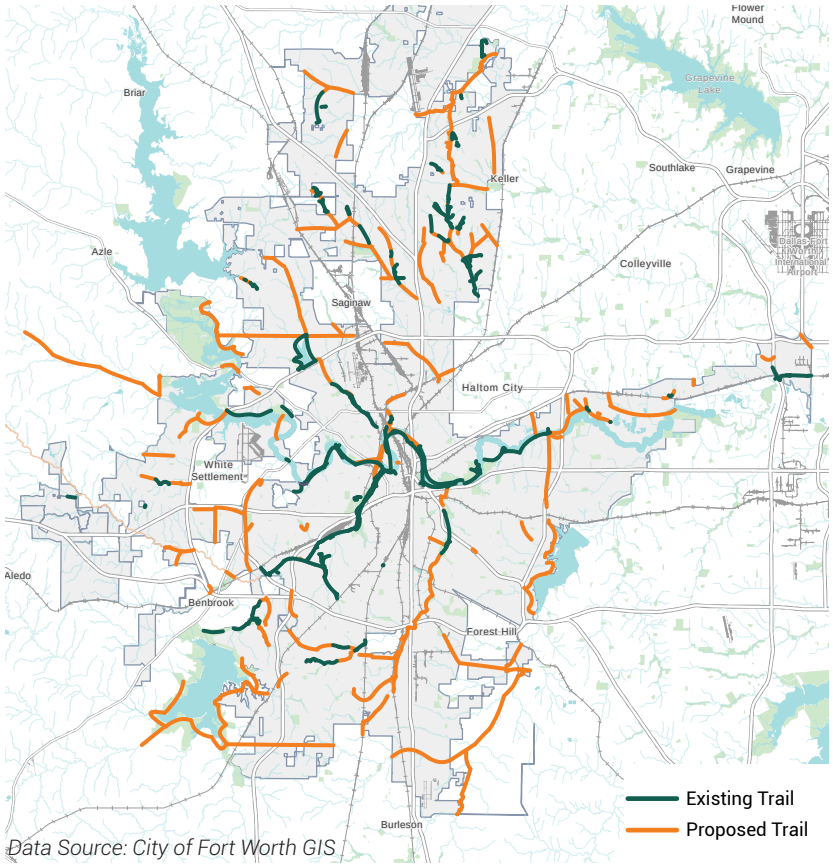
Effective water quality management involves incorporating Best Management Practices (BMPs) to filter and treat runoff before it reaches water bodies. Techniques shown in **Figure 01-8** such as bioswales, rain gardens, and sediment traps that help capture and treat pollutants are becoming ubiquitous in transportation projects.

The Fort Worth Stormwater Criteria Manual provides comprehensive guidelines for the design and management of stormwater systems in Fort

Figure 01-8: Sample Right-of-Way Green Infrastructure Strategies



Figure 01-9: Existing and Proposed Trail Network



Data Source: City of Fort Worth GIS

Worth. It outlines the city's requirements for stormwater infrastructure, including design standards, construction practices, and maintenance protocols. The manual aims to ensure that stormwater management practices effectively mitigate flooding, control erosion, and protect water quality in compliance with local regulations.

Challenges

Fort Worth's major water bodies present both challenges and opportunities for connectivity. Bridges and roadways must be carefully planned to provide efficient crossings without disrupting the natural flow of water bodies or compromising their ecosystems, or increasing flood risk.

Bridges also require significantly more resources than standard roadways due to the need for specialized engineering, including the design of foundations that can support heavy loads over long spans, resist environmental forces like flooding, and ensure structural integrity. The complexity of building over rivers, particularly in areas with delicate ecosystems, adds to the cost. The Trinity River in particular acts as a natural barrier, restricting mobility and making efficient transportation planning crucial for improving access and reducing travel distances in applicable areas.

To ensure these improvements do not exacerbate flooding, careful consideration must be given to stormwater management strategies. Integrating green infrastructure such as permeable trail surfaces, bioswales, and vegetated buffers can help absorb and filter runoff, reducing the impact on nearby waterways. Additionally, natural floodplains should be protected. The trail and infrastructure designs should account for natural drainage patterns to minimize disruption. Thoughtful planning and design will ensure these enhancements improve recreational access without compromising flood resilience or water quality.

Opportunities

Beyond the challenges, Fort Worth's water bodies presents a wealth of opportunities for integrating recreational and multimodal transportation options. **Figure 01-9** shows existing trails and those proposed in the 2019 Active Transportation Plan, most of which are alongside waterways. By connecting these routes with the city's bike and pedestrian infrastructure, Fort Worth can provide residents and visitors with paths that blend natural beauty with practical, safe travel.

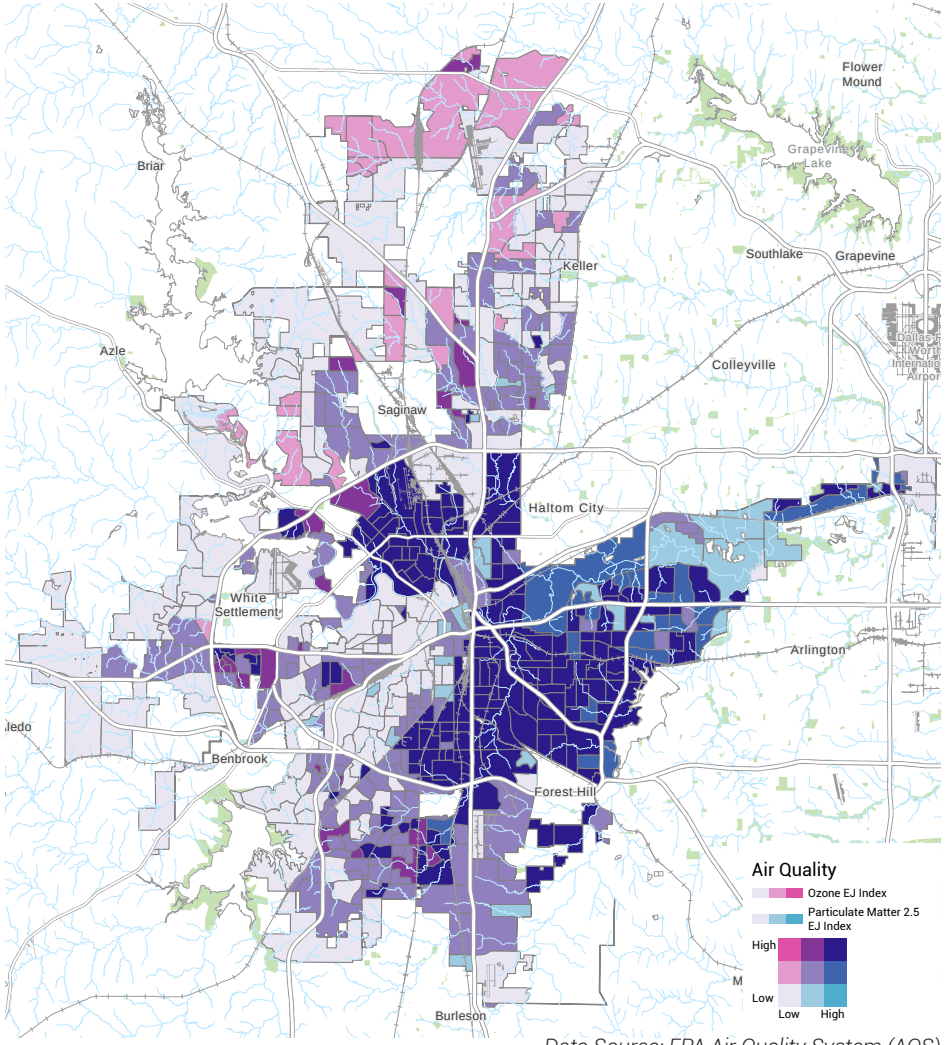
AIR QUALITY AND EMISSIONS

Fort Worth's air quality reflects both its natural environment and the impacts of urbanization and industrial activities. As part of the larger Dallas-Fort Worth (DFW) metropolitan area, the city has long grappled with air quality issues, particularly concerning ozone pollution. On hot summer days, when temperatures soar and sunlight intensifies, ground-level ozone levels often rise to levels that pose risks to public health.

The area has been classified as a non-attainment zone for ozone by the Environmental Protection Agency (EPA). While Fort Worth often meets federal air quality standards on an annual basis, it exceeds the standard often enough—based on the three-year average of the fourth-highest daily maximum 8-hour concentration—to be designated as nonattainment.

Figure 01-10 illustrates the spatial distribution of ozone and PM2.5 concentrations across Fort Worth. These pollutants, which are primarily associated with vehicle emissions, industrial activity, and other urban sources, contribute to air quality challenges in the region. The darker shaded areas indicate higher relative concentrations of ozone and fine particulate matter, which can have significant health impacts, particularly for vulnerable populations. Understanding the geographic distribution of these pollutants helps identify areas where air quality concerns may be more pronounced and informs strategies for mitigation and public health protection. The city's expanding road network, reliance on vehicular transportation, and ongoing construction contribute to these particulate levels, complicating efforts to maintain clean air.

Figure 01-10: Distribution of Ozone and PM2.5 Concentrations- 2023

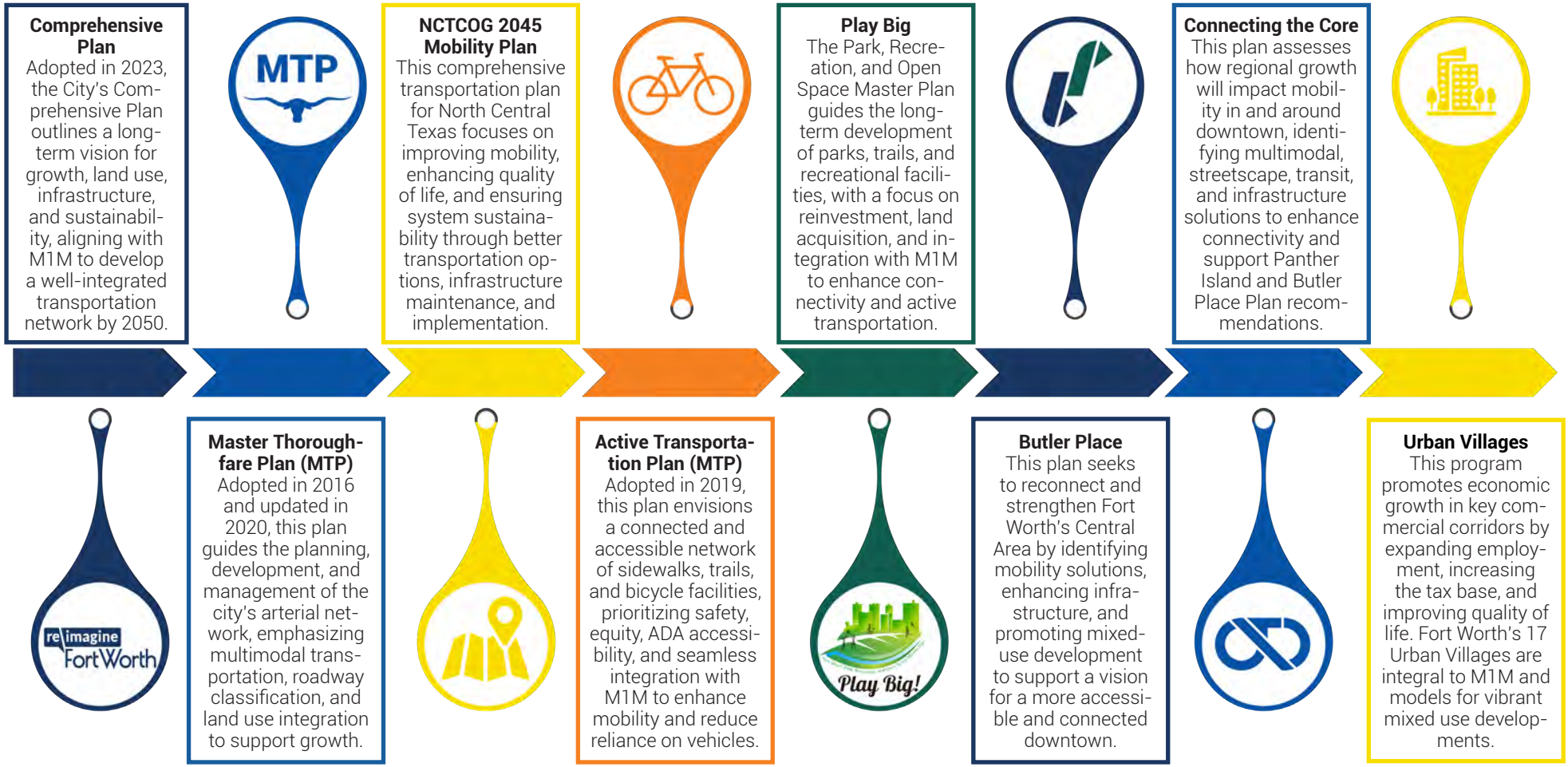


Data Source: EPA Air Quality System (AQS)

As Fort Worth continues to grow, so do the pressures on its air quality.

Other Planning Efforts

The current study aims to integrate insights, background information, and recommendations drawn from the city's previous plans, policies, and programs that guide transportation in Fort Worth today. The following is a summary of the most relevant planning efforts. **Appendix 1** provides a more comprehensive matrix of all related plans and policies.



Comprehensive Plan
Adopted in 2023, the City's Comprehensive Plan outlines a long-term vision for growth, land use, infrastructure, and sustainability, aligning with M1M to develop a well-integrated transportation network by 2050.

Master Thoroughfare Plan (MTP)
Adopted in 2016 and updated in 2020, this plan guides the planning, development, and management of the city's arterial network, emphasizing multimodal transportation, roadway classification, and land use integration to support growth.

NCTCOG 2045 Mobility Plan
This comprehensive transportation plan for North Central Texas focuses on improving mobility, enhancing quality of life, and ensuring system sustainability through better transportation options, infrastructure maintenance, and implementation.

Active Transportation Plan (MTP)
Adopted in 2019, this plan envisions a connected and accessible network of sidewalks, trails, and bicycle facilities, prioritizing safety, equity, ADA accessibility, and seamless integration with M1M to enhance mobility and reduce reliance on vehicles.

Play Big
The Park, Recreation, and Open Space Master Plan guides the long-term development of parks, trails, and recreational facilities, with a focus on reinvestment, land acquisition, and integration with M1M to enhance connectivity and active transportation.

Butler Place
This plan seeks to reconnect and strengthen Fort Worth's Central Area by identifying mobility solutions, enhancing infrastructure, and promoting mixed-use development to support a vision for a more accessible and connected downtown.

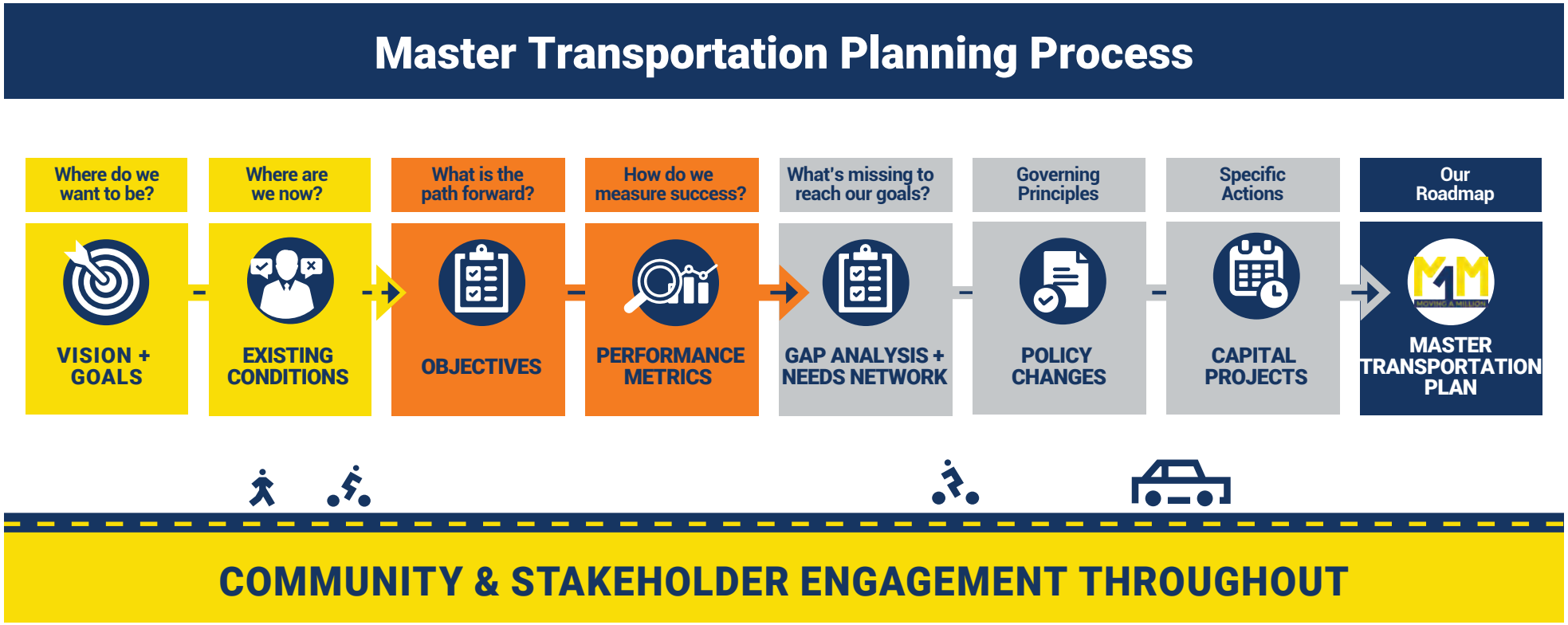
Connecting the Core
This plan assesses how regional growth will impact mobility in and around downtown, identifying multimodal, streetscape, transit, and infrastructure solutions to enhance connectivity and support Panther Island and Butler Place Plan recommendations.

Urban Villages
This program promotes economic growth in key commercial corridors by expanding employment, increasing the tax base, and improving quality of life. Fort Worth's 17 Urban Villages are integral to M1M and models for vibrant mixed use developments.

1.2 PLANNING PROCESS

With the help of the community, the City of Fort Worth is making big plans to Move a Million (M1M). The M1M Master Transportation Plan will unify all Fort Worth's transportation-related plans into ONE VISION. The result will be a capital program tied to city policies and funding realities, grounded in the wants and needs of the Fort Worth community. The graphic below shows the steps to developing a successful M1M Plan.

Steps to Success



1.3 VISION + GOALS

On June 13, 2024, we shared the draft Vision and Goals for M1M. Throughout the first round of public meetings and discussions within our Technical and Community Advisory Committees, input was collected on these guiding principles. This section outlines public and stakeholder feedback on the vision and goals, and how community input shaped the final language.

Approach

As homework following the committee meetings, the project team asked members the following questions:

- ***Is there anything missing from the vision?***
- ***Are there goals you would like to see added?***
- ***Please share any additional thoughts or suggestions for the M1M vision and goals.***

Feedback from the committee members determined that M1M should prioritize safety and preservation of the current transportation system. Additionally, alternative modes of transportation should be expanded, enhancing accessibility, inclusivity, connectivity, and travel choice. This recommendation was also supported by feedback from our open houses. The analysis of the feedback provided an opportunity to update the vision and goals, and incorporate the input to better reflect the community's thoughts and concerns. Six themes were identified based on the number of times the ideas and concepts were mentioned and the detailed nature of the comments provided. While some of these themes are adequately reflected in the draft vision and goals, some warranted further refinement.

Figure 01-11: Community Advisory Committee Meeting #1



Emerging Themes

Input emphasized the need for reduced congestion, infrastructure improvements, pedestrian and cyclist safety, better public transit, and greater community involvement in transportation planning.



INFRASTRUCTURE IMPROVEMENTS

Ensure infrastructure development is adequate to meet the needs of the growing population.



PEDESTRIAN + CYCLIST SAFETY

Develop/improve sidewalks, bike lanes, and crosswalks to improve mobility and safety.



IMPROVE PUBLIC TRANSIT

Expand and enhance public transit options and equitable access.

REDUCE CONGESTION

Improve/sync traffic lights and implement strategies to improve mobility.



COMMUNITY INVOLVEMENT

Provide outreach to the community with information about transportation planning and incorporate feedback.

Incorporation of Feedback

Based on this input, we revised the vision statement and goals to better incorporate public and stakeholder priorities.

DRAFT VISION

In 2050, the City of Fort Worth envisions a safe, reliable, resilient, and world-class transportation system that provides more freedom for all to choose viable transportation options; enhances our economic dynamism; connects us to communities, the region, and the world; improves our quality of life; is well-funded and maintained; and prioritizes equity.

REVISED VISION

In 2050, Fort Worth envisions a safe, reliable, and resilient transportation system that empowers all to choose from a range of options, supports economic vitality, connects communities locally and globally, and enhances quality of life. Through sustainable funding, active community engagement, and congestion management strategies, this world-class system will reflect the needs of those it serves.

DRAFT GOALS

SAFETY FIRST
Implement safety measures that reduce crashes and eliminate traffic fatalities and injuries across all transportation modes and trips.

FIX IT FIRST
Ensure cost-effectiveness of transportation assets throughout their life cycle.

HUMAN COMFORT
Create a network that is convenient, connected, and considerate for everyone and our environment.

ECONOMIC COMPETITIVENESS
Support businesses, improve regional and global connectivity, facilitate trade and investment, promote labor mobility, and enhance prosperity.

TECHNOLOGY
Embrace flexible and resilient technology to adapt to evolving transportation needs and challenges.

EQUITY
Ensure accessible, affordable, and reliable transportation options for all ages and abilities.

REVISED GOALS

FIX IT FIRST
Create a streamlined approach that reduces waste and prioritizes cost efficiency at every stage, from planning and design to construction and maintenance.

HUMAN COMFORT
Create a network that is convenient, connected, environmentally considerate, and empowers everyone with the freedom to choose their preferred way of travel.

EQUITY
Promote and build an accessible, affordable, and reliable transportation system to meet the mobility and connectivity needs of all ages and abilities.

02 SYSTEM GOALS

This section dives into M1M's goals, showing how they guide the city's transportation vision. We break down the current state of the system and highlight challenges and opportunities, all through the lens of these key principles. By connecting data to our goals, we can better understand where we are now and where we need to go.

With a clear destination and data-driven insights, Fort Worth is poised to transform its transportation landscape for a brighter future.

2.1 SAFETY FIRST

GOAL: Implement safety measures that reduce crashes and eliminate traffic fatalities and injuries across all transportation modes and trips.

Safety Action Plan

Simultaneously with M1M, the City of Fort Worth is developing a Safety Action Plan (SAP), which aims to eliminate fatal and serious injury (KSI) crashes by 2045 by prioritizing safe, accessible, and equitable transportation for all users. The SAP will also serve as the safety element of M1M.

WHAT IS A SAFETY ACTION PLAN?

An SAP is a strategic document designed to reduce and eliminate serious injuries and fatalities by addressing key safety risks through data-driven analysis and targeted interventions. It outlines specific actions, policies, and strategies to improve safety for all roadway users.

The plan incorporates the Safe System Approach as the guiding paradigm to address roadway safety. This strategy aims to prevent crashes and reduce the impact of those that do occur.

Figure 02-1: Safe System Approach



Source: recreated based on FHWA graphic

This approach differs from traditional methods by focusing on both human error and vulnerability, incorporating numerous safeguards to protect all road users. As shown in **Figure 02-1,** the five main goals are to ensure safer people, roads, vehicles, speeds, and post-crash care.

In addition, six principles will be incorporated into the SAP development process to make sure projects/policy/program recommendations are aligned with the safe system approach:

- ***Death/serious injury is unacceptable***
- ***Humans make mistakes***
- ***Humans are vulnerable***
- ***Responsibility is shared***
- ***Safety is proactive***
- ***Redundancy is crucial***

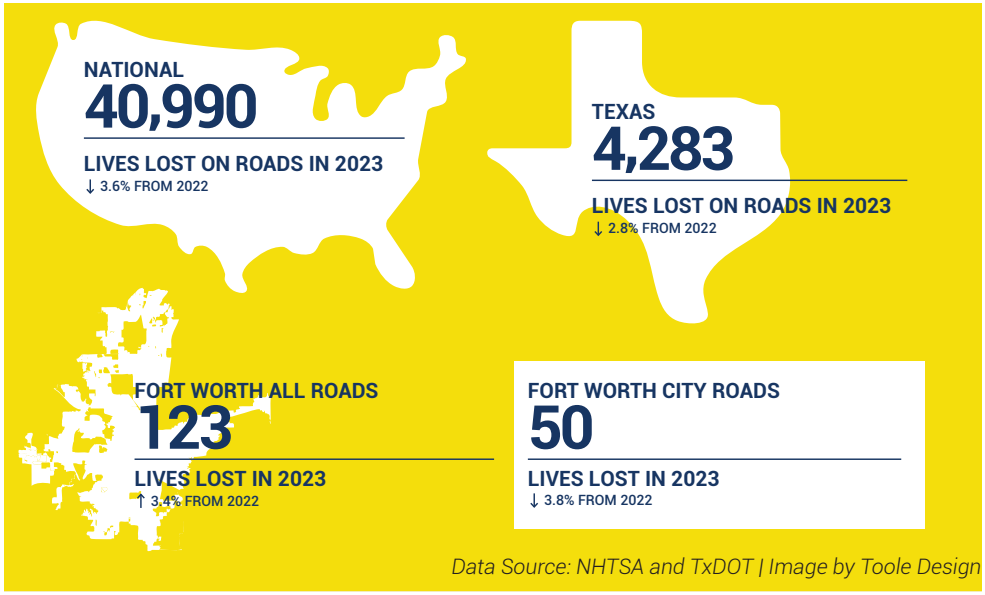
Where are we now?

Let's start with the problem, summarized in **Figure 02-2.** Over the past decade, traffic fatalities and serious injuries have decreased in many countries, but not in the US. In 2023, nearly 41,000 lives were lost on US roads, marking only the second year of a downward trend.

Texas accounts for over 10% of these national fatalities, with a slightly smaller decrease than the national average. In Fort Worth, 123 lives were lost on roadways in 2023, a 13% increase from the previous year.

Approximately 50 of these fatalities occurred on TxDOT roadways, with a smaller increase on city local roads compared to the overall numbers. Unfortunately, the national and state-level decreasing trends have not been reflected on our roadways.

Figure 02-2: Lives Lost on Roads - 2023

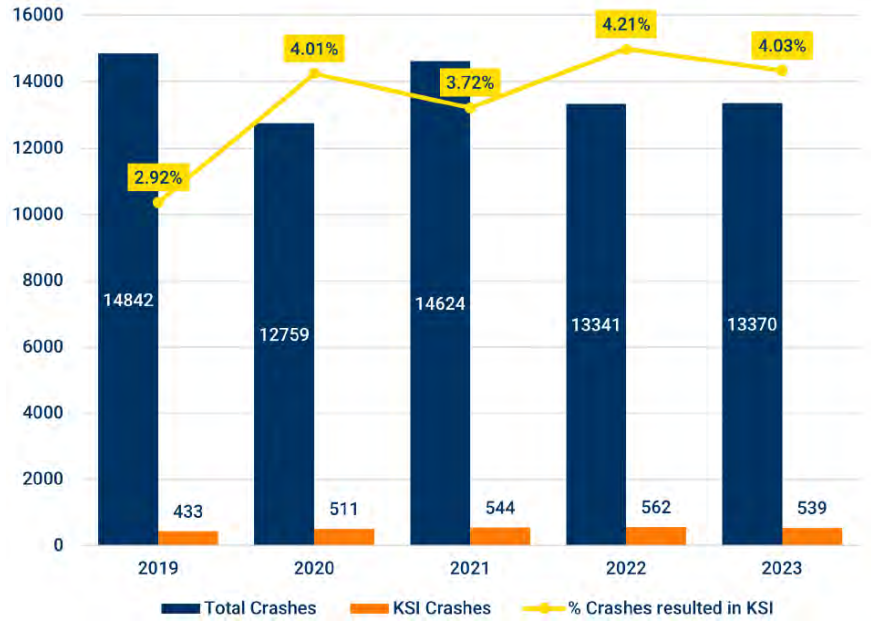


Data Source: NHTSA and TxDOT | Image by Toole Design

ROADWAY CRASHES IN FORT WORTH, 2019-2023

Figure 02-3 shows the total number of crashes per year, along with the number of KSI (Killed or Seriously Injured) crashes and the percentage of crashes that resulted in fatalities or serious injuries. The total number of crashes remained relatively stable over the five years, ranging from 13,371 in 2023 to a high of 16,424 in 2021. However, the percentage of crashes resulting in fatalities or serious injuries increased slightly over time, from 2.92% in 2019 to 4.03% in 2023.

Figure 02-3: Total and KSI Crashes by Year



Data Source: TxDOT CRIS

Figure 02-4 and **Figure 02-5** show the significant roles that speeding and distracted driving play in Fort Worth's crash severity. Speeding-related crashes account for 28% of all crashes but make up a larger 36% of KSI crashes, indicating that speeding greatly increases the likelihood of severe outcomes. Similarly, distracted driving contributes to 24% of all crashes and 20% of KSI crashes. Although its impact on KSI crashes is less pronounced than speeding, distracted driving remains a key factor in overall crash incidence.

These findings emphasize that both speeding and distracted driving are critical areas to address for enhancing road safety. Speeding, in particular, tends to correlate with more severe injuries or fatalities, while distracted driving is a widespread issue affecting general crash rates. Both behaviors will be prioritized in Fort Worth's Vision Zero Safety Action Plan to help reduce fatal and serious injury crashes.

Figure 02-4: Distribution of Speeding-Related Crashes

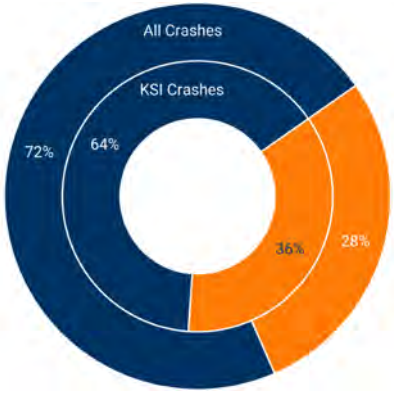
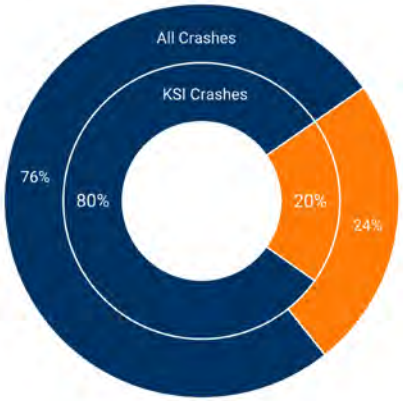


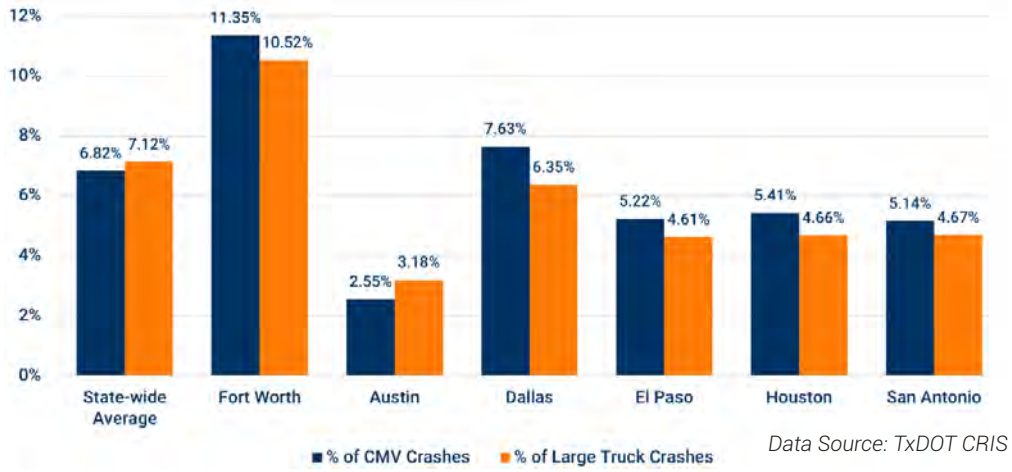
Figure 02-5: Distribution of Distracted Driving Crashes



Data Source: TxDOT CRIS

Figure 02-6 compares the percentage of crashes involving Commercial Motor Vehicles (CMVs) and large trucks in Fort Worth to other Texas cities and the state-wide average. Fort Worth has a notably higher rate of large truck crashes at 10.52% compared to the state-wide average of 6.2%, with other cities like Dallas, El Paso, and San Antonio showing lower percentages. This trend underscores a unique safety challenge in Fort Worth, where large truck-involved crashes are disproportionately higher and tend to have more severe outcomes.

Figure 02-6: Percentage of CMV and Large Truck Crashes



Data Source: TxDOT CRIS

These data underscore the need for targeted interventions in Fort Worth, with a focus on managing speeding, addressing distracted driving, and mitigating the risks associated with large truck traffic.

High Injury Network

The High Injury Network (HIN) identifies corridors with the greatest density and severity of crashes, helps prioritize investment in areas where crash history demonstrates serious problems, and effectively communicates these priorities to community members.

Figure 02-7 visualizes Fort Worth's high-injury network, overlaying it with areas of social vulnerability. Red and orange zones—representing medium-high and high vulnerability—are concentrated in central and southern parts of the city, particularly around major roadways. These areas also align with high-injury corridors, suggesting that socially vulnerable communities are disproportionately affected by severe crashes. As shown below, pedestrians and commercial motor vehicles experience the highest share of KSI crashes on the despite HIN roadways making up only 6.3% of the network, underscoring significant safety risks for both vulnerable road users and freight-related travel.

Mode	*Percentage of Crashes that are HIN*		*Percentage of Roadways that are HIN*
	All Crashes	KSI Crashes	
Pedestrian	47.8%	50.3%	2.70%
Bicycle	25.0%	46.9%	0.57%
Motorcycle	21.1%	28.0%	1.03%
Motor Vehicle	44.0%	45.4%	4.35%
Commercial Motor Vehicle	36.8%	51.2%	1.68%
Overall	50.8%	54.5%	6.30%

Figure 02-7: High Injury Network + Social Vulnerability Index

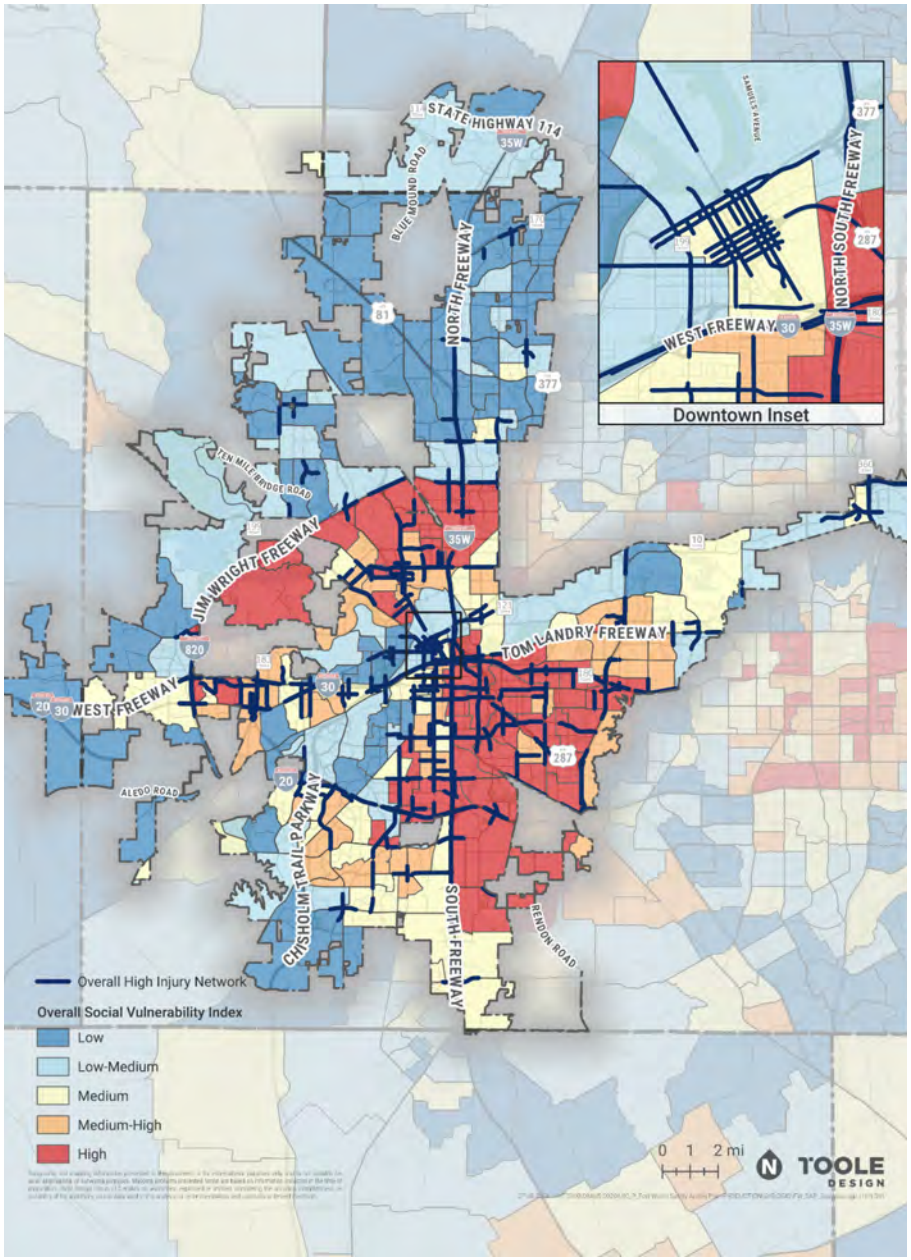


Figure 02-8 illustrates Fort Worth's Pedestrian HIN, highlighting roadways with the highest concentration of severe and fatal pedestrian crashes. The dark blue lines indicate corridors where pedestrian safety concerns are most significant, representing a small portion of the overall roadway network but accounting for a disproportionate share of serious pedestrian injuries and fatalities.

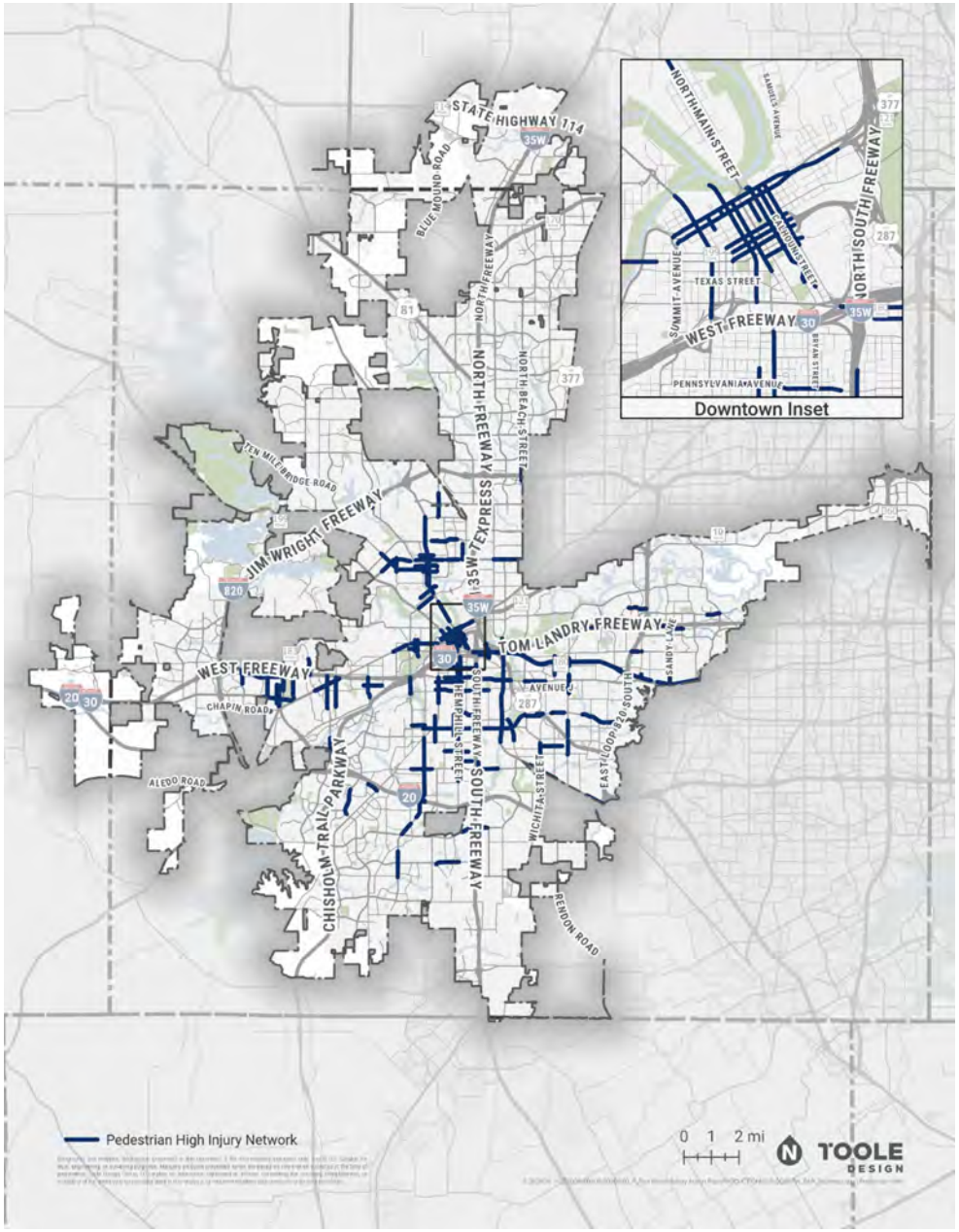
Key observations include:

- A dense concentration of high-injury corridors in Downtown Fort Worth, as shown in the inset map.
- Major freeways and arterial roads intersecting the HIN, particularly along I-35W, I-30, and US-287, which suggests challenges with pedestrian crossings and high-speed traffic environments.

This map also highlights the disproportionate impact of pedestrian crashes on vulnerable populations, particularly in southeast Fort Worth, where zero-car households are more common. Residents in these areas rely more heavily on walking and transit, yet they often face high-speed roadways, inadequate pedestrian infrastructure, and unsafe crossings. The concentration of pedestrian high-injury corridors in these neighborhoods underscores the urgent need for targeted safety improvements, including enhanced pedestrian facilities, better lighting, and traffic-calming measures, to ensure equitable access to safe and reliable transportation.

The Pedestrian HIN is a critical tool for identifying priority locations for pedestrian safety improvements, such as enhanced crossings, traffic calming measures, and infrastructure upgrades to reduce crashes and improve walkability in high-risk areas.

Figure 02-8: Pedestrian High Injury Network



2.2 FIX IT FIRST

GOAL: Create a streamlined approach that reduces waste and prioritizes cost efficiency at every stage, from planning and design to construction and maintenance.

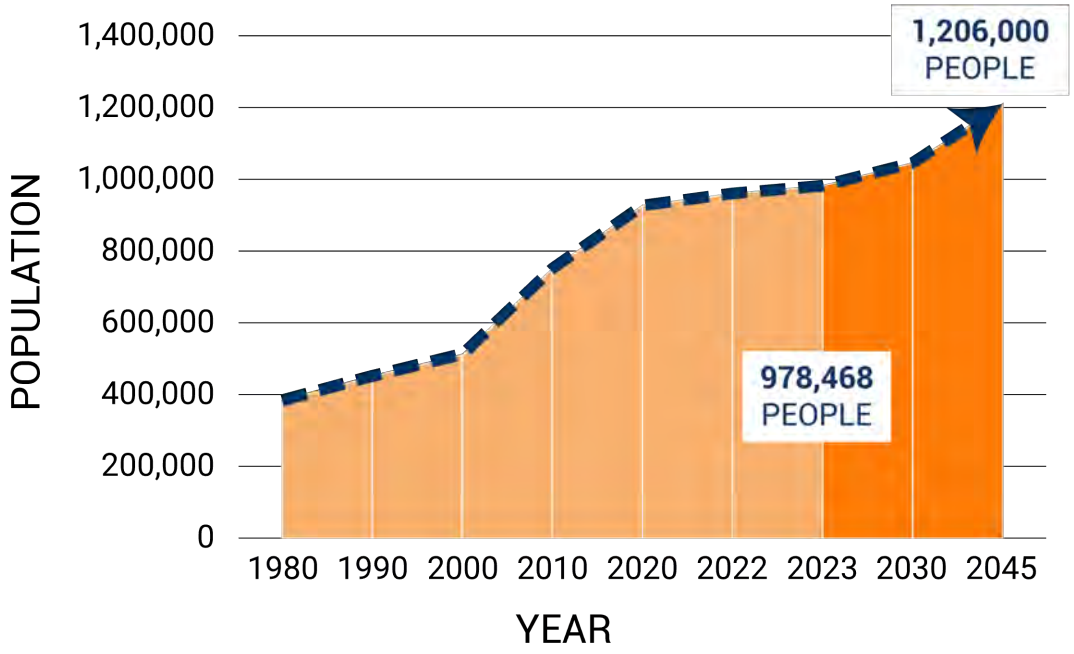
Big Growth, Big Demands

Fort Worth's rapid growth presents challenges, particularly around maintenance. This goal ensures that we maintain and upgrade existing systems and proactively plan for the maintenance and upkeep of new assets, balancing current needs with future demands.

As shown in **Figure 02-9**, Fort Worth is anticipated to experience a 25% population increase over the next two decades, growing from approximately 978,468 residents in 2023 to over 1.2 million by 2045. This significant growth trajectory indicates an urgent need for expanded infrastructure and services to meet rising demands. As the population grows, so does the pressure on transportation networks, public services, and housing. Fort Worth will need to strategically allocate resources to ensure sustainable growth, maintaining quality of life while accommodating new residents. This projected increase emphasizes the need for a balanced approach, where expanding capacity is met with strong, ongoing maintenance of existing assets.

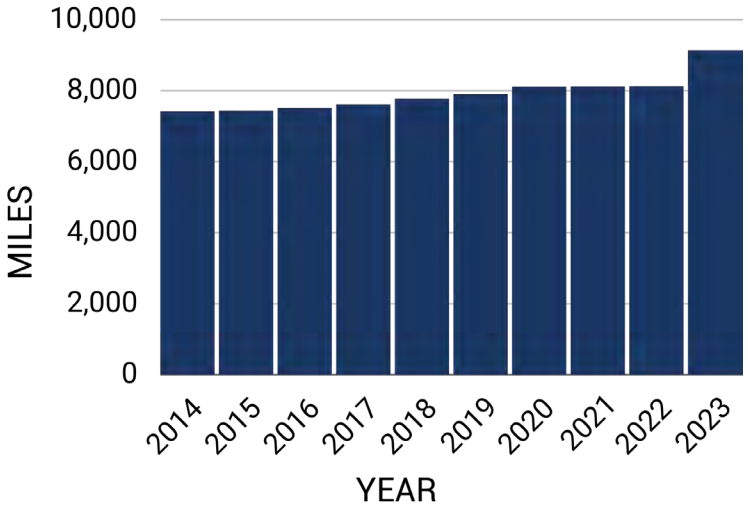
Figure 02-10 highlights Fort Worth's efforts in maintaining its street network. Since 2014, the number of maintained lane miles has shown steady growth, reflecting the city's commitment to keeping its roadways in good condition. Despite this positive trend, increasing maintenance efforts may be needed to support future demand, especially as the city's population grows and places additional strain on road infrastructure.

Figure 02-9: Historical and Projected Population Growth



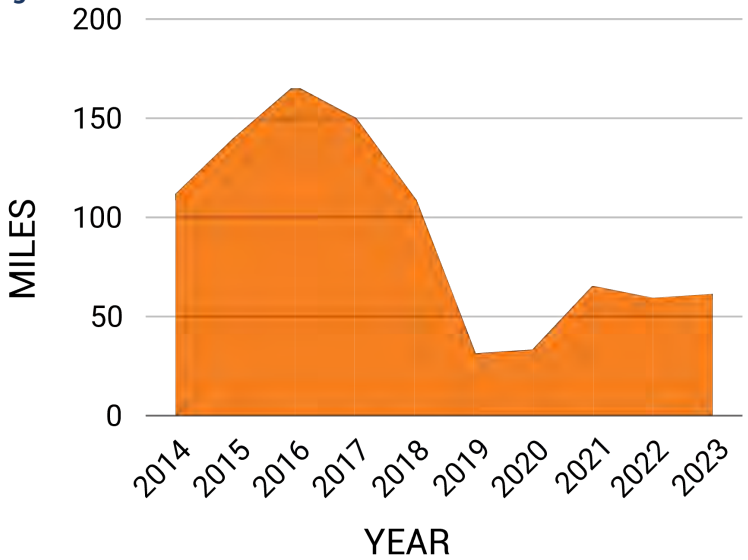
Data Source: NCTCOG

Figure 02-10: Annual Street Lane Miles Maintained



Data Source: Fort Worth Annual Comprehensive Financial Report

Figure 02-11: Annual Street Lane Miles Resurfaced



Data Source: Fort Worth Annual Comprehensive Financial Report

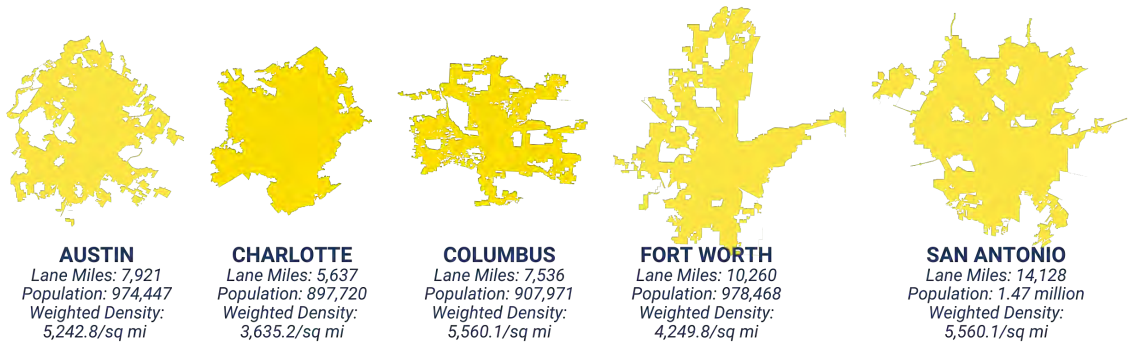
Regular maintenance is essential to extend the lifespan of the streets, improve safety, and prevent costly, large-scale repairs in the future. This steady maintenance trend is promising, yet further expansion and more intensive maintenance may be required to keep pace with Fort Worth's rapid growth.

A different trend is shown in **Figure 02-11,** with a notable decline in lane resurfacing since 2016. After peaking around 2016, resurfacing efforts have significantly decreased, with only minor increases in recent years. Given that resurfacing is critical to prevent road degradation and improve driving conditions, this decline may pose challenges, especially as Fort Worth's roads experience heavier usage due to population growth. With fewer lane miles being resurfaced annually, there is a risk of accelerated wear and tear on the road network. To mitigate this, Fort Worth will need to increase resurfacing efforts, prioritizing areas that see the highest traffic and the most significant signs of wear.

Lane Miles

Fort Worth's 10,000+ total lane miles represent a valuable infrastructure asset, essential to supporting economic growth and ensuring mobility for residents and businesses. However, the scale of this network also brings significant maintenance demands. Figure compares Fort Worth to peer cities. Fort Worth has significantly more roadway infrastructure than Austin, Charlotte, and Columbus, despite having

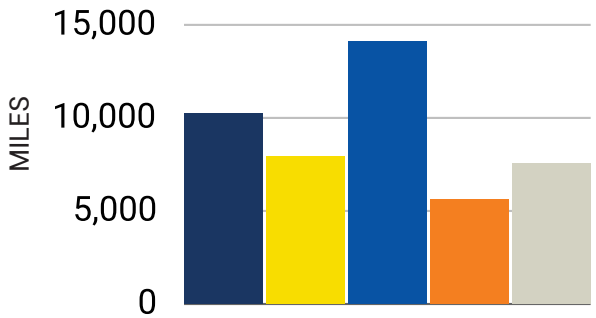
Figure 02-12: Comparison of Lane Miles, Population, and Density Across Peer Cities



Data Source: Replica, 2022 ACS 5-Year Estimates

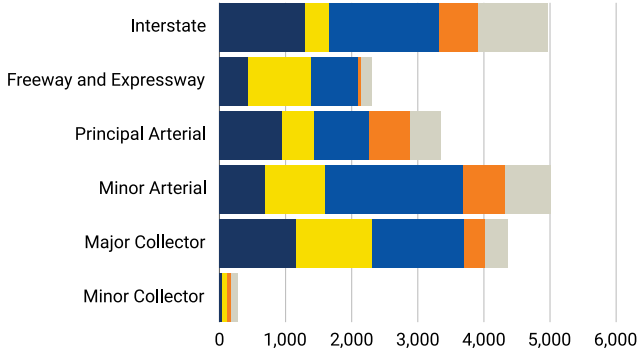
a similar population size. However, Fort Worth's weighted density of 4,249.8 people per square mile is lower than these cities, suggesting a more spread-out urban form. This sprawling layout increases the demand for road maintenance and creates challenges for efficient public transit and active transportation connectivity. In contrast, relatively denser cities like Austin and Columbus can potentially support more efficient transit systems within a smaller area, helping to network demand and reduce infrastructure strain. Fort Worth's extensive lane mileage and lower density underscore the need for strategic planning to ensure sustainable growth and effective connectivity.

Figure 02-13: Total Lane Miles Comparison



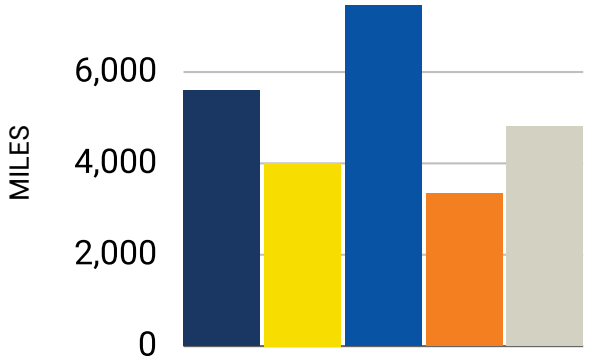
Data Source: TxDOT, NCDOT, ODOT

Figure 02-14: Lane Miles by Functional Class

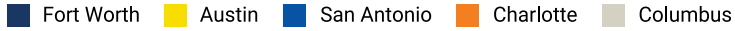


Data Source: TxDOT, NCDOT, ODOT

Figure 02-15: Local Lane Miles Comparison



Data Source: TxDOT, NCDOT, ODOT



Fort Worth's roadway network ranks as one of the largest in Texas. This extensive infrastructure supports the city's role as a transportation and logistics hub, but also comes with a **considerable responsibility for maintenance and upgrades to keep pace with usage and growth.**

Fort Worth is second only to San Antonio in interstate lane miles and has the most principal arterial miles of the group. When it comes to freeways, it has fewer than both Austin and San Antonio. Compared to its Texas counterparts, Fort Worth has fewer minor arterial miles and comparable major collector miles. Fort Worth's amount of interstate and arterial road infrastructure suggests its **strategic role in regional and long-distance logistics, supporting freight movement and intercity travel.**

With 5,593.2 local lane miles, Fort Worth boasts a large network of streets connecting neighborhoods and businesses. This substantial asset requires continuous investment (**primarily from local resources**) to ensure safety, connectivity, and efficiency.

Lifecycle Planning

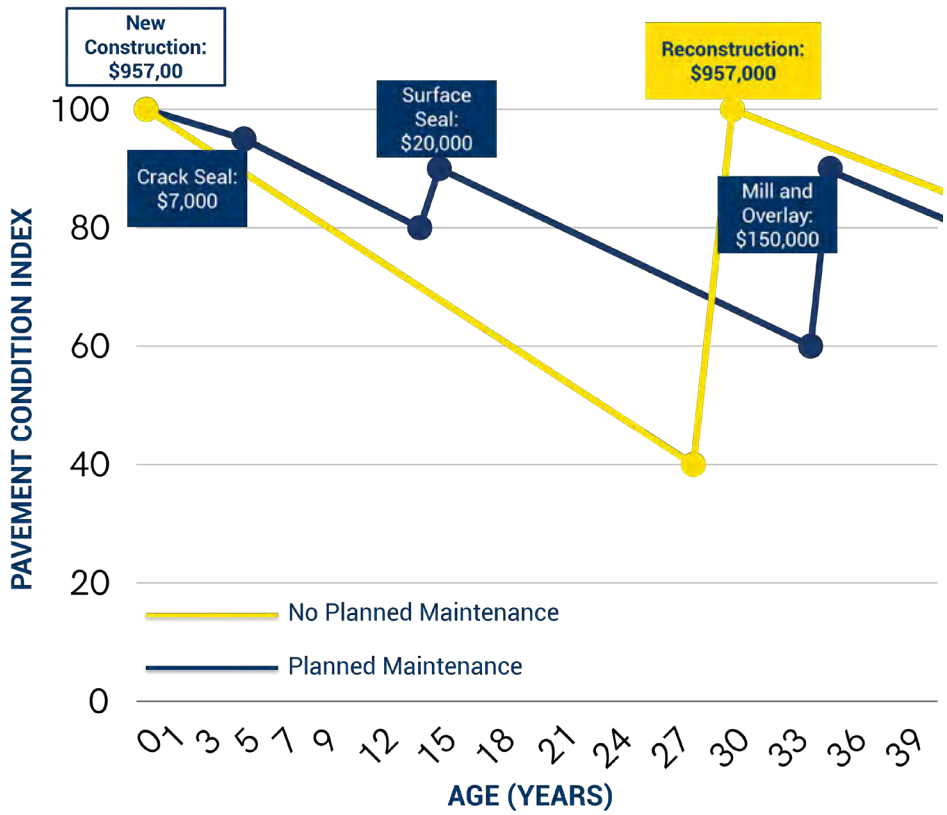
Figure 02-16 demonstrates how strategic maintenance can preserve infrastructure condition and extend service life. When maintenance is planned and conducted at key intervals, the infrastructure remains in better condition over time, reducing the frequency and cost of large-scale repairs. The graph shows two scenarios:

- **No Planned Maintenance** (yellow line): Infrastructure without proactive maintenance requires costly reconstruction at frequent intervals, leading to a Pavement Condition Index (PCI) decline below 70 in just 11 years and total costs of approximately $1.9 million (per lane mile) over 40 years.
- **Planned Maintenance** (blue line): Proactive measures, such as crack sealing, surface sealing, and mill and overlay, reduce the need for major repairs, allowing the PCI to remain above 70 for a longer period. Planned maintenance reduces the 40-year cost to $1.13 million, extending the infrastructure's life to 59 years.

The table below the graph breaks down the cost differences between planned and unplanned maintenance:

- **Construction Cost**: Both scenarios begin with a new construction cost of $957,000.
- **Maintenance Cost**: Planned maintenance incurs an additional $177,000 in periodic maintenance expenses but prevents costly full reconstruction needs.
- **40-Year Cost:** Planned maintenance results in a total 40-year cost of $1.134 million, a significant reduction compared to $1.914 million for unplanned maintenance.
- **Service Life and Condition**: With planned maintenance, the infrastructure remains in good condition (PCI above 70) for 4 years, compared to only 11 years without planned interventions. The total lifespan increases from 28 years to 59 years.

Figure 02-16: Lifecycle Planning for Cost Efficiency



	Planned Maintenance	No Planned Maintenance
Construction Cost	$957,000	$1,914,000
Maintenance Cost	$177,000	$0
40-Year Cost	$**1,134,000**	$**1,914,000**
Whole Life (years)	59	28
PCI Below 70 (years)	4	11

Data Source: City of Fort Worth, Work Session on Street Maintenance Funding

In summary, implementing a lifecycle planning approach can help Fort Worth manage infrastructure demands more efficiently, optimizing both costs and performance as the city continues to grow.

COST SAVINGS

Planned maintenance can save Fort Worth over $780,000 per lane mile in maintenance costs over a 40-year period.

EXTENDED LIFESPAN

Lifecycle planning extends infrastructure lifespan, delaying costly reconstruction and keeping roadways in better condition.

ENHANCED DURABILITY

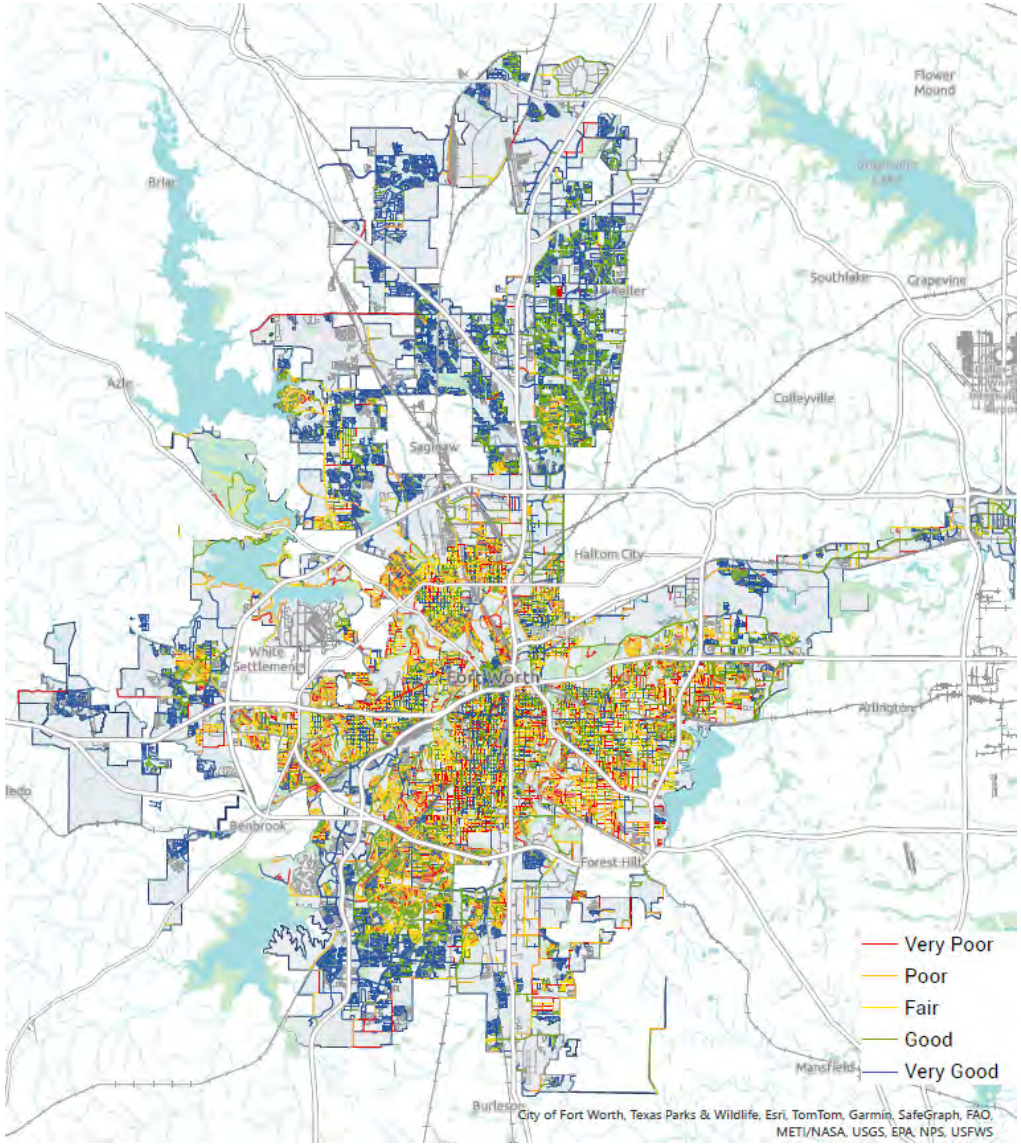
Proactive maintenance efforts maintain higher PCI scores, reducing wear and tear on infrastructure and providing smoother, safer roads for longer periods.

CURRENT PAVEMENT CONDITIONS IN FORT WORTH

Fort Worth's pavement conditions vary significantly across the city, with distinct patterns of deterioration and well-maintained areas. As the city continues to grow and expand, maintaining and improving pavement quality is essential for safe and efficient transportation.

The Pavement Condition Index (PCI) Map shown in **Figure 02-17** illustrates the distribution of pavement conditions throughout Fort Worth, revealing key areas of concern and areas with better infrastructure quality:

Figure 02-17: Pavement Condition Index

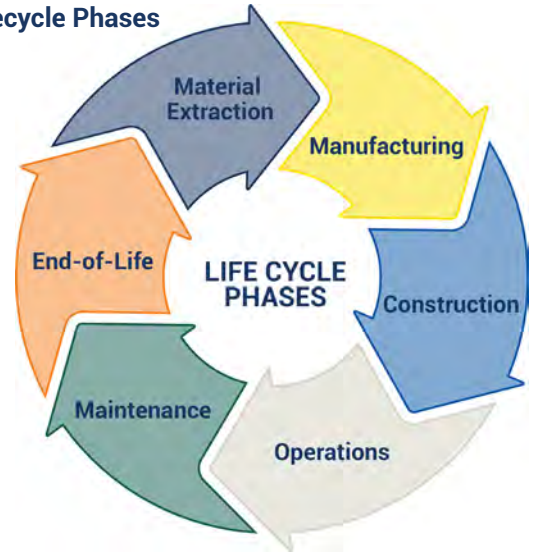


Data Source: City of Fort Worth

- **Poor Pavement Conditions:** The core of the city, along with areas extending toward the south and southeast, exhibits the most deteriorated pavement conditions. These regions are at greater risk for infrastructure issues and may require more immediate maintenance and repairs.
- **Better Pavement Conditions**: The north and western areas of Fort Worth generally display better pavement conditions, as indicated by higher PCI scores on the map. These areas may require less immediate maintenance but will still need regular upkeep to preserve their current quality.

A lifecycle management approach offers a sustainable solution to Fort Worth's infrastructure needs. As shown in **Figure 02-18**, this approach addresses each stage—from material extraction through end-of-life—to optimize performance and minimize long-term costs. Proactive maintenance at each phase extends infrastructure lifespan, reduces costly repairs, and supports a resilient, efficient transportation network for a growing city.

Figure 02-18: Lifecycle Phases



Funding Mechanisms

As Fort Worth continues to grow, the demands on its transportation infrastructure are increasing significantly. While the city has experienced notable funding increases in recent years, these additional resources are still not sufficient to meet the escalating needs for street maintenance and improvement. This section explores current funding mechanisms, recent increases, and the ongoing funding gap.

CURRENT FUNDING INCREASES

To address transportation infrastructure demands, Fort Worth has leveraged two primary funding sources: PayGo Funding and Transportation Impact Fees. Both sources have seen substantial growth recently.

- PayGo Funding has increased by 77% from $31 million in 2020 to $55 million in 2024, as illustrated in **Figure 02-19.**
- Transportation Impact Fees saw a 45% increase from $44 million in 2021 to $65 million in 2023, represented in **Figure 02-20**.

These increases demonstrate a commitment to enhancing the city's infrastructure budget to keep pace with development pressures and wear on existing streets. However, even with these boosts, the funds available remain insufficient for fully meeting street maintenance requirements.

Persistent Funding Gap

Despite the substantial increases in PayGo funding and transportation impact fees, Fort Worth faces a significant shortfall in funding to cover its full street maintenance needs. The city estimates it requires an additional $66.1 million annually beyond the current

PayGo funding to effectively address the growing demand for street infrastructure maintenance. This funding gap highlights the need for alternative solutions or expanded funding mechanisms to ensure sustainable infrastructure upkeep.

Fund Balance for Street Transportation Projects

The Fund Balance for Street Transportation Projects, depicted in **Figure 02-21**, has also seen a dramatic rise, with a 140% increase from $49 million in 2021 to $120 million in 2023. This growth reflects proactive efforts to build a buffer for future projects. However, while this increase is a positive step, the current demands still exceed available resources, reinforcing the need for continued funding expansion.

Figure 02-19: PayGo Funding

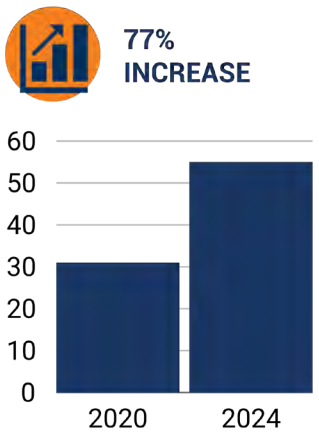


Figure 02-20: Transportation Impact Fees

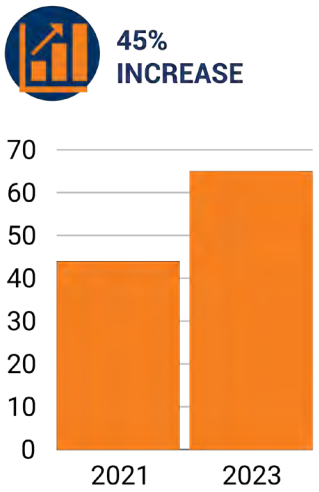
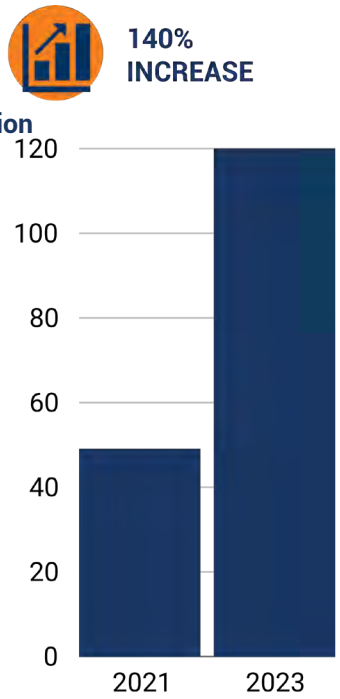


Figure 02-21: Fund Balance For Street Transportation Projects



KEY TAKEAWAYS

FUNDING INCREASES

Two primary funding sources have recently seen significant increases, with PayGo funding up 77% and transportation impact fees up 45%.

ONGOING DEMAND

Even with increased funding, the demand for street maintenance continues to exceed available resources.

FUNDING SHORTFALL

Fort Worth requires an additional $66.1 million per year to bridge the gap and adequately maintain its infrastructure.

SUSTAINABLE SOLUTIONS

Addressing this funding gap will be critical as Fort Worth grows, necessitating strategic exploration of new or expanded funding mechanisms.

See **Appendix 2** for a more comprehensive financial review, including potential funding sources for transportation projects.

2.3 HUMAN COMFORT

GOAL: Create a network that is convenient, connected, environmentally considerate, and empowers everyone with the freedom to choose their preferred way of travel.

Transportation should be about choices, efficiency and comfort. We're focused on easing congestion, keeping traffic flowing smoothly, enhancing alternatives like biking and transit, and improving connections throughout the city. We also want to improve air quality to create a healthier and more comfortable place to live.

Congestion

Traffic congestion affects more than just our schedules—it has a direct impact on our comfort and quality of life. Long, frustrating commutes and frequent delays make it harder to get where we need to go, adding stress to our day and taking time away from family, hobbies, and relaxation. For many, congestion means less time for the things that matter most, whether it's picking up kids on time, enjoying outdoor spaces, or connecting with friends. The constant noise and pollution from heavy traffic can also make our neighborhoods feel less peaceful and even affect our health. That's why finding ways to reduce congestion is a top priority for Fort Worth residents, who want a city where getting around is easier, healthier, and more enjoyable.

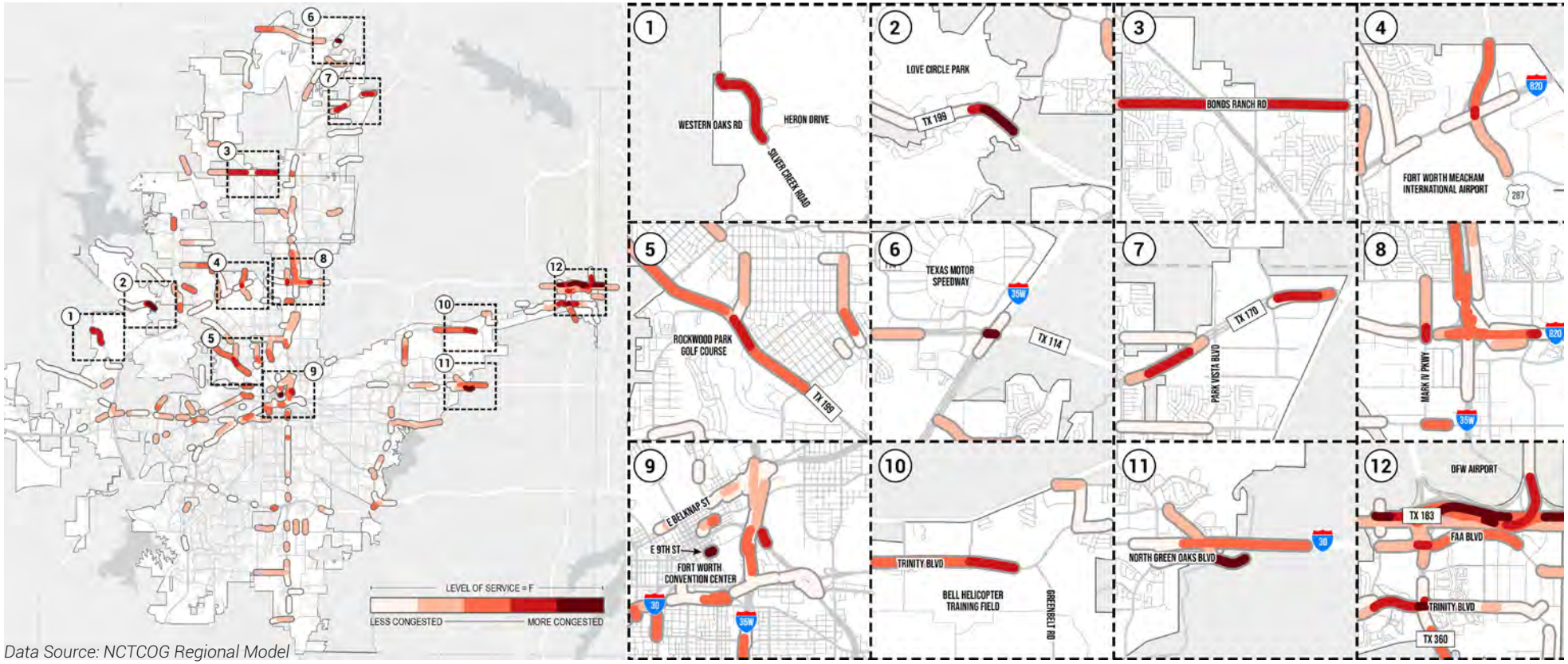


Figure 02-22 depicts the top 12 most congested areas in Fort Worth, focusing on critical corridors and intersections with high traffic volumes and low levels of service. These areas experience significant congestion, indicated by dark red shades, which represents Level of Service F, the lowest performance level for traffic flow.

Key Congestion Hotspots

1. **Western Oaks Rd / Heron Dr Area**: This western corridor experiences high congestion, affecting local mobility.
2. **TX 199 near Love Circle Park**: A primary route facing severe bottlenecks, impacting access to surrounding neighborhoods.
3. **Bonds Ranch Rd Corridor**: Increased congestion here limits the efficiency of this major northwestern route.
4. **Fort Worth Meacham International Airport Area**: Heavy traffic around this transportation hub highlights the need for improved infrastructure to support airport access.
5. **Rockwood Park Golf Course Area**: High congestion on adjacent roads affects both recreational and local traffic.
6. **Texas Motor Speedway Vicinity**: Major events cause periodic spikes in traffic, requiring robust congestion management strategies.

Figure 02-22: Top 12 Most Congested Areas in Fort Worth



Data Source: NCTCOG Regional Model

7. **TX 170 Corridor**: This highway segment faces consistent congestion, impacting travel between Fort Worth and surrounding areas.
8. **Mark IV Parkway and I-820 Intersection**: A critical interchange with significant traffic volumes that impact north-south connectivity.
9. **Downtown Fort Worth (E Belknap St and E 9th St near the Convention Center)**: A central area where congestion affects access to the city's core and key event spaces.
10. **Trinity Blvd near Bell Helicopter Training Field**: Persistent congestion here affects both industrial and commuter traffic.
11. **North Green Oaks Blvd near I-30**: A highly congested corridor that impacts cross-regional movement.
12. **DFW Airport Vicinity (TX 183, FAA Blvd, and Trinity Blvd)**: This area around DFW Airport experiences high congestion, affecting airport access and regional connectivity.

Implications for Transportation Planning

The concentration of congestion in these key areas underscores the need for targeted traffic management solutions and capacity improvements. Addressing these congestion hotspots can improve traffic flow, reduce delays, and enhance access to major destinations, including DFW Airport, Texas Motor Speedway, and Downtown Fort Worth. Strategic interventions, such as expanding capacity, optimizing signal timing, and enhancing alternative routes, will be critical in mitigating congestion in these priority corridors.

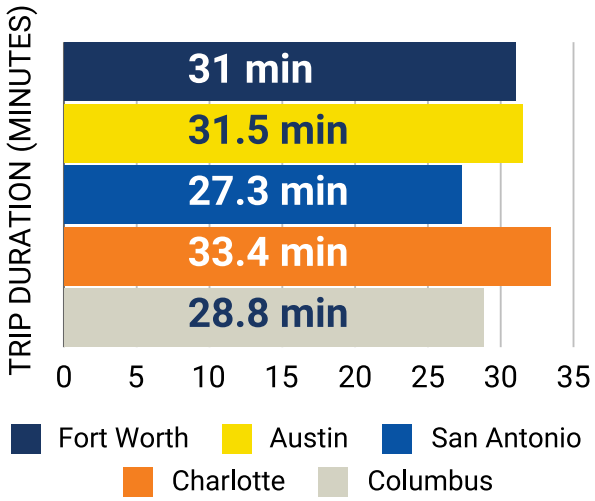
Travel Time

Travel time plays a big role in how comfortable and enjoyable daily life feels. For Fort Worth residents, the time spent on the road is comparable to other major cities. With an average trip time of about 31 minutes, Fort Worth's travel times align closely with those in places like Austin and San Antonio. This consistency suggests that, while traffic is certainly part of life here, it is not out of the ordinary considering the city's size and development pattern.

Average Trip Duration

Figure 02-23 shows that Fort Worth residents spend an average of 31 minutes per trip, which is similar to cities like Austin (31.5 minutes) and San Antonio (27.3 minutes). Fort Worth's travel time is slightly shorter than Charlotte (33.4 minutes) but longer than Columbus (28.8 minutes). This consistency with other cities reflects Fort Worth's relative accessibility and travel efficiency.

Figure 02-23: Average Trip Duration Comparison

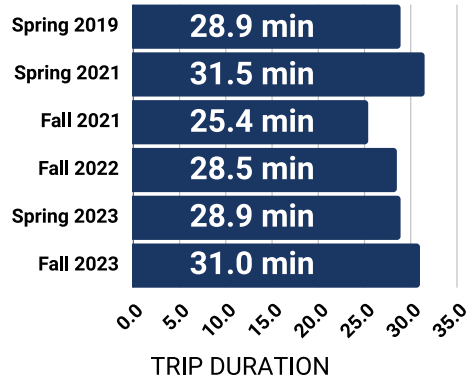


Data Source: Replica

Historical Trip Duration

Despite public perception that travel times are rapidly increasing, **Figure 02-24** illustrates that the city's average travel time has remained relatively steady over recent years, generally falling between 28 and 31 minutes. Considering Fort Worth's rapid growth and evolving traffic patterns, this is a testament to the resilience and stability of the city's transportation network.

Figure 02-24: Historical Trip Duration

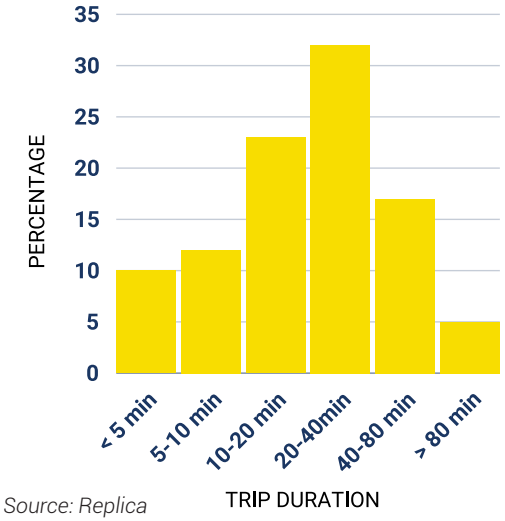


Data Source: Replica

Trip Duration Distribution

As indicated in **Figure 02-25,** most trips in Fort Worth fall within the 20 to 40-minute range, with a smaller portion of trips taking either less than 10 minutes or more than 40 minutes.

Figure 02-25: Trip Duration Distribution



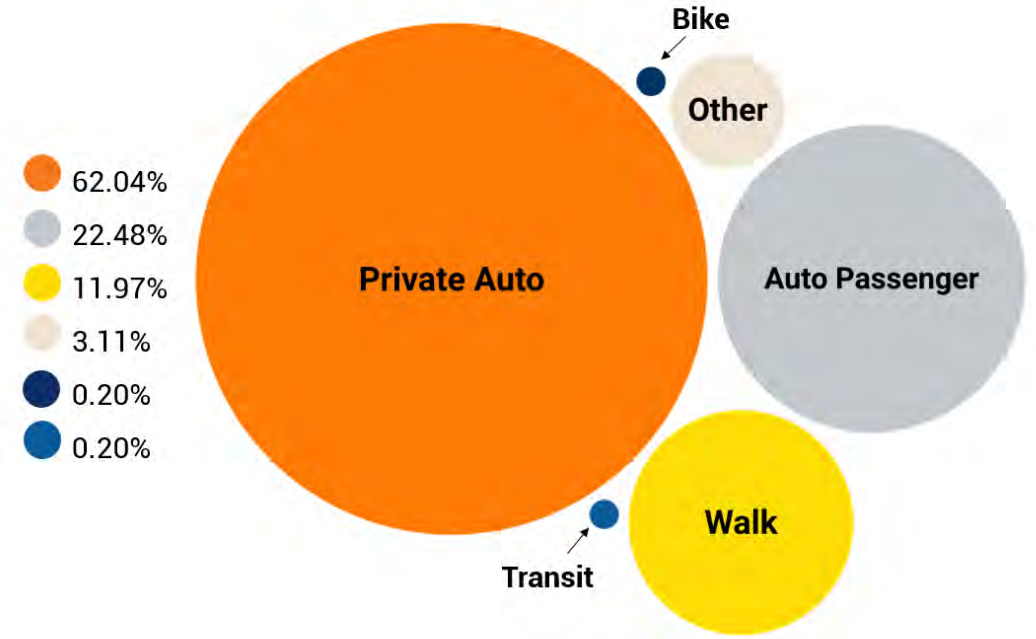
Data Source: Replica

Mode Share

The mode share data for Fort Worth shown in **Figure 02-26** indicates a strong preference for private vehicle use, with 62.04% of trips made by private auto. This reliance on personal vehicles reflects the city's car-oriented infrastructure and suggests that many residents find car travel the most comfortable and convenient option. With 22.48% of trips made as auto passengers, solo driving remains the primary way people choose to get around.

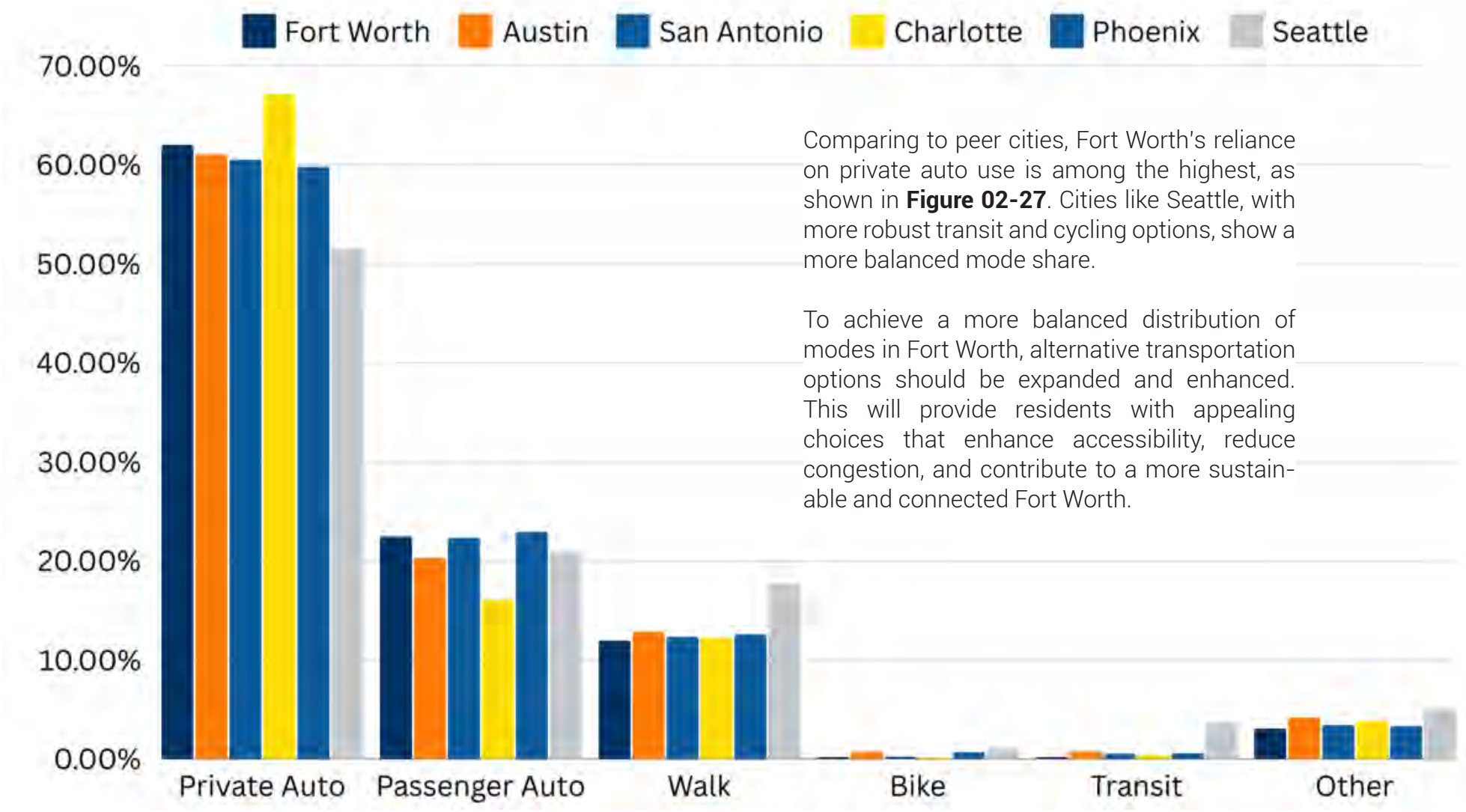
Alternative transportation modes, such as walking and transit, represent smaller shares, at 11.97% and 0.20% respectively. The lower percentage of transit use may indicate challenges with transit availability, convenience, or reliability, making it less attractive for some residents. Similarly, the small share for bike trips (0.20%) suggests there may be barriers to cycling, like limited dedicated infrastructure or safety concerns. It's clear that, for now, car travel remains the most comfortable and reliable choice for many residents.

Figure 02-26: Trip Volume by Mode, Typical Weekday



Data Source: Replica

Figure 02-27: Mode Share Peer Cities Comparison



Comparing to peer cities, Fort Worth's reliance on private auto use is among the highest, as shown in **Figure 02-27**. Cities like Seattle, with more robust transit and cycling options, show a more balanced mode share.

To achieve a more balanced distribution of modes in Fort Worth, alternative transportation options should be expanded and enhanced. This will provide residents with appealing choices that enhance accessibility, reduce congestion, and contribute to a more sustainable and connected Fort Worth.

Data Source: Replica

Travel Patterns

To gain insight into travel patterns around Fort Worth, the analysis examined "desire lines"—the direct links between where trips begin and end. These desire lines reveal the most common connections within, to, and from the city, highlighting key travel demands. By identifying these natural movement patterns, transportation improvements target high-demand connections, making trips smoother and more comfortable.

North Central Texas Council of Governments (NCTCOG) origin-destination (OD) data by traffic analysis zone (TAZ) for trips made during the 2023 AM period were utilized in this analysis.

Transportation analysis zones within the NCTCOG dataset range from a land area of approximately one square block in downtown areas to more than 50 square miles in suburban and rural areas. As a result, some key activity centers such as downtown Forth Worth are comprised of more than 50 TAZs while the DFW Airport is made up of less than 30 TAZs and Texas Christian University (TCU) encompasses only five TAZs. To avoid obscuring key travel patterns due to this wide range in land area, NCTCOG TAZ data within the 2010 Urbanized Area was aggregated into analysis districts based on existing transportation barriers such as interstates and water bodies as well as similar land use. This aggregation simplifies the travel pattern analysis from considering over 5,000 individual TAZs to approximately 1,000 analysis districts.

The following sections summarize the results of three travel pattern analyses:

1. **Within Fort Worth**: Trips beginning and ending within Fort Worth
2. **From Fort Worth**: Trips beginning in Fort Worth and ending outside Fort Worth
3. **To Fort Worth**: Trips beginning outside Forth Worth and ending within Fort Worth.

WITHIN FORT WORTH TRAVEL PATTERN

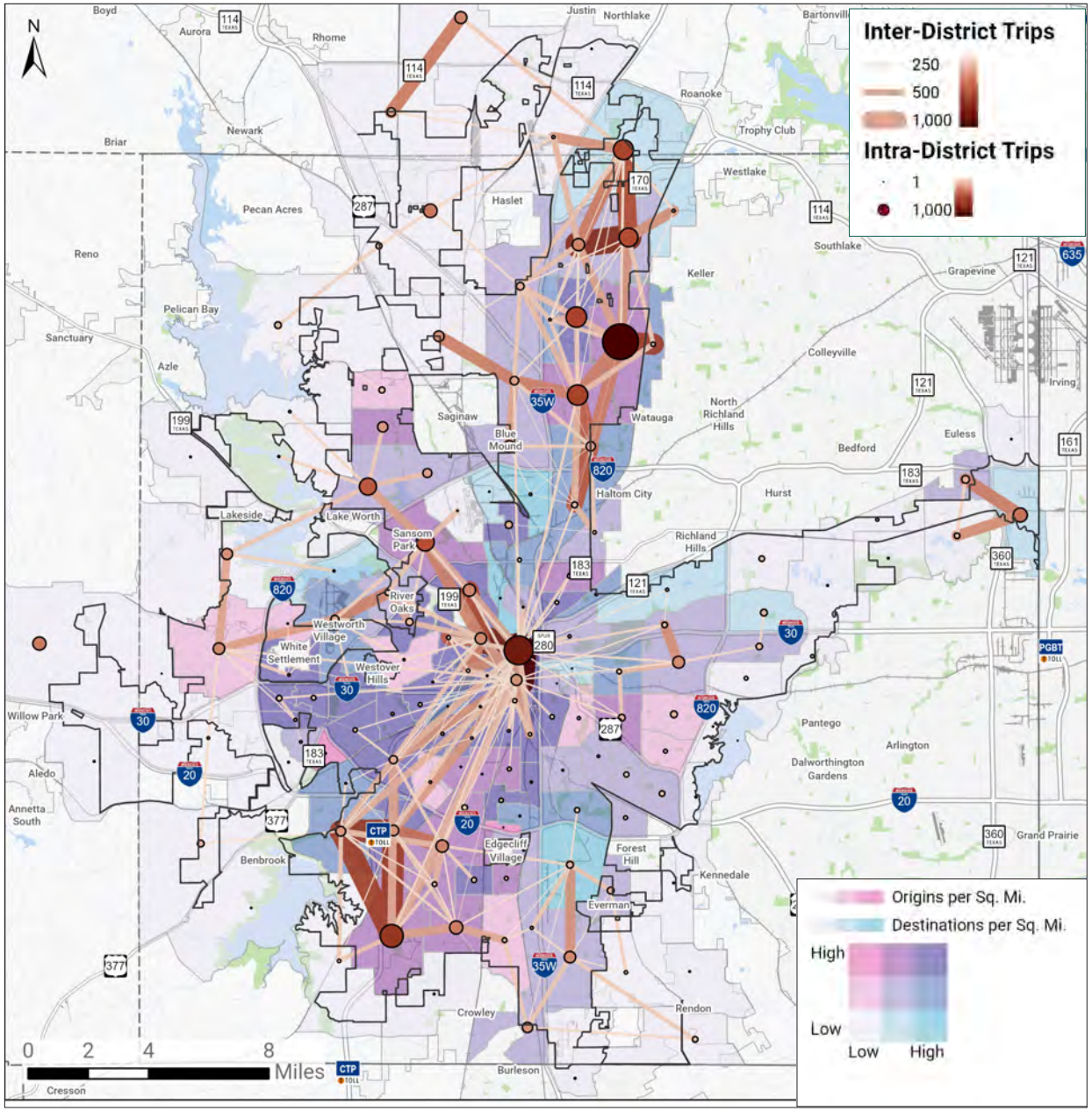
Figure 02-28 depicts three types of travel patterns for the 151 analysis districts within the City of Fort Worth:

- **Intra-District Trips**: Total trips starting and ending within the given district (represented by a point with radius and color proportional to the total number of trips)
- **Inter-District Trips**: Total trips connecting any two districts regardless of trip direction (represented by a line connecting the given districts with line thickness and color proportional to the total number of trips). For visual simplicity, inter-district trips are only visualized if the total trips between the two analysis districts exceed 250 trips.
- **Trip Activity Density:** Total trip origins and destinations per square mile including both intra- and inter-district trips (represented by analysis district shading).

In general, most travel within Fort Worth during the AM period is located to the west or northeast of Downtown with relatively few trips on the eastern side of the city. Top inter-district trips are typically between adjacent analysis districts with the exception of trips to Downtown where there is a greater prevalence of high trip volumes from both adjacent and further away analysis districts.

Areas within the City of Fort Worth with significant trip activity and strong travel patterns to several analysis districts include, from north to south:

Figure 02-28: 2023 AM Travel Patterns Within Fort Worth



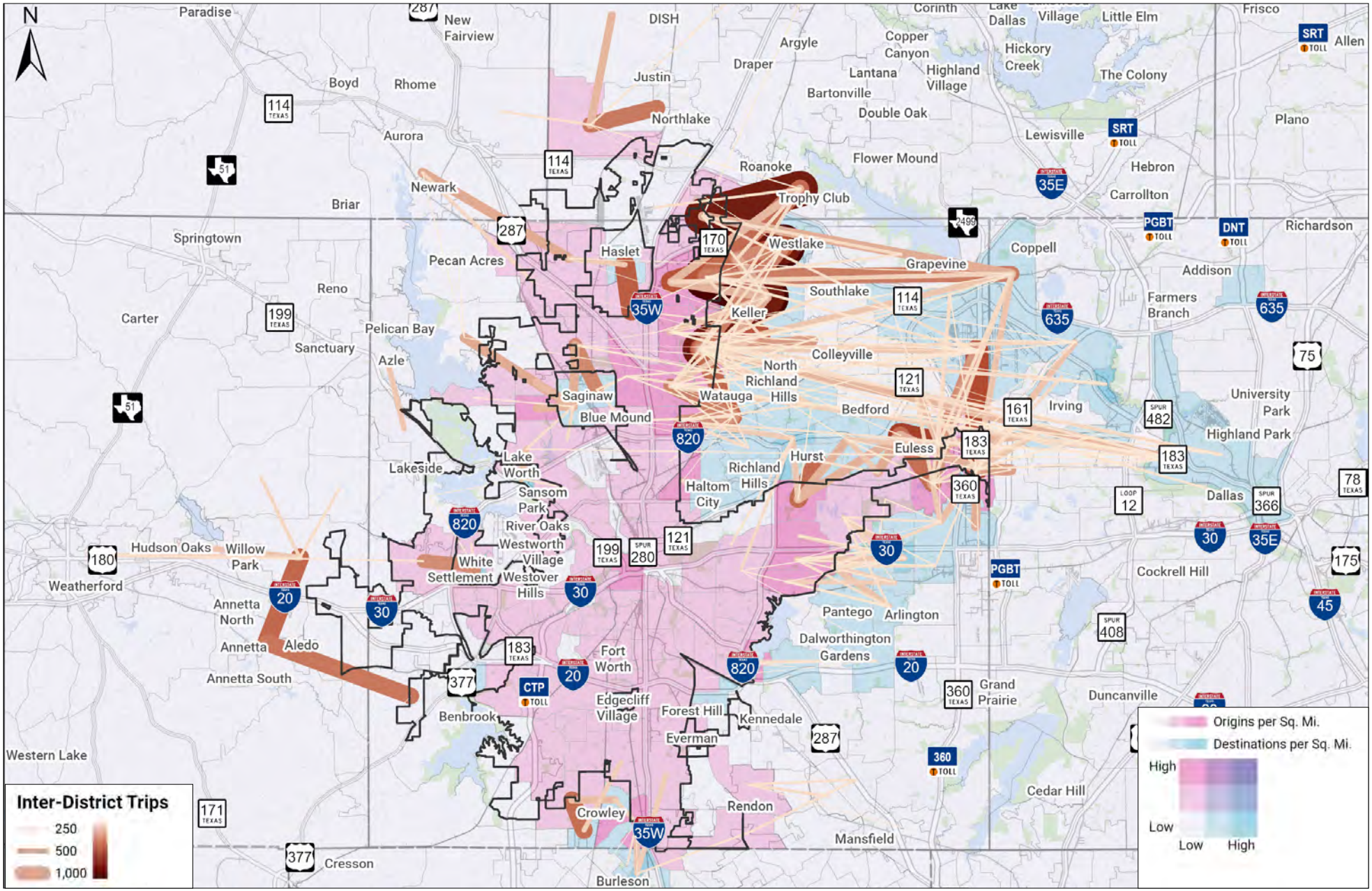
- Industrial area near Roanoke between I-35W and TX-170
- Residential area south of TX-170 near the Villages of Woodland Springs
- Residential and Industrial area near the Heritage Neighborhood, Central High School, and the Kroger Distribution Center Warehouse
- Along TX-199
- Downtown Fort Worth
- Near Southside neighborhood
- The Linwood/West 7th/Cultural District Neighborhoods to the west of Downtown Fort Worth
- Hulen Mall and the adjacent commercial area near I-20 and Chisholm Trail Parkway

TRIPS STARTING IN FORT WORTH AND ENDING BEYOND THE CITY

Figure 02-29 depicts inter-district trips starting inside Fort Worth and ending outside of the city as well as the associated trip activity density. As this analysis is limited to trips crossing the City of Fort Worth boundary, no intra-district trips are included in this analysis. In addition, inter-district trips are visualized for all analysis district pairs exceeding 100 trips (rather than 250+ used for the Within Fort Worth analysis) due to lower inter-district volumes.

Notably, the strongest travel patterns leaving Fort Worth in the morning travel east to the

Figure 02-29: 2023 AM Travel Patterns From Fort Worth



adjacent suburbs of Trophy Club, Westlake, Keller, and Watuga rather than to the west into Parker County. Other strong travel patterns include north-eastern and eastern Fort Worth to the DFW Airport and adjacent industrial area as well as Fort Worth to White Settlement and Fort Wort to Aledo and eastern Willow Park.

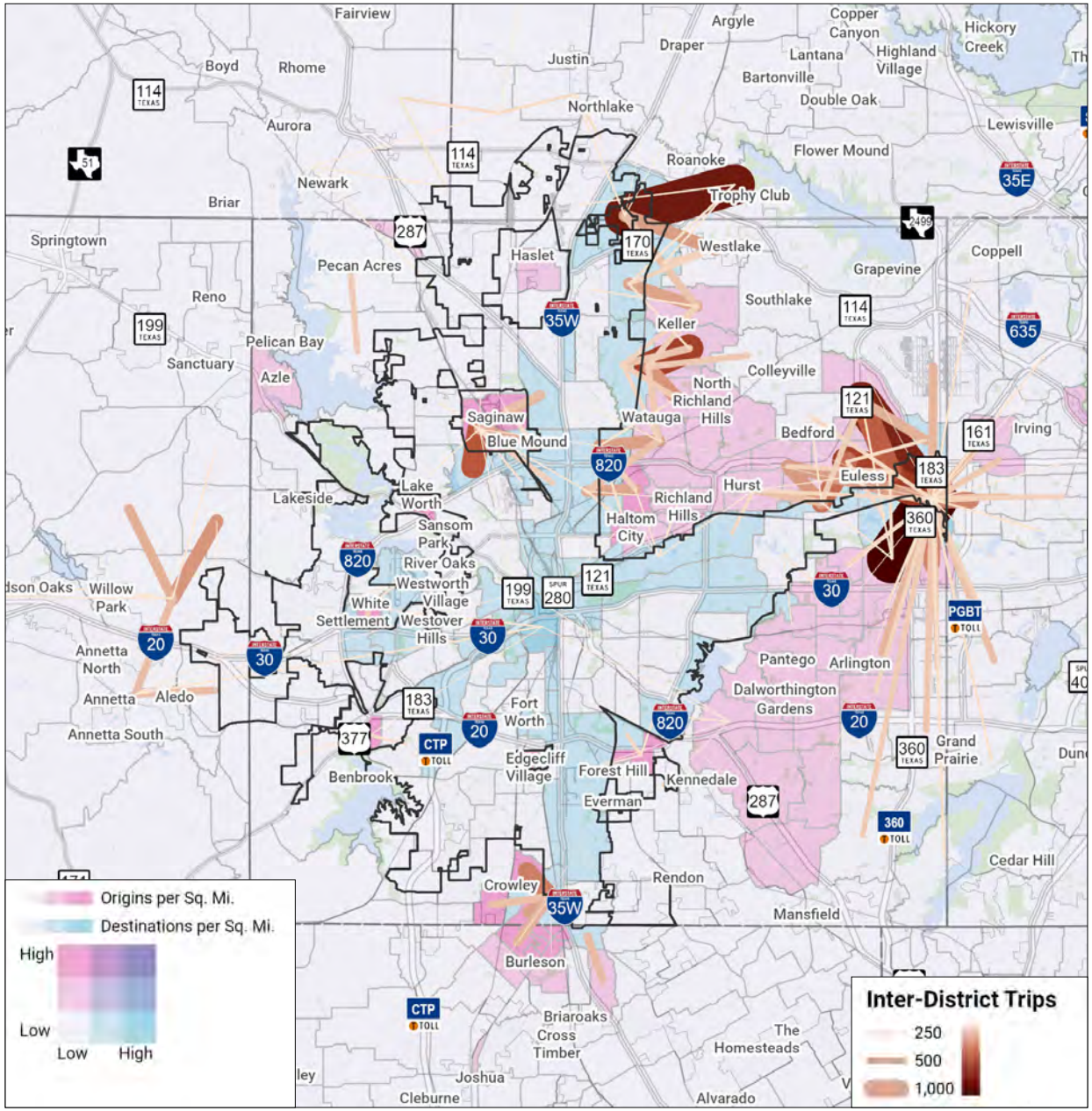
TRAVEL TO FORT WORTH FROM BEYOND

Figure 02-30 depicts inter-district trips starting outside Fort Worth and ending inside the city as well as the associated trip activity density. As this analysis is limited to trips crossing the City of Fort Worth boundary, no intra-district trips are included in this analysis. In addition, inter-district trips are visualized for all analysis district pairs exceeding 100 trips (rather than 250+ used for the Within Fort Worth analysis) due to lower inter-district volumes.

Notably, the strongest travel patterns entering Fort Worth in the morning are located adjacent to DFW Airport. Other strong travel patterns into Fort Worth include travel from the adjacent northern suburbs of Trophy Club, Westlake, Keller, and Watuga while relatively few strong trip patterns are from Parker County to the west, similar to the relative strength of western versus eastern travel patterns presented in the "From Fort Worth" analysis.

See **Appendix 3** for an OD analysis of major employment focus areas.

Figure 02-30: 2023 AM Travel Patterns To Fort Worth

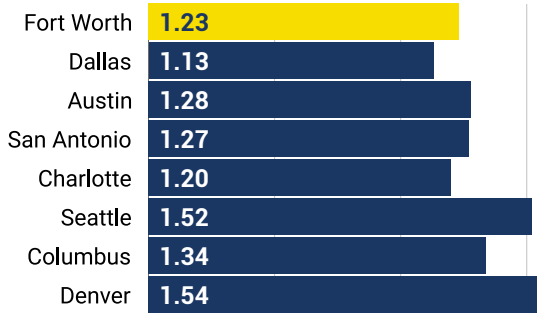


Street Connectivity

Fort Worth's street network has a connectivity ratio of 1.23, indicating a moderate level of connectivity. This ratio—representing the number of street segments per intersection—reflects the overall accessibility and route options within the road network. Generally, a higher connectivity ratio provides more travel options, which can lead to reduced congestion, shorter travel times, and fewer crashes.

As shown in **Figure 02-31**, Fort Worth's connectivity ratio is lower than some peer cities. For instance, Austin (1.28), San Antonio (1.27), Columbus (1.52), and Seattle (1.54) all show higher connectivity ratios, offering residents more route options and contributing to a potentially more efficient and safer transportation network. Fort Worth's ratio is similar to Dallas (1.13), highlighting an opportunity to improve connectivity and better align with cities that have higher ratios.

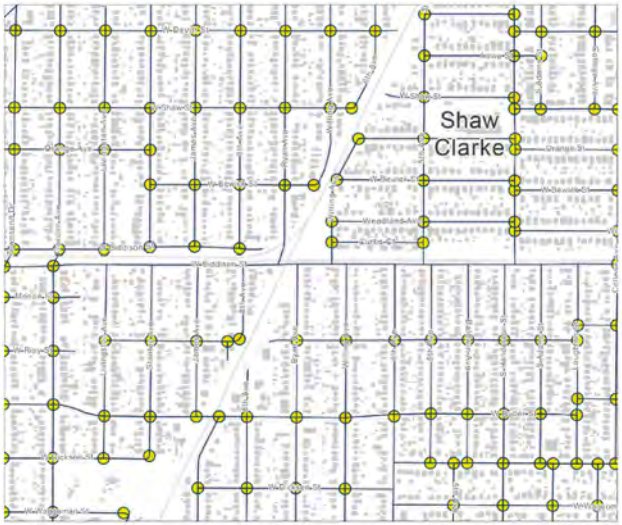
Figure 02-31: Peer City Street Connectivity



Within Fort Worth, the difference in connectivity is also evident when comparing neighborhoods. As shown in **Figure 02-32**, the Shaw Clarke neighborhood, with a connectivity ratio of 1.72 and a higher intersection density, experiences fewer crashes (162) than South Edgewood, which has a lower connectivity ratio of 1.61 and nearly double the crashes (294). This contrast suggests that improving street connectivity in certain areas could enhance safety and accessibility by dispersing traffic and offering more route options. See **Appendix 4** for the complete Connectivity Analysis.

Figure 02-32: Fort Worth Neighborhood Street Connectivity Comparison

Shaw Clarke



South Edgewood



		Shaw Clarke	South Edgewood
Street Connectivity	Intersection Density	151 Intersections/ sq mi	105 Intersections/ sq mi
	% 4-way intersections	39.73%	14.28%
	Link-node ratio	1.72	1.61
Congestion	TTI: Morning peak	1.07	1.08
	TTI: Afternoon peak	1.12	1.04
Safety	Number of crashes	162	294

2.4 ECONOMIC COMPETITIVENESS

GOAL: Support businesses, improve regional and global connectivity, facilitate trade and investment, promote labor mobility, and enhance prosperity.

Strengthening the Tax Base

Expanding Fort Worth's tax base is key to boosting the city's economic competitiveness and supporting sustainable growth. The FY2025 budget projects a 1.58% increase in property tax revenue over last year, with $25.9 million of which comes from new properties added to the tax roll. The property tax rate remains steady at $0.6725 per $100 valuation, aligning with Fort Worth's commitment to balance fiscal responsibility with economic expansion. By broadening the tax base and attracting a range of business investments, Fort Worth can secure the resources needed for essential improvements in infrastructure, public safety, and quality of life, positioning itself as a competitive and appealing urban center.

Mixed-use development, as exemplified by Clearfork shown in **Figure 02-34,** plays a strong role in expanding Fort Worth's tax base. By blending residential, commercial, and retail spaces in a single area, mixed-use projects attract diverse investments, increase property values, and create multiple revenue streams through property, sales, and business taxes. These developments encourage walkable, vibrant communities where residents and businesses are close together, supporting local spending and fostering

Figure 02-33: City of Fort Worth Fiscal Year 2024-2025 Annual Budget Changes

1.58% increase
IN PROPERTY TAX REVENUE

Property Tax Rate
$0.6725/$100 VALUATION

$25.99 million
IN NEW PROPERTIES

Figure 02-34: Clearfork Development, Fort Worth



a 24/7 economy. They're a sustainable way to grow the tax base, as they generate steady revenue and attract further investment.

In addition, mixed-use developments are cost-effective, often requiring less infrastructure while maximizing land use and reducing urban sprawl. By increasing revenue per square mile and supporting a more connected, active city environment, mixed-use development helps Fort Worth build a resilient tax base that can support long-term growth and economic strength.

Daytime Population

Fort Worth gains population during the day as workers commute into the city, while Tarrant County as a whole experiences a net loss. However, many Fort Worth residents also leave the city for work, reducing the number of people available to shop, dine, and engage with local businesses and attractions during normal business hours. According 2023 ACS 1-year estimates shown in **Figure 02-35**, Fort Worth's daytime population was estimated at 1,045,333 with an Employment Residence (ER) Ratio of 1.03, indicating that the city attracts more workers than it sends out.

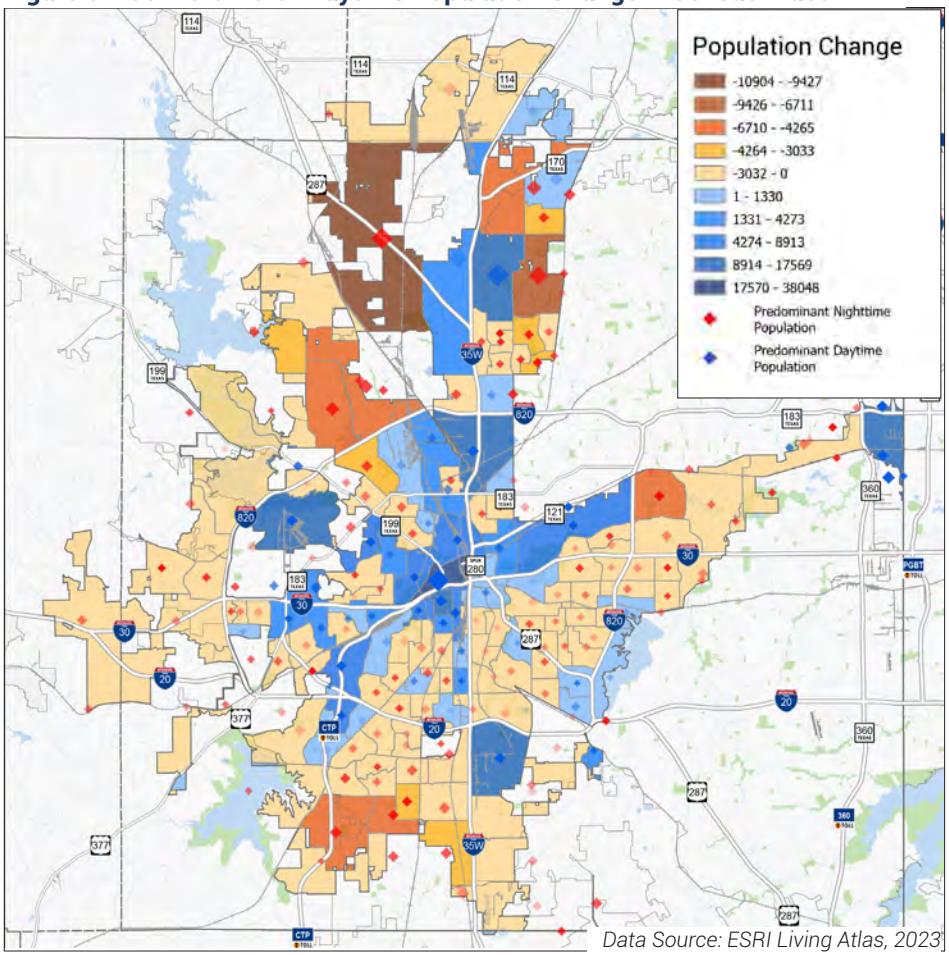
Figure 02-35: Fort Worth Daytime Population Change – Census Tract

	Fort Worth	Dallas	Austin	San Antonio	Charlotte	Columbus
Total Population	976,932	1,302,859	979,700	1,495,312	911,307	909,074
Daytime Population	1,045,333	1,532,569	1,201,100	1,625,039	1,086,521	964,489
ER Ratio	1.07	1.18	1.23	1.09	1.19	1.06

Data Source: Calculated from ACS 1-Year Estimates, 2023

Figure 02-36 illustrates daytime population change by census tract, where orange areas highlight districts losing residents during the day as they commute elsewhere for work, impacting daytime economic activity.

Figure 02-36: Fort Worth Daytime Population Change – Census Tract



Data Source: ESRI Living Atlas, 2023

In addition to expanding the tax base, the promotion of mixed-use development could help retain more people within the city throughout the day by creating vibrant neighborhoods where residents can live, work, and access amenities all in one place. With residential, office, and retail spaces closely integrated, mixed-use areas encourage people to stay local, increasing foot traffic for businesses and supporting a more dynamic, economically active

urban environment.

Improved transportation options connecting these mixed-use hubs would further strengthen accessibility, making it even easier for residents and workers to stay within the city and support local businesses.

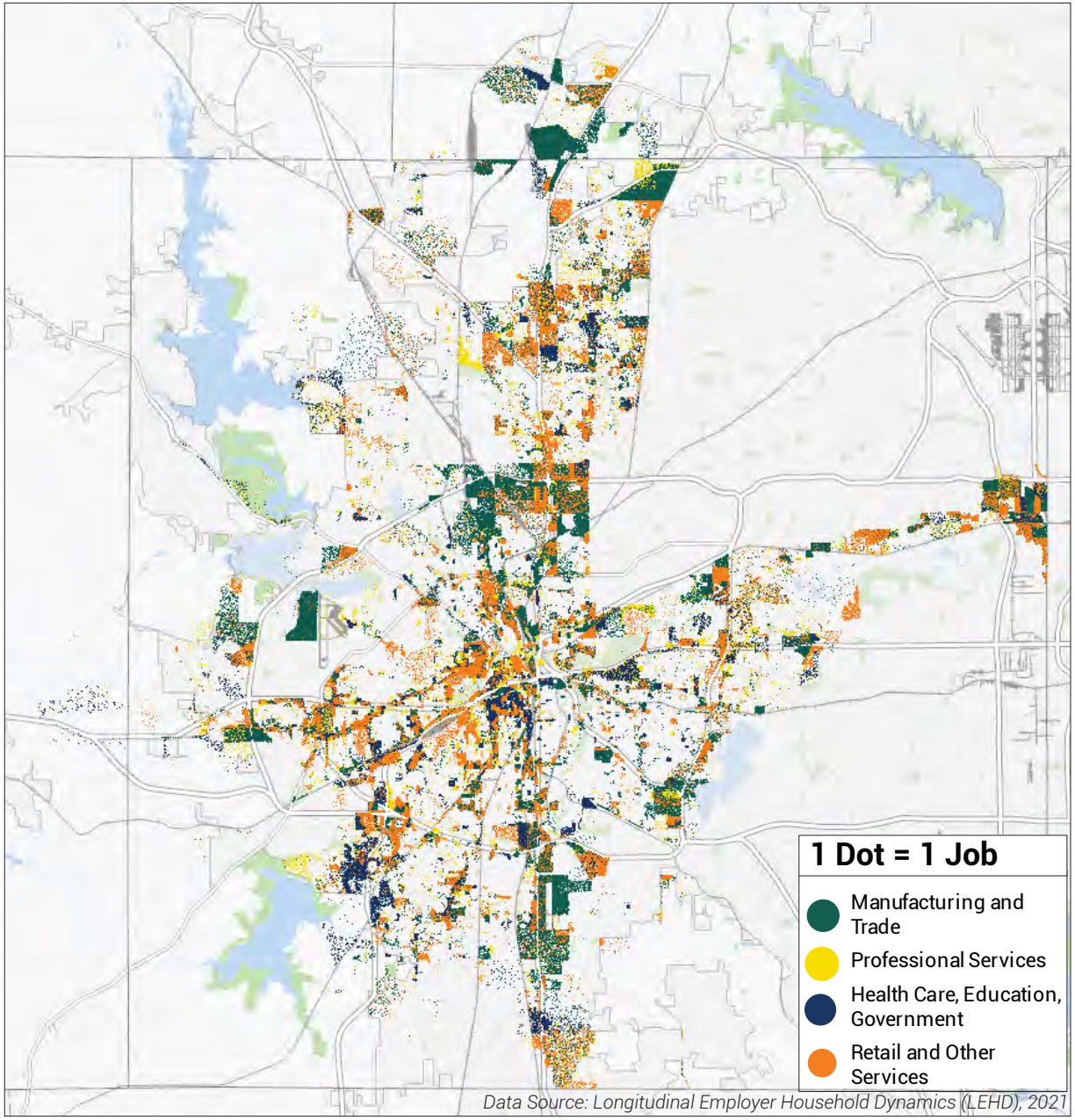
Employment

DISTRIBUTION OF JOBS BY SECTOR

Employment patterns, shown in **Figure 02-37,** in Fort Worth reveal the economic diversity and distribution of various job sectors across the city. Each sector plays a unique role in supporting Fort Worth's economy, with distinct areas of concentration reflecting the city's infrastructure, institutional presence, and commercial development.

- **Downtown Fort Worth** serves as the primary employment hub, particularly for professional services. This area attracts a high concentration of office and business services, establishing Downtown as the city's core for corporate, legal, and financial jobs.
- **The manufacturing sector** is more dispersed, located primarily on the city's outskirts and near industrial zones and major transportation corridors. This placement takes advantage of larger land areas needed for manufacturing facilities and proximity to highways for logistics and distribution.
- **Healthcare and education jobs** are evenly

Figure 02-37: Fort Worth Employment by Sector - Block Group



Data Source: Longitudinal Employer Household Dynamics (LEHD), 2021

spread across the city, particularly near major institutions like hospitals and universities. These jobs are also found in suburban locations, showing the broad reach and community presence of these essential services.

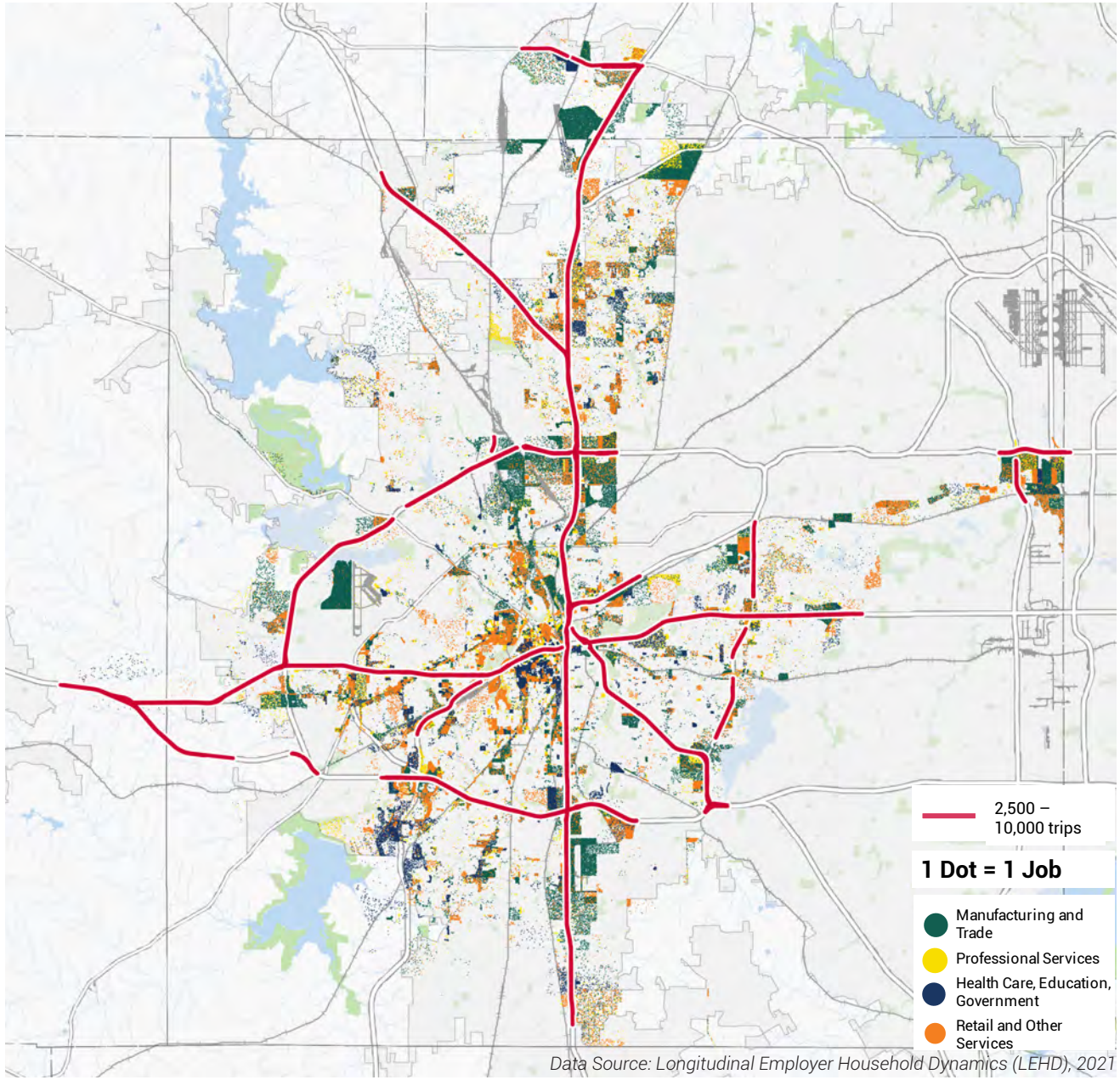
- **Retail jobs** are widely distributed but show higher density along key commercial corridors extending outward from the city center. These corridors support retail businesses that cater to both local residents and visitors, helping to sustain Fort Worth's economy by driving consumer spending.

This spatial distribution of employment highlights Fort Worth's economic resilience and the importance of supporting diverse sectors across different areas of the city. Understanding these employment patterns helps to inform transportation and infrastructure planning, ensuring that residents and workers have efficient access to job centers throughout Fort Worth.

EMPLOYMENT AND FREIGHT TRIPS

The interaction between employment hubs and freight routes is a significant factor in Fort Worth's economic landscape. As shown in the **Figure 02-38**, freight traffic primarily follows major highways and roads, often cutting through densely popu-

Figure 02-38: Employment and Freight Trips



Data Source: Longitudinal Employer Household Dynamics (LEHD), 2021

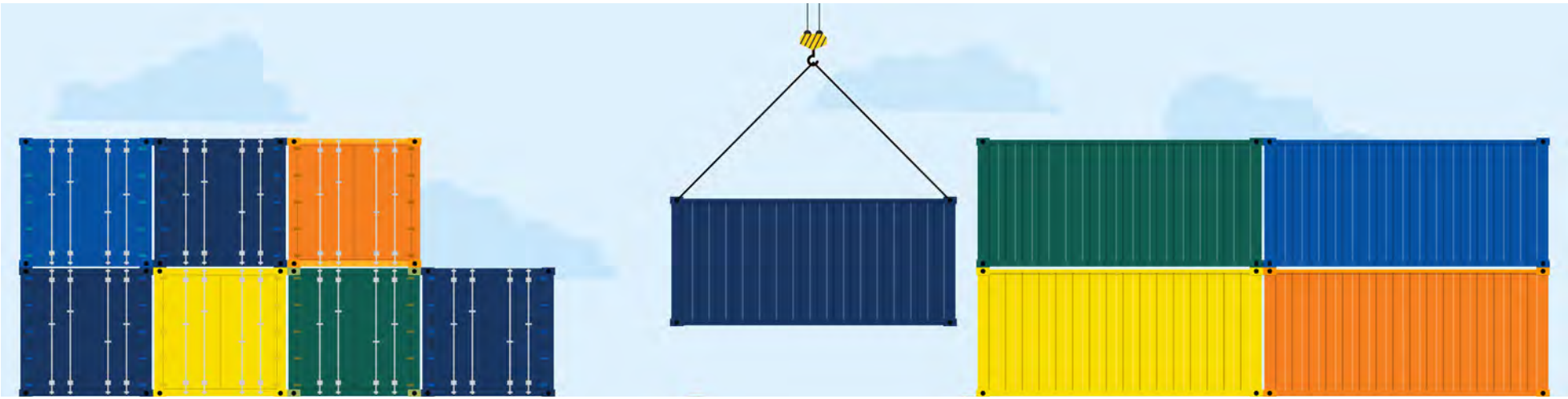
lated areas and key employment centers. These routes, which span both the central part of the city and surrounding areas, highlight Fort Worth's role as a critical transportation hub in North Texas.

Key freight corridors with the most frequent trips often overlap with job clusters, particularly in manufacturing and trade sectors. This overlap is essential for efficient goods movement and economic productivity, yet it also presents challenges. The convergence of freight and commuter traffic in busy employment zones can lead to congestion, especially in high-density areas near downtown and along major economic corridors, as illustrated in the map. Such congestion can impact travel times, freight efficiency, and overall productivity, underscoring the need for strategic planning in these high-traffic areas.

Balancing the needs of freight traffic with those of local commuters and businesses is crucial to maintaining Fort Worth's economic competitiveness. Improving infrastructure along these freight corridors, optimizing traffic flow, and considering alternative routes are potential strategies to reduce bottlenecks, enhance accessibility, and support Fort Worth's role as a dynamic center for both employment and goods movement.

SUMMARY

The economic competitiveness of Fort Worth relies on a strong and diverse tax base, strategic employment patterns, and the ability to retain a vibrant daytime population. Expanding the tax base through initiatives like mixed-use development helps secure essential resources for infrastructure and public services, supporting sustainable growth. By fostering areas where residents can live, work, and engage locally, the city can reduce daytime population loss, boosting economic activity within Fort Worth. Employment patterns highlight Downtown as a central hub for professional services, while manufacturing and retail sectors are distributed throughout key corridors and the city's outskirts. Additionally, the overlap of freight routes with major employment centers underscores the need for careful planning to balance freight efficiency with local accessibility.



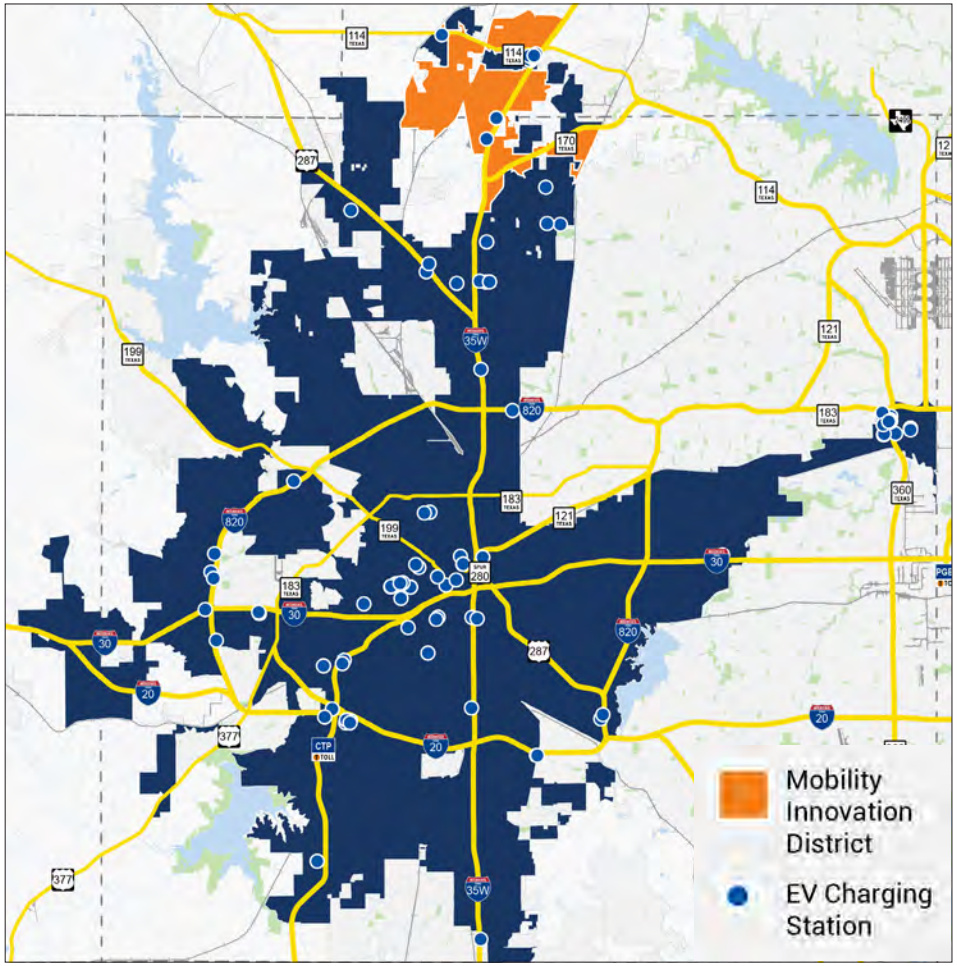
2.5 TECHNOLOGY

GOAL: Embrace flexible and resilient technology to adapt to evolving transportation needs and challenges.

Fort Worth is establishing itself as a leader in transportation innovation, utilizing advanced technologies and forward-thinking solutions to enhance mobility, improve traffic efficiency, and support sustainable transportation options. As shown in the **Figure 02-39**, Fort Worth is implementing key initiatives that position the city at the forefront of modern transportation.

- **Advanced Traffic Management**: Fort Worth has introduced real-time traffic monitoring and adaptive signal systems through its Traffic Management Center. This system allows the city to monitor traffic patterns continuously and make immediate adjustments to traffic signals, reducing congestion and improving travel times. Advanced traffic management helps to create a smoother, more efficient transportation experience for residents and commuters alike.
- I**nnovation in Mobility**: The Alliance Mobility Innovation Zone (highlighted in the figure) serves as a testing ground for cutting-edge mobility technologies. Within this zone, Fort Worth is exploring and supporting the deployment of autonomous vehicles, drone deliveries, and alternative energy sources like hydrogen fuel cells. These innovations represent Fort Worth's commitment to embracing new technology to improve connectivity, enhance logistical efficiency, and contribute to regional economic development.
- **Cleaner Transportation:** Fort Worth is also expanding its network of EV (electric vehicle) charging stations across the city, as illustrated in the map. This growing infrastructure supports the tran-

Figure 02-39: Mobility Innovation Zone and EV Charging Stations



Data Source: City of Fort Worth GIS

sition to cleaner transportation options, making it more convenient for residents to adopt electric vehicles. Cleaner transportation solutions reduce emissions and improve air quality, contributing to a healthier urban environment.

Through these initiatives, Fort Worth is paving the way for a smarter, more sustainable transportation future. By leveraging advanced traffic management, fostering innovation in autonomous and alternative fuel technologies, and expanding EV infrastructure, the city is building a resilient transportation system that supports growth while enhancing mobility and quality of life for its residents.

TECHNOLOGY AND TRANSPORTATION GOALS

Fort Worth is leveraging smart technologies to address the demands of its growing population and modernize its transportation infrastructure. As outlined in **Figure 02-40,** these technologies support various focus areas aligned with the city's M1M goals, covering safety, infrastructure maintenance, comfort, economic efficiency, technological advancement, and equity. Technologies highlighted in yellow have been implemented in some capacity.

For safety, the city has introduced speed monitoring and pedestrian/bicyclist signal phasing to reduce accidents and enhance protection for vulnerable road users. These measures are essential for managing the flow of people and vehicles in high-traffic zones, creating safer streets for both commuters and residents.

In alignment with human comfort and economic goals, Fort Worth has deployed real-time public transit information and smart parking management. These tools improve the commuting experience by reducing wait times and offering convenient parking options in busy areas, which supports local businesses and encourages transit use.

Meanwhile, equity initiatives like on-demand transit services and multilingual information systems ensure that all residents benefit from these advancements, making transportation more accessible for Fort Worth's diverse population.

Although Fort Worth's progress is notable, further expansion is needed to keep pace with the expanding population. Integrating real-time data across all modes of transportation, increasing access to these technologies city-wide, and extending smart infrastructure to underserved areas would strengthen the network. These improvements would make Fort Worth's transportation system more connected, inclusive, and efficient, better meeting the needs of the city's growing community.

Figure 02-40: Smart Technologies and Focus Areas

Focus Area	Smart Application
Safety	• Speed Monitoring and Compliance • Pedestrian and bicyclist phasing at traffic signals • Emergency Vehicle preemption
Fix It First	• Resident Infrastructure Maintenance Reporting • Predictive Infrastructure Maintenance • Smart Streetlights
Human Comfort	• Real-time public transit information • Transit signal priority • Smart park and ride system
Economy	• Smart Freight and Logistics Coordination • Smart Parking Management • Smart Metering for Parking
Technology	• Connected and autonomous vehicle technology • Real-time public transit app • Video and data analytics
Equity	• Real-Time Multilingual Public Transit Information Systems • On-Demand Transit Services • Bicycle and Pedestrian Counters • Broadband/high-speed internet

2.6 EQUITY

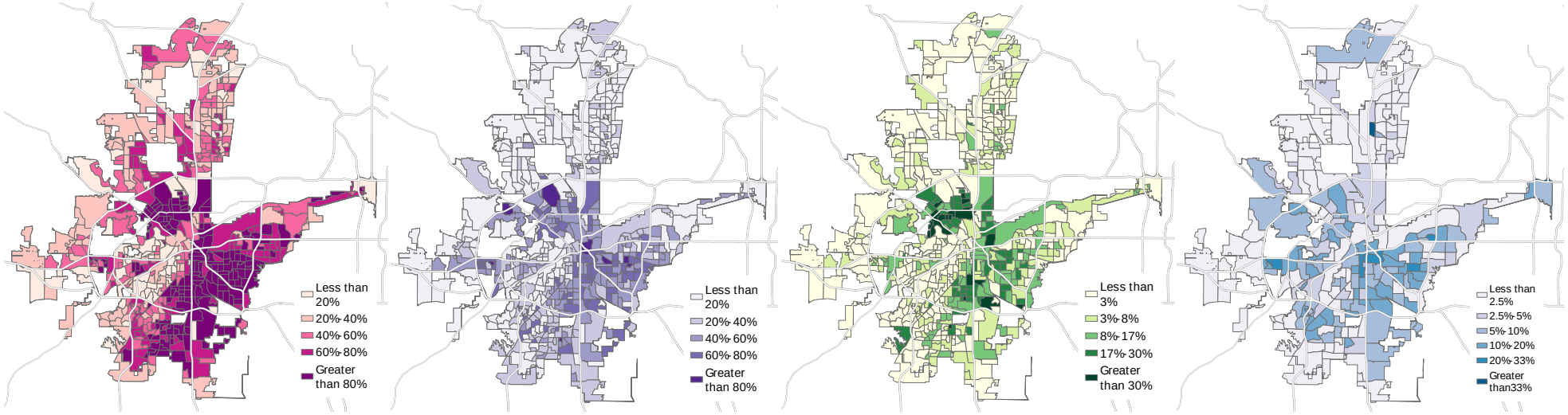
GOAL: Promote and build an accessible, affordable, and reliable transportation system to meet the mobility and connectivity needs of all ages and abilities.

Fort Worth's transportation equity initiatives focus on meeting the diverse needs of disadvantaged populations, including zero-car households, people of color, low-income residents, individuals with limited English proficiency, and seniors and disabled individuals. Concentrated primarily in Fort Worth's core and southeastern neighborhoods, these groups face unique mobility challenges that require targeted solutions. Ensuring equitable access to transportation is a vital component of Fort Worth's overall commitment to inclusive growth and accessibility.

DISADVANTAGED POPULATIONS AND GEOGRAPHIC DISTRIBUTION

Fort Worth's core and southeastern neighborhoods have a high concentration of disadvantaged populations, as illustrated in **Figure 02-41**. Data from the EPA's Environmental Justice (EJ) Screen highlights the percentage of people of color, low-income residents, zero-car households, and individuals with limited English proficiency in these areas. These populations often experience transportation barriers that limit their access to jobs, healthcare, education, and other essential services. Expanding accessible transit options in these neighborhoods is essential to closing these gaps and promoting equity.

Figure 02-41: Percent People of Color, Percent Low Income, Limited English Proficiency, and Percent No Vehicle



Data Source: EPA EJ Screen

SENIOR AND DISABLED POPULATIONS

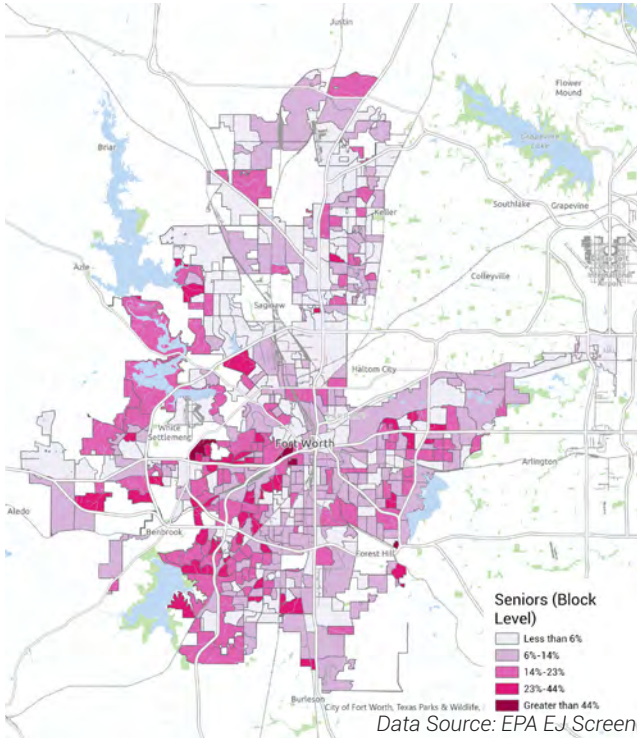
Senior residents and individuals with disabilities represent additional high-need groups in Fort Worth. **Figure 02-42** provides a breakdown of the concentrations of senior (65+) populations, while **Figure 02-43** shows the distribution of persons with disabilities. These populations, particularly concentrated in western areas of the city along I-30, rely on accessible transit options and walkable infrastructure to meet their mobility needs.

As shown in **Figure 02-44**, these same areas face limited access to regular transit services, impacting their mobility and independence. Trinity Metro provides paratransit services through its ACCESS program, offering door-to-door transportation for eligible residents with disabilities who cannot use standard transit routes. Additionally, Trinity Metro's on-demand services help to fill some of the transportation gaps, but there remains a need for expanded transit options in these underserved neighborhoods. Enhancing these services would improve access to essential destinations like healthcare, shopping, and social activities, supporting greater independence and quality of life for Fort Worth's senior and disabled populations.

TRANSIT RIDERSHIP TRENDS

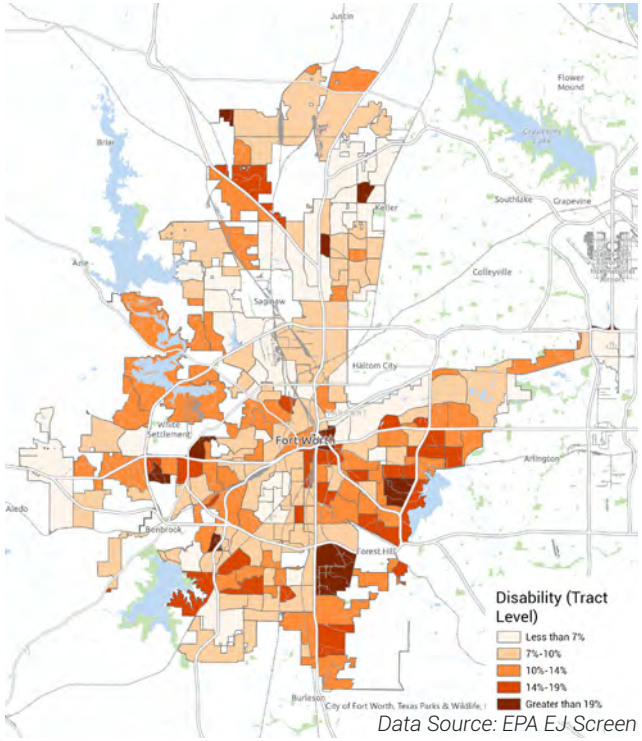
The COVID-19 pandemic led to a significant decline in transit usage across Fort Worth, with bus ridership dropping from over 5 million in 2019 to below 3 million in 2020, as shown in **Figure 02-47**. Since 2021, ridership on bus,

Figure 02-42: Senior (65+) Population Percentage



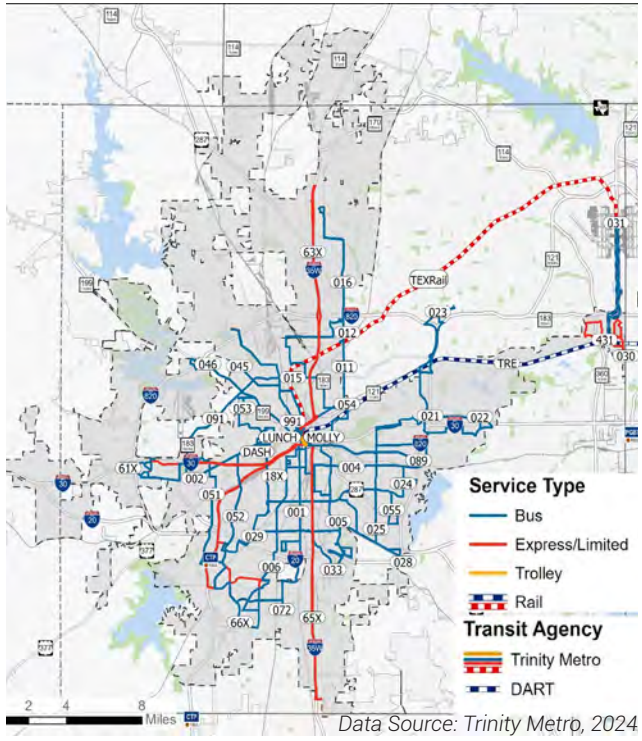
Data Source: EPA EJ Screen

Figure 02-43: Disability Population Percentage



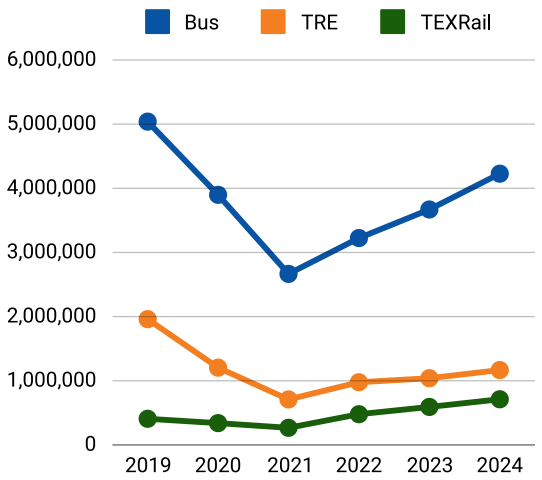
Data Source: EPA EJ Screen

Figure 02-44: Fort Worth Transit Routes



Data Source: Trinity Metro, 2024

Figure 02-45: Trinity Metro Ridership, 2019-2024



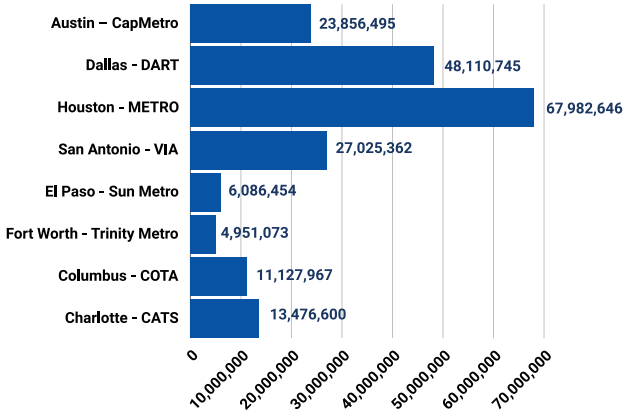
Data Source: Trinity Metro Reference Guide, Trinity Metro Website

Trinity Railway Express (TRE), and TEXRail services has steadily increased, with projections indicating that bus ridership will return to pre-pandemic levels by the end of 2024. This recovery trend underscores the resilience of Fort Worth's public transit system and highlights the importance of maintaining reliable and accessible transit options for disadvantaged communities as they rebuild their daily routines post-pandemic.

TRANSIT RIDERSHIP IN PEER CITIES

Despite recent growth, Fort Worth's transit ridership remains lower than that of peer cities. As shown in **Figure 02-46**, Trinity Metro's 2023 ridership stands at 4.95 million, significantly below similarly sized cities like

Figure 02-46: Transit Ridership Comparison



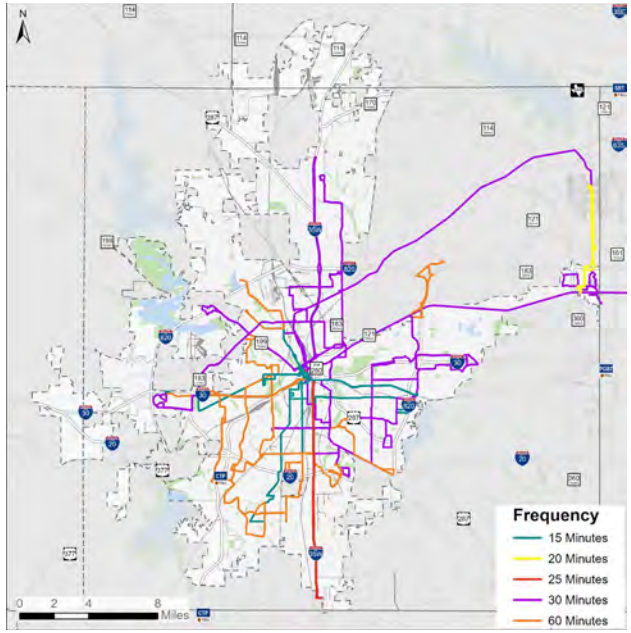
Data Source: TxDOT, COTA, CATS

Austin, Columbus, and Charlotte. The lower ridership figures reflect a need for expanded services and increased frequency on popular routes to better serve high-need areas. Increasing transit use through expanded services in areas with high concentrations of disadvantaged populations would enhance economic mobility and access to essential services, bringing Fort Worth closer to its equity goals.

TRANSIT SERVICE FREQUENCY + HIGH-NEED AREAS

A review of Fort Worth's transit service frequency, shown in **Figure 02-47**, reveals service gaps in high-need areas, including South Fort Worth along I-35W, Central Fort Worth between I-820 and Hwy 183, and West Fort Worth along I-30. These areas, with high concentrations of low-income, senior, and disabled residents, would benefit from increased service frequency and improved transit infrastructure. Addressing these gaps is crucial to providing equitable transit access, particularly for those who rely on public transportation as their primary means of travel.

Figure 02-47: Transit Service Frequency



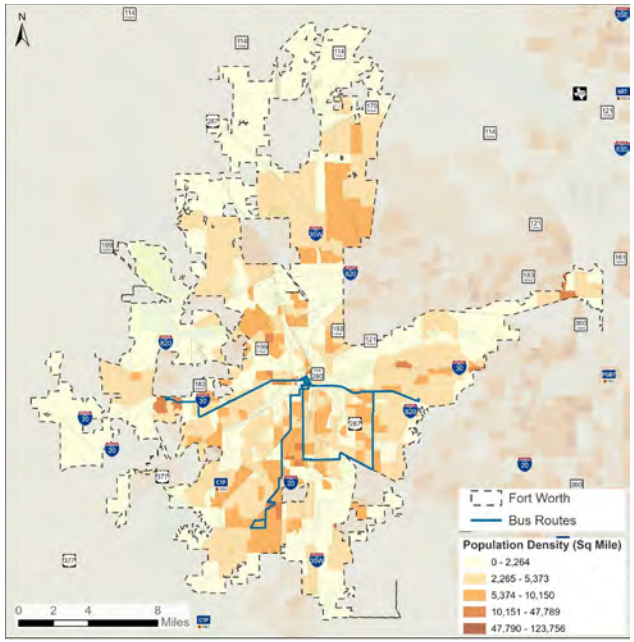
Data Source: Trinity Metro, 2024

HIGH-PERFORMING ROUTES AND POPULAR DESTINATIONS

The top five most popular transit routes, highlighted in **Figure 02-48**, serve high-density areas that connect residential neighborhoods with employment centers and essen-

tial destinations. These routes are vital to supporting daily mobility for residents in high-need areas and to fostering economic stability by connecting people with jobs, healthcare, and educational opportunities. Expanding the frequency and reach of these routes would further enhance accessibility, making Fort Worth's transportation system more inclusive and responsive to the needs of its disadvantaged populations.

Figure 02-48: High-Performing Routes and Population Density



Data Source: Trinity Metro, 2024

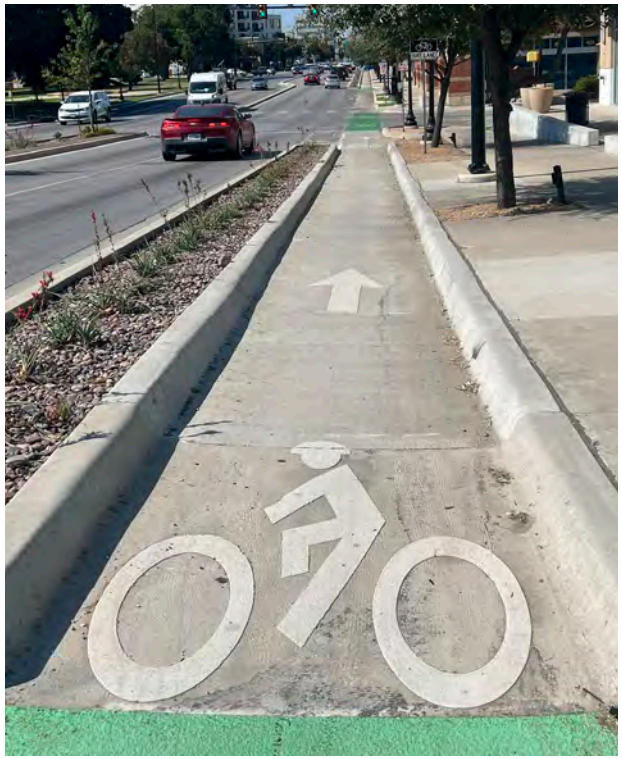
ACTIVE TRANSPORTATION

Bicycle and pedestrian infrastructure is a crucial component of an equitable transportation system, providing residents with safe, accessible options for short trips and connections to other modes of transit. Enhancing these networks enables people of all ages, abilities, and income levels to move independently throughout the city, reducing dependence on cars and offering a more affordable and environmentally friendly transportation choice.

Fort Worth has made significant strides in developing its bicycle and pedestrian infrastructure, yet there is still work to be done to create a fully connected and accessible network. The city has over 100 miles of bike lanes, but the majority of these are not protected or separated, which limits their usability for all ages and skill levels. While there are some high-quality facilities, many parts of the city lack sufficient infrastructure, creating gaps that make it challenging for residents to rely on active transportation as a primary mode of travel.

A recent addition to the network, the new bike lanes on 7th Street shown in **Figure 02-49**, reflects Fort Worth's efforts to increase safe cycling options in high-traffic areas. These lanes connect key destinations

Figure 02-49: Protected Bike Lane on 7th Street, Fort Worth



and provide a dedicated space for cyclists in a busy corridor, encouraging more residents to consider cycling as a reliable and convenient mode of transport. The 7th Street bike lanes are an important step forward, demonstrating the city's commitment to enhancing bike infrastructure in strategic locations that serve both residents and visitors.

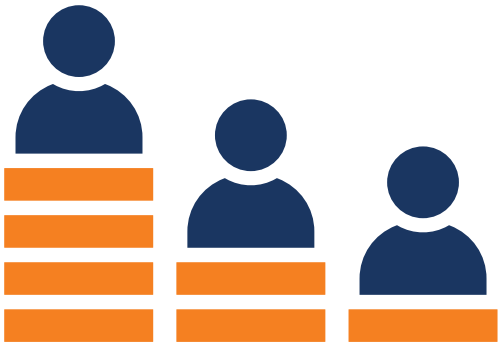
Pedestrian infrastructure in Fort Worth also faces challenges. While the city has made

efforts to improve sidewalks and crossings, many neighborhoods, especially those in underserved areas, still lack basic pedestrian facilities. 22% of the city's sidewalks are in poor or very poor condition, and several high-need areas have limited or no sidewalks at all. This lack of continuous, accessible sidewalks reduces walkability and creates barriers for residents who rely on walking to access transit, schools, and other essential services.

The gaps in Fort Worth's bicycle and pedestrian infrastructure underscore the need for targeted investments to create a more equitable, connected network. Improving and expanding these facilities—especially in neighborhoods with limited access to transit—will help ensure that all residents have safe, convenient options for active transportation.

SUMMARY

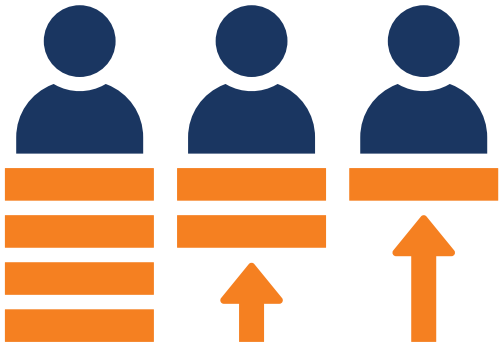
Fort Worth's transportation system has made progress toward equity, but significant gaps remain in access and infrastructure for disadvantaged communities. Many areas, particularly in the city's core and southeastern neighborhoods, lack sufficient public transit, bike lanes, and pedestrian pathways, limiting mobility options for residents who rely on these modes of transportation. While recent projects show steps in the right direction, much of the city's bicycle and pedestrian network is incomplete, with sidewalks in poor condition and bike lanes that are often unprotected. Addressing these deficiencies is crucial to creating a more equitable system, ensuring that all residents—regardless of income, ability, or location—can move safely and affordably throughout Fort Worth.



INEQUALITY



EQUALITY



EQUITY

03 MOVING FORWARD

Fort Worth is at a pivotal moment in its growth. As one of the nation's fastest-growing cities, the need for a comprehensive, strategic transportation plan has never been greater. For years, our transportation network has evolved reactively, meeting immediate needs without a unified vision. While this approach may have worked in the short term, it has left us with congestion, gaps in connectivity, limited accessibility, and challenges maintaining aging infrastructure.

The M1M State of the System report dives into these issues, offering a foundation for a more sustainable, connected transportation system that's ready to serve our growing community.

The M1M initiative goes beyond road improvements; it's about enhancing quality of life for everyone in Fort Worth. Our current infrastructure limits access to services, jobs, and education, especially for those who rely on transit, biking, or walking. M1M aims to create a more accessible and safe network by expanding transit and bike infrastructure, while also improving the experience for drivers with smarter traffic management and optimized signals. By prioritizing these multimodal solutions, M1M envisions a future with faster, safer, and more reliable travel options.

To achieve these goals, Fort Worth must also address structural challenges within its funding and planning. With a limited tax base, there is pressure on current resources to meet rising infrastructure demands. M1M will outline strategies to diversify funding sources, attract new investments, and build a financial foundation capable of supporting our long-term needs.

This proactive approach will not only prepare Fort Worth for future growth but also ensure that transportation investments contribute to a thriving, economically competitive city that prioritizes the well-being of its residents.

OUR PRIORITIES



MANAGING RAPID GROWTH

Fort Worth's transportation network must expand and adapt to keep up with the city's expanding population. M1M will provide a roadmap to support this growth sustainably, connecting new neighborhoods and reducing congestion.



MAINTAINING AND UPGRADING THE SYSTEM

Keeping up with the demands of a growing population means tackling maintenance challenges head-on. Fort Worth is committed to preserving existing infrastructure, building for the future, and integrating smart technologies and multimodal options to create a resilient network.



ESTABLISHING A COMPREHENSIVE BLUEPRINT

Historically, Fort Worth's transportation system developed in a piecemeal way. M1M will provide a cohesive blueprint that coalesces the competing interests of growth, mobility, accessibility, and economic vitality.



BROADENING THE TAX BASE

A sustainable transportation future requires a diverse and resilient funding structure. Fort Worth must attract new investments, develop sustainably, and explore innovative funding mechanisms to support long-term transportation needs.



CONNECTING NEIGHBORHOODS

M1M aims to better connect Fort Worth's neighborhoods, creating shorter, more efficient routes that reduce travel times and enhance quality of life. Improved connectivity will help residents reach jobs, schools, and essential services more easily, fostering a more livable community.

MOVING A MILLION

For more information, visit the project website:
movingamillion.org

APPENDIX C

TECHNICAL MEMO 3: PERFORMANCE MEASURES

Master Transportation Plan

Performance Measures and Target Setting

Technical Memorandum

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Acronyms

ACS	American Community Survey
ADA	Americans with Disabilities Act
AQI	Air Quality Index
AQS	Air Quality System
ATP	Active Transportation Plan
CAV	Connected and Automated Vehicle
CMV	Commercial motor vehicle
CNT	Center for Neighborhood Technology
CoFW	City of Fort Worth
CRIS	Crash Records Information System
DUI	Drive under the influence
EPA	U.S. Environmental Protection Agency
EV	Electric vehicle
EVP	Emergency vehicle preemption
FHWA	Federal Highway Administration
FSI	Fatal and serious injury
H+T Index	Housing + Transportation Affordability Index
ITS	Intelligent Transportation System
M1M	Moving a Million
NCTCOG	North Central Texas Council of Governments
PCI	Pavement Condition Index
PHB	Pedestrian hybrid beacon
PM	Particulate matter
SAP	Safety Action Plan
SLRTP	Statewide Long-Range Transportation Plan

SOV	Single-occupancy vehicle
STP	Seattle Transportation Plan
TDM	Travel Demand Management
TPW	Transportation and Public Works
TSP	Transit signal priority
TTI	Travel Time Index
TxDOT	Texas Department of Transportation
UFMP	Urban Forest Master Plan
USDOT	U.S. Department of Transportation
VMT	Vehicle miles traveled
VRU	Vulnerable roadway user

Introduction

The City of Fort Worth (CoFW) is developing the "Moving a Million" (M1M) Plan—the City's Master Transportation Plan. The plan has a 25-year planning horizon, with updates anticipated every 4 years to align with other local and regional capital planning cycles. The M1M Plan will build upon all of Fort Worth's transportation-related plans and serve as the city's fiscally responsible Capital Transportation Plan, tied to city policies and funding realities and grounded in the needs of the Fort Worth community.

Adopting performance measures and setting targets are important steps in the long-range planning process. Performance measures are a tool to track whether projects and program investments are effectively advancing plan goals and objectives. Performance measures may also be used to inform and forecast investment strategies, identify maintenance and operations improvements, monitor the state of system assets, anticipate and follow the effects of program investments, and track performance on how an organization is progressing on their overall goals and objectives. This technical memo presents the methodology for selecting performance measures used to evaluate the progress of the M1M Plan and the process for setting baseline and target values for each performance measure for the year 2050.

Establishing Performance Measures

Performance measures are part of the master transportation planning process, which also includes goals, objectives, policies, coordination, and capital projects. The performance measures for M1M were established using national standards and guidance for performance management with consideration for the city's unique transportation challenges, data maturity, staff resources, and community needs. Ultimately, performance measures are intended to advance goals, objectives, and policies within the planning process.

Key considerations in establishing performance measures for M1M include:

- Aligning goals and performance measures
- Ensuring consistency with other relevant planning efforts and coordinating with the North Central Texas Council of Governments (NCTCOG), Texas Department of Transportation (TxDOT), U.S. Department of Transportation (USDOT), and other related agencies
- Incorporating public input
- Leveraging the experience of peer agencies to cover a wide range of anticipated transportation trends
- Managing with available and easily accessible data

Aligning Goals and Performance Measures

Through the M1M planning process, goals are established, and performance measures and targets are reported. Aligning goals and performance measures ensure project-level decisions are driving towards meeting established goals and objectives. The following M1M goals were developed in consultation with the Technical Advisory Committee and the public.

Goal 1: Safety First
Implement safety measures that reduce crashes and eliminate traffic fatalities and injuries across all transportation modes and trips.

Goal 2: Fix It First
Ensure cost-effectiveness of transportation assets throughout their life cycle.

Goal 3: Human Comfort
Create a network that is convenient, connected, and considerate for community use.

Goal 4: Economy
Support businesses, improve regional and global connectivity, facilitate trade and investment, promote labor mobility, and enhance prosperity.

Goal 5: Technology
Embrace flexible and resilient technology to adapt to evolving transportation needs and challenges.

Goal 6: Equity
Ensure accessible, affordable, and reliable transportation options for all ages and abilities.

In the process of establishing M1M performance measures, they are categorized and tied to the established M1M goals. Goals translate the city's long-term aspirational vision into strategic targets that guide decision-making and resource allocation across the transportation network. Performance measures quantify progress made towards achieving the goals, and each goal contains multiple performance measures.

Building Upon Adopted Measures

The project team reviewed documents from various agencies to gather potential performance measures for the M1M Plan. This included federal, state, and regional long-range transportation planning documents, the city's Comprehensive Plan and Active Transportation Plan (ATP), and other relevant planning documents. The selected sources provide a holistic overview of transportation performance

measures adopted and recommended by the city's funding and planning partner agencies, serving as a strong foundation for tailoring performance measures to the M1M Plan. The reviewed documents are listed below.

Federal, State, and Regional Planning Documents:

- Transportation Performance Management, Federal Highway Administration (FHWA)
- Transit Asset Management, Federal Transit Administration (FTA)
- Strategic Plan 2022 to 2026, USDOT
- Connecting Texas 2050, Statewide Long-Range Transportation Plan (SLRTP), TxDOT
- Mobility 2045 Update, NCTCOG

City of Fort Worth Planning Documents:

- Fort Worth Master Thoroughfare Plan
- Fort Worth Active Transportation Plan
- Fort Worth 2023 Comprehensive Plan
- Fort Worth Capital Improvement Plan (2021 to 2025)
- Fort Worth Urban Village Program
- Fort Worth Parks, Recreation, and Open Space Master Plan
- Fort Worth Urban Forest Master Plan (UFMP)
- Fort Worth Task Force on Race and Culture Final Recommendations
- Cavile Place Neighborhood Transformation Plan

The reviewed plans consistently emphasize multimodal safety, mobility, and asset preservation as key priorities for transportation planning. Plans at all levels highlight safety metrics aimed at reducing crashes and improving safety for users of all transportation modes. Those measures include vehicular crash numbers, total and vulnerable roadway user (VRU) fatalities, and contributing factors to roadway accidents.

Mobility is another focal point of the reviewed plans, reflecting the need to address the worsening traffic congestion and improve connectivity between residences and major activity centers such as workplaces, schools, and health care facilities. State and regional plans (e.g., Connecting Texas 2050 [TxDOT's SLRTP] and the Mobility 2045 Update [NCTCOG's Metropolitan Transportation Plan]) established various performance measures centered on mobility, such as urban and rural travel time reliability index (TTI), annual delay hours on vehicle per person, and percentage of population with access to transit.

Transportation asset preservation also emerged as a theme, indicating the importance of monitoring infrastructure conditions and ensuring the long-term reliability and resilience of the transportation system. Federal and state planning documents included measures that track infrastructure condition, such as roadway pavement and bridge condition scores and maintenance-related measures involving annual preventative maintenance.

Equity serves as a guiding principle in developing transportation projects and programs. The reviewed plans widely recognize equity-related performance measures that evaluate the burdens and distribution of transportation resources across different populations. Those measures include affordability (transportation cost as a percentage of total income), access to services, and investments directed toward historically underserved communities. The Mobility 2045 Update also incorporated a measure to track the number of community participants during plan development, underscoring the importance of engaging diverse communities in the planning process to ensure all needs and priorities are reflected in the plan.

Another insight from the review was the emphasis on advanced technologies and sustainability. Fort Worth's Comprehensive Plan includes a measure to track the number of Intelligent Transportation Systems (ITS) devices, such as smart parking management systems, to promote the use of real-time data for conducting better analysis and informing decision-making. Other plans established measures for new vehicle technology like electric vehicles (EVs), including numbers of EV registrations and charging stations. These measures are also linked to sustainability, another important aspect of transportation planning. The reviewed documents proposed sustainability measures such as carbon emission reduction and air quality to facilitate a green future and align with aspirations of creating healthier and more livable environments.

Overall, the literature review provided a framework for developing performance measures contextualized for Fort Worth and aligned with the six goals of the M1M Plan. From the best practices of federal, state, regional, and city plans, the project team developed a robust set of performance measures that addresses the city's priorities and ensures the M1M Plan supports a safe, equitable, efficient, and sustainable transportation system.

Incorporating Public Input

During the public engagement process, the city gathered over 1,000 responses and categorized them into four themes:

- **Road and Street Improvements:** The need to reduce traffic congestion and improve road quality (pavement and markings).
- **Public Transportation:** The importance of expanding rail service and improving the comfort and availability of public transit options.

- **Active Transportation:** The importance of walking and biking infrastructure and pedestrian safety.
- **Quality of Life:** Other infrastructure needs to improve living standards such as better access to local services and short commutes.

These public inputs provided valuable guidance for the development of the performance measures.

Leveraging Peer Agency Experience

The project team reviewed performance measures developed and adopted by peer cities to identify successful practices and adaptable measures that align with M1M's goals. Seattle, Denver, and Austin were selected as peer cities due to their similar characteristics to Fort Worth, such as population size, growth trend, and transportation challenges, and their similar transportation plans as discussed below.

Seattle Transportation Plan, Seattle, Washington[1]

The Seattle Transportation Plan (STP) adopted eight outcome-focused performance measures to track how projects and programs help to achieve the STP's six goals of safety, equity, sustainability, mobility and economic vitality, livability, and maintenance and modernization. The performance measures include the number of traffic-related fatalities and serious injuries, reduction in greenhouse gas emissions, reduction in vehicle miles traveled (VMT), infrastructure condition, access to multimodal facilities, and transportation cost burden. The STP team also ensured that most metrics could be monitored through the city's Race and Social Equity Index, which combines race, ethnicity, and other demographic data, to help the city meet equity goals and direct investments towards priority populations.

Denver Moves Everyone, Denver, Colorado[2]

Denver Moves Everyone developed a total of 25 performance measures for the plan's five goals—mobility, safety, sustainability, community, and quality. Mobility measures aim to increase the usage of public and active transportation with benchmarks such as 15 percent of trips made by transit by 2030. Safety measures target 0 traffic fatalities by 2030. Reducing greenhouse gas emissions is the focus of the sustainability goal, assessed through metrics such as increasing tree canopy and the number of EV registrations. Community measures facilitate equity during the planning process and project development, including tracking the number of projects that use the Racial Equity Toolkit for public engagement and commute time of the Black, Indigenous, and people of color population. Finally, the quality measures concentrate on transportation asset maintenance, demonstrated by all assets

[1] https://www.seattle.gov/documents/Departments/SDOT/STP/STP_Part_I.pdf

[2] final_denvermoveseveryone2050_strategictransportationplan_web.pdf

meeting or exceeding quality standards.

Austin Strategic Mobility Plan, Austin, Texas[3]

The Austin Strategic Mobility Plan presented a total of 156 performance indicators, setting a detailed framework for tracking the plan's progress to achieve the goals of prioritizing safety, managing demand, supplying the infrastructure, network operation, protecting health and environment, and supporting the community. These measures, while being more specific than other peer cities, share similar core concepts of decreasing traffic fatalities (targeting zero fatalities), improving mobility (e.g., increasing the number of people living within ½ mile of active transportation facilities, increasing travel time reliability and transit ridership), promoting health and equity, and ensuring the efficiency of transportation network operation and transportation project implementation.

Focusing on Available Data

Measuring performance relies on quality and timely data to assess current performance levels and trends, establish performance targets, and conduct performance forecasts. The CoFW collects and analyzes data from a variety of sources to track safety, pavement condition, air quality, and several other measures. In addition, the city coordinates with regional planning partners such as NCTCOG and Trinity Metro on specific measures such as VMT, travel time reliability, and transit on-time performance. As part of the M1M performance measure process, the project team coordinated with the city's GIS Department to collect available data, identify potential gaps, and make recommendations on additional performance measures based on data maturity. As the city continues to track and report performance through regular processes, including annual performance reporting and the implementation of M1M policies, it is recommended that measures and targets be revised as new data becomes available.

Target Setting

After establishing the performance measures, setting performance targets is critical, as they create an observable and quantifiable link between investment decisions and performance outcomes. There are different approaches and resources for organizations that wish to set performance targets. For federal and regional performance measures, most agencies choose to either adopt regional targets or support statewide targets. Ideally, performance targets are outcome focused, such as zero traffic fatalities by 2050. However, some performance measures are tracked without having a defined target. This may be due to a lack of data, making it difficult to derive trends for those categories, or because the performance measure may be indirectly linked to transportation, such as job opportunity increase.

It is recommended that the city set performance targets based on what performance levels they believe

[3] 202402_AMD_ASMP.pdf | Powered by Box

can be achieved with constrained funding, leveraging the experience of peer agencies and analytical models or tools that aid in performance forecasting. The city should also work with other planning and funding partners in collecting data. For those tracked performance measures that have a directional trend as the "target," they may become targeted in the future as better data becomes available or if policy priorities change.

Proposed "Moving a Million" Performance Measures

The project team evaluated an initial pool of potential performance measures from peer documents, then selected the core metrics for each goal that frequently appeared (e.g., reducing traffic fatalities for safety). The project team consolidated duplicates and prioritized those that could align with multiple goals, such as improving safety, enhancing mobility, and advancing equity. Each measure was also assessed for its feasibility, including the availability of data for consistent tracking and the ability to provide measurable outcomes. This process ensured that the proposed performance measures for the M1M Plan are both comprehensive and practical. The following proposed measures are grouped by goal theme. While data for some measures are not readily available, they are included as additional measures stemming from best practices, peer cities, and community input.

A. Safety First

The following measures are linked to the goal of implementing safety measures that reduce crashes and eliminate traffic fatalities and injuries across all transportation modes and trips. All safety measures track crashes, fatalities, and injuries across the city.

A-1: Number of traffic-related fatal crashes (5-year average)

Source: The original data is sourced from TxDOT's Crash Records Information System (CRIS) database and is supplemented with the crash analysis from the Safety Action Plan (SAP) project team.

Baseline (2023): 107 fatal crashes

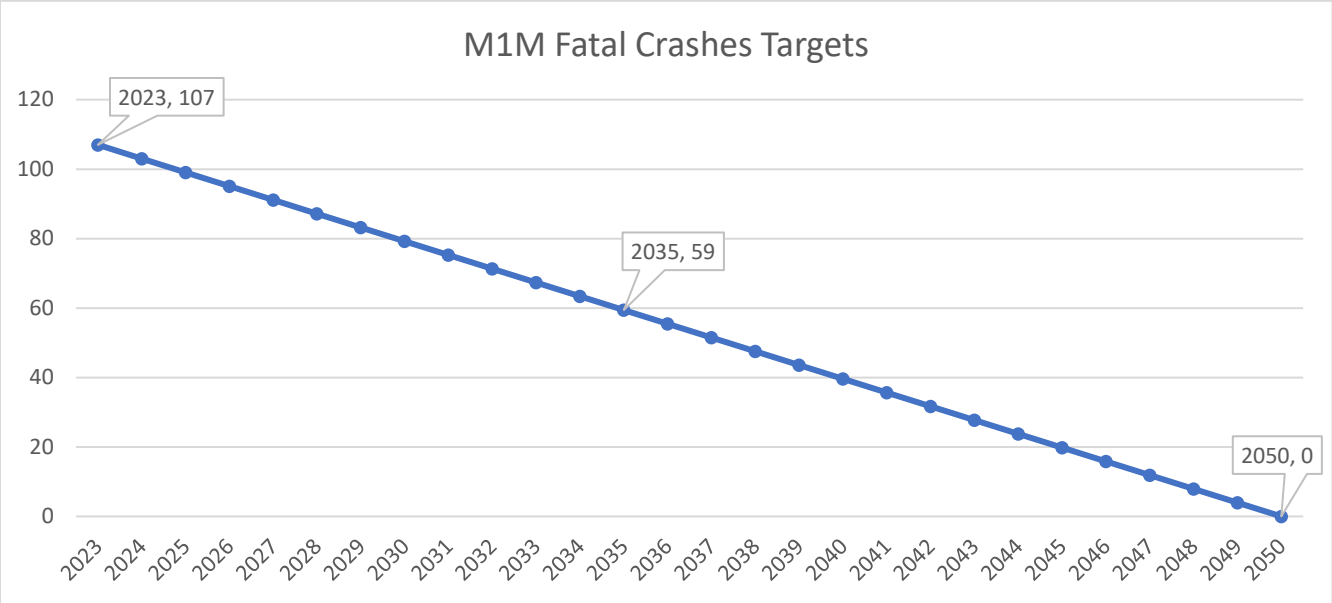
Baseline Methodology: The number of fatal crash fatalities is a 5-year rolling average calculated based on the 4 years leading up to and including the reporting year. A rolling average provides more reliable insight into safety trends over time and de-emphasizes outlying years with notably high or low numbers.

2050 Target: Zero traffic-related fatal crashes

Target Setting Methodology: The CoFW is developing an SAP. M1M recommends the safety performance target aligns with the SAP target of reaching zero fatalities by 2050. The performance target for the number of fatalities in any given year between 2023 and 2050 is calculated based on the 2023 crash data as the initial point and zero as the final point on the projected line for fatal crashes

using a straight-line method. The number of fatal crashes is expected to be reduced by 4 each year to 59 in total in 2035.

Figure 1. MIM Fatal Crashes Targets



Responsible Agency: CoFW Transportation and Public Works (TPW)

Reporting Frequency: Annual

A-2: Number of traffic-related serious injury crashes (5-year average)

Source: The original data is sourced from TxDOT's CRIS database and supplemented with the crash analysis from the SAP project team.

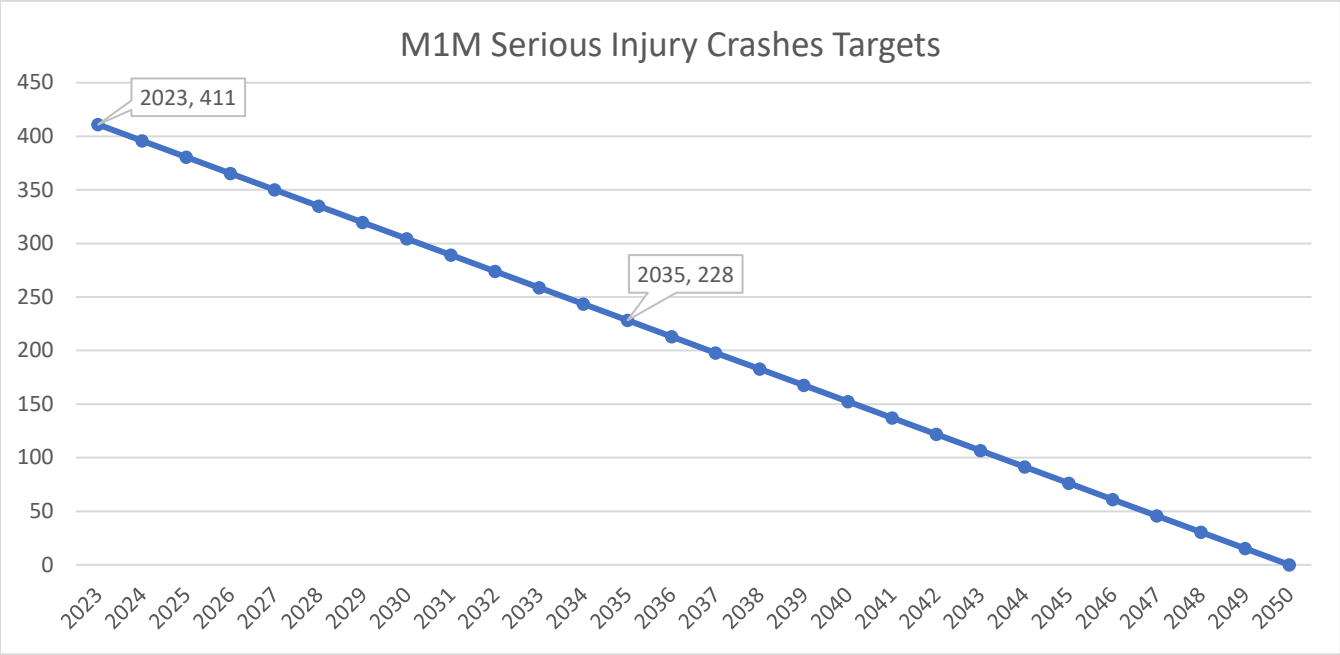
Baseline (2023): 411 serious injury crashes

Baseline Methodology: The number of serious injury crashes is a 5-year rolling average calculated based on the 4 years leading up to and including the reporting year.

2050 Target: Zero traffic-related serious injury crashes

Target Setting Methodology: The CoFW is developing an SAP. It is recommended that the M1M safety performance target aligns with the SAP target of reaching zero serious injury crashes by 2050. The performance target for the number of serious injury crashes in any given year between 2023 and 2050 is calculated based on the 2023 crash data as the initial point and zero as the final point on the projected line for serious injury crashes using a straight-line method. The number of serious injury crashes is expected to be reduced by 15 each year to 228 in total in 2035.

Figure 2. MIM Serious Injury Crashes Targets



Responsible Agency: CoFW TPW

Reporting Frequency: Annual

A-3: Number of fatal and serious injury (FSI) crashes that involved Vulnerable Road Users (VRUs) (i.e., bicyclists and pedestrians) (5-year average)

Source: The original data is sourced from TxDOT's CRIS database and supplemented with the crash analysis from the SAP project team.

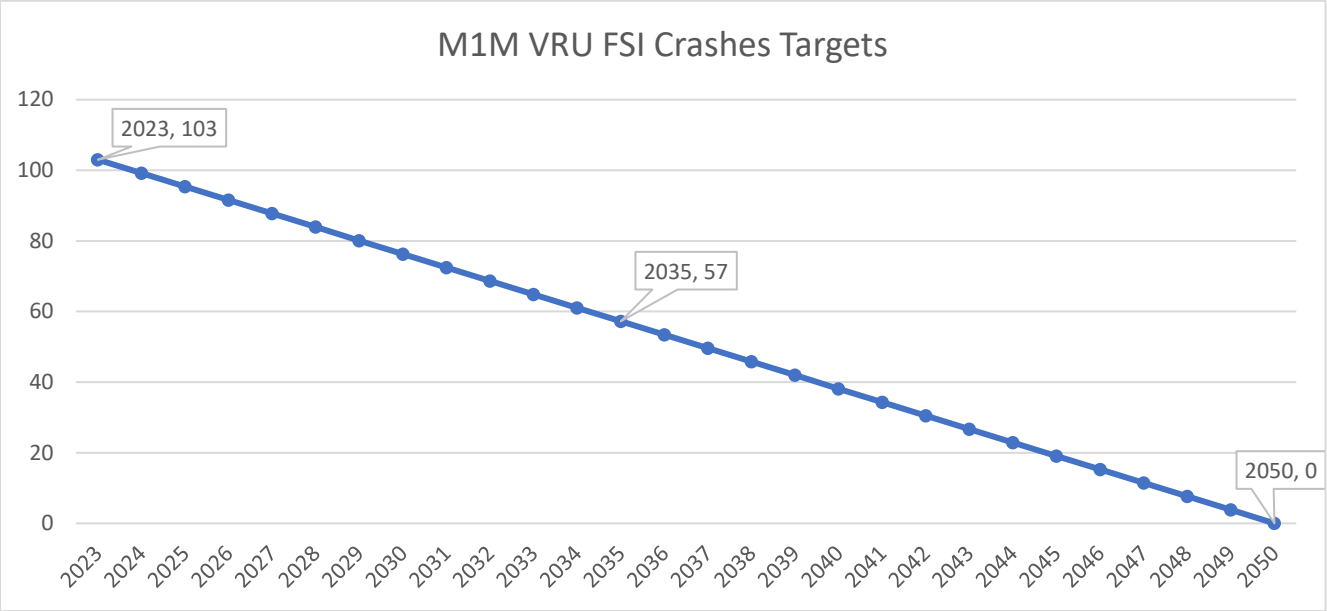
Baseline (2023): 103 FSI crashes that involved VRUs

Baseline Methodology: The number of VRU FSI crashes is a 5-year rolling average calculated based on the 4 years leading up to and including the reporting year.

2050 Target: Zero FSI crashes involving VRUs

Target Setting Methodology: The CoFW is developing an SAP. It is recommended that the M1M safety performance target aligns with the SAP target of reaching zero fatal and serious injury crashes by 2050. The performance target for the number of fatal and serious injury crashes in any given years between 2023 and 2050 is calculated based on the 2023 crash data as the initial point and zero as the final point on the projected line for serious injury crashes using a straight-line method. The number of serious injury crashes is expected to be reduced by 4 each year to 57 in total in 2035.

Figure 3. MIM VRU FSI Crashes Targets



Responsible Agency: CoFW TPW

Reporting Frequency: Annual

A-4: Number of FSI crashes involving speeding (5-year average)

Source: The original data is sourced from TxDOT's CRIS database and supplemented with the crash analysis from the SAP project team.

Baseline (2023): 185 crashes involving speeding

Baseline Methodology: The number of FSI crashes involving speeding is a 5-year rolling average calculated based on the 4 years leading up to and including the reporting year.

2050 Target: Zero FSI crashes involving speeding

Target Setting Methodology: M1M recommends tracking this value across time with a downward trend target. While contributing factors of crashes are not a part of CoFW SAP's established performance measures, monitoring the trend of crashes involving speeding still provides valuable insights into the effectiveness of safety improvements and countermeasures.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

A-5: Number of FSI crashes involving distracted driving (5-year average)

Source: The original data is sourced from TxDOT's CRIS database and supplemented with the crash analysis from the SAP project team.

Baseline (2023): 102 crashes

Baseline Methodology: The number of FSI crashes involving distracted driving is a 5-year rolling average calculated based on the 4 years leading up to and including the reporting year.

2050 Target: Zero FSI crashes involving distracted driving

Target Setting Methodology: M1M recommends tracking this value across time with a downward trend target. While contributing factors of crashes are not a part of CoFW SAP's established performance measures, monitoring the trend of crashes involving distracted driving still provides valuable insights into the effectiveness of safety improvements and countermeasures.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

A-6: Number of FSI crashes involving driving under the influence (DUI) (5-year average)

Source: The original data is sourced from TxDOT's CRIS database and supplemented with the crash analysis from the SAP project team.

Baseline (2023): 47 crashes

Baseline Methodology: The number of FSI crashes involving DUI is a 5-year rolling average calculated based on the 4 years leading up to and including the reporting year.

2050 Target: Zero FSI crashes involving DUI

Target Setting Methodology: M1M recommends tracking this value across time with a downward trend target. While contributing factors of crashes are not a part of CoFW SAP's established performance measures, monitoring the trend of crashes involving DUI still provides valuable insights into the effectiveness of safety improvements and countermeasures.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

A-7: Number of commercial motor vehicle (CMV) and large truck-involved crashes (5-year average)

Source: The original data is sourced from TxDOT's CRIS database and supplemented with the crash analysis from the SAP project team.

Baseline (2023): 3,015 crashes

Baseline Methodology: The number of CMV and large truck-involved crashes is a 5-year rolling average calculated based on the 4 years leading up to and including the reporting year.

2050 Target: 1 percent annual reduction

Target Setting Methodology: M1M recommends tracking this value across time with a downward trend target.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

Additional Considerations:

- **Lane miles of system-wide safety treatments implemented**

  This measure quantifies the roadway safety improvements installed across the city's transportation network, such as traffic-calming measures, protected bike lanes, and enhanced pavement markings and signages. It reflects the progress in reducing crashes and enhancing safety for the users of all transportation modes. The measure is calculated by multiplying the length of treated roadways by the number of lanes installed. However, due to data limitations, the M1M team is not currently able to incorporate this measure into the plan. It is possible to integrate this measure in the future when reliable and granular data is available.

B. Fix it First

The following measures are linked to the maintenance goal of ensuring cost-effectiveness of transportation assets throughout their life cycle. All maintenance measures track existing asset conditions and community satisfaction in transportation assets across the city.

B-1: Percentage of pavement lane miles in fair to very good condition

Source: Pavement condition data is provided by the CoFW TPW. The city pavement assessment is performed on a 3- to 5-year basis. The city is in the process of collecting pavement condition data for 2025.

Baseline (2021): 87 percent of citywide pavement conditions are in fair to excellent condition

Baseline Methodology: The city pavement condition assessment determines the Pavement Condition Index (PCI) for each street segment based on the severity and extent of the pavement defects such as bleeding, corrugation, and cracking. PCI is grouped into six categories: failed, poor, fair, good, very good, and excellent. This metric is calculated based on the sum of lane miles in fair, good, very good, or excellent condition divided by the sum of all lane miles in the street network maintained by the CoFW.

2050 Target: 90 percent of citywide pavement conditions are in fair to excellent condition

Target Setting Methodology: Based on peer city reviews, it is recommended that the city set the pavement condition goal to 90 percent of streets being in fair to excellent condition. To more efficiently maintain and upgrade existing systems and proactively plan for the maintenance and upkeep of new assets, it is also recommended that an annual target is set each year based on resources available for maintenance of the street network and rehabilitation or replacement of poor and failed streets.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

B-2: Percentage of bridge structures in fair to excellent condition

Source: TxDOT Bridge Dataset

Baseline (2022): 67.2 percent of CoFW bridges in fair to excellent condition

Baseline Methodology: TxDOT classified bridge structural conditions as failure, critical, serious, poor, fair, satisfactory, good, very good, and excellent. This measure tracks the percentage of bridges in Fort Worth that are in or above fair condition (all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour).

2050 Target: 90 percent of bridges are in fair to excellent condition

Target Setting Methodology: Based on peer city reviews and alignment with state goals, it is recommended that the city set the bridge structure condition goal to 90 percent of major bridges being in fair to excellent condition. It is also recommended that an annual target is set each year based on available repairs or replacements of structurally deficient bridges.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

B-3: Percentage of missing or poor condition sidewalks

Source: Sidewalk condition data is provided by CoFW TPW.

Baseline (2021): 6 percent of sidewalks missing or in poor condition

Baseline Methodology: The percentage of missing or poor condition sidewalks measures the quality of the city's infrastructure dedicated to pedestrians. The percentage is calculated by dividing the length of sidewalks that score 25 or -1 in the city's pavement condition data by the total length of sidewalk in Fort Worth.

2050 Target: 20 percent reduction in 6 years from the baseline year

Target Setting Methodology: The target aligns with Fort Worth's ATP.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

B-4: Percent satisfaction with the pavement condition of major city streets

Source: The data was based on the M1M community survey.

Baseline (2024): 13 percent satisfaction with pavement condition

Baseline Methodology: This measure was calculated by the number of respondents who answered “very happy” or “happy” about the city's pavement condition divided by the total number of responses.

2050 Target: Upward trend

Target Setting Methodology: M1M recommends tracking this value across time with an upward trend target utilizing a regular community survey system.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

Additional Considerations:

- **Percent satisfaction with bikeway maintenance**

  This measure tracks cyclists' perceptions of how well bikeways are maintained, involving factors like pavement quality, debris clearance, and signage visibility. The percentage reflects the users' confidence in the safety and comfort of the biking infrastructure. However, integrating this measure into the plan is currently constrained by data limitations. This measure can offer valuable insights in the future when a robust and recurring feedback mechanism to collect public input is developed.

- **Percent satisfaction with sidewalk maintenance**

  Similar to the measure for bikeways, percent satisfaction with sidewalk maintenance tracks pedestrians' attitudes on the maintenance quality of the city's sidewalks, including pavement condition, lighting, accessibility compliance, etc. It serves as an important indicator of pedestrian infrastructure reliability and equity. The M1M Plan will incorporate this measure into the tracking progress once a robust public feedback mechanism is established.

- **Number of intersection locations with poor condition of traffic signs and markings**

  This number quantifies degraded infrastructure at intersections, specifically traffic signs and markings such as faded pavement markings, obscured signage, or deteriorated reflective materials. These traffic control devices are simple but vital to roadway safety and navigational clarity. Due to insufficient data on signs and markings condition, this measure is not included as part of the M1M performance measures. It can be incorporated into the plan in the future once a systematic traffic signs and markings inspection and reporting framework is available.

- **Annual average percentage uptime of ITS assets**

  This measure evaluates the operational reliability of ITS devices in Fort Worth by quantifying the proportion of time the ITS equipment remains fully functional over a defined period, including traffic signals, cameras, and dynamic messaging boards. It provides critical insights into real-time traffic management and data collection. However, incorporating this metric into the plan faces challenges due to technical limitations. Building a reporting mechanism for continuous monitoring of ITS assets will help establish the performance measures tracking in the M1M Plan.

- **Percent street inventory maintained by preventive maintenance**

  This percentage measures the amount of street segments maintained by preventive maintenance such as minor reconstruction, resurfacing, and crack sealing that can help extend pavement life and improve overall street conditions. Due to current limitations in available data, the M1M Plan is unable to accurately track this measure. It could be incorporated into the plan when detailed street maintenance data is available in the future.

C. Human Comfort

The following measures are linked to the mobility goal of creating a network that is convenient, connected, and considerate for community use. All mobility measures track travel time, connectivity, reliability, and other related metrics across the city.

C-1: Number of miles traveled by vehicles on roadways (VMT)

Source: NCTCOG Travel Demand Management (TDM) Model

Baseline (2023): 29,305,520 (daily VMT)

Baseline Methodology: The number is derived by calculating the sum of VMT in both directions on all links within the CoFW using the NCTCOG TDM model.

2050 Target: 1.2 percent annual total VMT reduction

Target Setting Methodology: Based on the review of peer city targets, which generally aim at annual reductions of VMT from 1 to 1.5 percent, 1.2 percent of annual total VMT reduction is a feasible target for Fort Worth that can encourage the travel mode shift from predominately single-occupancy vehicles (SOV) to alternative transportation modes.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

C-3: Travel Time Index (TTI)

Source: NCTCOG TDM Model

Baseline (2023): 1.71 (A.M.) / 1.92 (P.M.)

Baseline Methodology: TTI measures the predictability of travel times on the city's transportation network, indicating the average additional time required for trips. The ratio value is calculated by dividing the peak hour travel time on all links by the free flow travel time.

2050 Target: 1.5

Target Setting Methodology: The target was established by incorporating the FHWA's guidance and case studies, Texas's statewide urban travel reliability condition, and benchmarking data from peer agencies. A TTI below 1.5 is widely recognized as an indicator of reliable travel time. The performance dashboard of TxDOT reports the latest (2023) Texas urban TTI at 1.48. Fort Worth's goal is 1.5, which provides a realistic and attainable benchmark that aligns with current statewide performance and promotes ongoing and future improvements in travel time reliability.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

C-4: Percent of trip volumes by walking, biking, or riding transit (Mode Split)

Source: Replica[4]

Baseline (YYYY): 12.4 percent

Baseline Methodology: The mode split percentage measures the proportion of trips that people utilize public and active transportation modes. Replica, a mobility data platform, provides the number of trips by each transportation mode in Fort Worth. The percentage is calculated by dividing the total number of trips by public and active transportation modes trips.

2050 Target: 24.8 percent

Target Setting Methodology: Based on the review of peer city measures, doubling the percentage of alternative transportation mode users by 2050, or an 0.5 percent annual increase, is a feasible goal to promote the use of public transit and active lifestyles in Fort Worth.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

C-5: Street connectivity (link-to-node ratio)

Source: NCTCOG TDM 2023 Roadway Network

[4] Replica is a big data platform that uses U.S census dataset and in-vehicle GPS data to run simulations and develop a calibrated model for travel patterns and travel demands.

Baseline (2023): 1.23

Baseline Methodology: The link-to-node ratio, representing the number of street segments per intersection, reflects the overall accessibility and route options within the road network. Generally, a higher connectivity ratio provides more travel options, which can lead to reduced congestion, shorter travel times, and fewer crashes. The ratio is derived from NCTCOG TDM's roadway network dataset by dividing the number of all street segments (links) by the number of all intersections (nodes).

2050 Target: Upward

Target Setting Methodology: M1M recommends tracking this value across time with an upward trend target.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

C-6.1: Air Quality Index (AQI) of particulate matter with a diameter of 2.5 micrometers or less (PM 2.5)

Source: U.S. Environmental Protection Agency (EPA) Air Quality System (AQS)

Baseline (2023): Average AQI PM 2.5: 46.8

Baseline Methodology: One measure for air quality is the level of particulate matter, a pollutant also correlated with vehicle emissions, specifically fine particles known as PM 2.5. EPA data indicates that communities in central and southeast of Fort Worth are disproportionately affected by poor air quality.

2050 Target: Maintain below 50

Target Setting Methodology: According to AirNow, an air quality data platform partnering with the EPA, National Oceanic and Atmospheric Administration, and other federal agencies, an AQI value of PM 2.5 below 50 signifies a “good” air quality level, indicating that particle pollution poses little or no risk to human health. While Fort Worth maintains the AQI at the “good” level, the city aims to sustain this level of air quality through consistent monitoring and proactive environmental initiatives.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

C-6.1: AQI of ozone

Source: EPA AQS

Baseline (2023): Average ozone level: 67.3

Baseline Methodology: Another measure for air quality is the level of ozone, a pollutant also correlated with vehicle emissions. Similar to the PM 2.5 pollutant, EPA data shows communities in central and

southeast Fort Worth are disproportionately affected by poor air quality.

2050 Target: 50

Target Setting Methodology: AirNow utilizes a consistent scoring scale for ozone and particle pollution, showing that the ozone pollution in Fort Worth is currently at the "moderate" level. Although the air quality is acceptable, there may be a risk for a particular group of people who are unusually sensitive to air pollution. Fort Worth aims to reduce ozone pollution to an AQI value of 50 or below, corresponding with the "good" category.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

C-7: Households within 1/4 mile of a dedicated bike facility

Source: CoFW and American Community Survey (ACS)

Baseline (2023): 74,130

Baseline Methodology: Household with access to bike facility is calculated by summing the total number of households from ACS household data within a ¼-mile buffer of the CoFW's existing bike lanes, side paths, and trails.

2050 Target: Upward

Target Setting Methodology: M1M recommends tracking this value across time with an upward trend target.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

C-8: Households within 1/2 mile of frequent transit

Source: ACS and Remix[5]

Baseline (2023): 70,369 (20.3 percent of total households)

Baseline Methodology: Households within ½ mile of frequent transit routes measure the number of residences located within a short walking distance of high-frequency transit services (transit with 15-minute service), indicating the accessibility of people to public transportation. The value is gathered from the ACS household numbers that are within the 1/2-mile buffer of frequent transit routes derived from Remix, a public transit planning software developed by Via.

[5] Remix is a transit planning software that incorporates transit data such as ridership and origin-destination flow to provide interactive mapping, scenario-modeling, and scheduling tools to help the design and evaluate of transit networks and programs.

2050 Target: 2 percent annual increase (from previous year)

Target Setting Methodology: Based on the review of peer city measures, a 2 percent year over year increase is a feasible 20-year target, meaning more than 30 percent of total households in Fort Worth will be within ½ mile of frequent transit.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

C-9: Miles of multi-use trails and bike lanes

Source: CoFW

Baseline (2019): 165.63 miles (98.18 miles of trails and 67.45 miles of bike lanes)

Baseline Methodology: The mileage of multi-use trails and bike facilities measures the total length of infrastructure specifically designed to support active transportation modes, demonstrating the city's promise to encourage healthier and more sustainable mobility options. The value is derived from the bike lane data provided by CoFW TPW and the Fort Worth ATP network GIS data.

2050 Target: 550 miles

Target Setting Methodology: This target aligns with the total mileage of proposed bike facilities and trails in Fort Worth's ATP.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

C-11: Average transit on-time performance percentage

Source: Trinity Metro

Baseline (2024): 87.9 percent

Baseline Methodology: The transit on-time performance percentage measures the reliability of Fort Worth's public transit system by tracking the proportion of transit trips that adhere to their scheduled arrival and departure times. The percentage is calculated by dividing the on-time trips by total trips for each route and computing the average for all transit routes in Fort Worth.

2050 Target: 89 percent (Trinity Metro Target)

Target Setting Methodology: The target aligns with Trinity Metro's on-time performance percentage target.

Responsible Agency: Trinity Metro

Reporting Frequency: Annual

C-12: Passenger trips per revenue vehicle miles

Source: Trinity Metro

Baseline (2023): 0.4

Baseline Methodology: The passenger trips per revenue vehicle miles metric measures the effectiveness of the city's transit services. The number is calculated by dividing the annual unlinked trips by annual vehicle revenue miles.

2050 Target: 1

Target Setting Methodology: Based on the review of peer city passenger trips per revenue vehicle miles, 1 is a feasible target for Fort Worth and encourages the improvement of operational efficiency and higher service utilization.

Responsible Agency: Trinity Metro

Reporting Frequency: Annual

C-13: Percentage of ground covered by leaves, branches, and stems (tree canopy)

Source: Fort Worth UFMP

Baseline (2023): 19 percent ground coverage

Baseline Methodology: The tree canopy percentage measures the city's land area shaded by trees, reflecting Fort Worth's environmental sustainability and overall livability. The UFMP recommends assessing tree canopy at least once every 5 years. The UFMP study team worked with PlanIT GEO, an urban forestry consulting firm to calculate the tree canopy percentage through GIS analysis using Light Detection and Ranging imagery.

2050 Target: 30 percent ground coverage

Target Setting Methodology: The UFMP team set the 2050 target at 30 percent by examining the available land area, tree canopy cover, tree equity, city priorities, future land use, and opportunities to mitigate urban heat and preserve forest land. Increasing tree canopy to 30 percent will require a total of 76,200 new trees annually, including both replacing lost trees due to developments or pests and planting new trees.

Responsible Agency: Urban Forest Working Group

Reporting Frequency: Annual

Additional for Consideration:

- **Households within 10-minute walk via sidewalk to neighborhood amenities**

Households that can reach neighborhood amenities such as grocery stores by 10-minute walk via sidewalk is an effective performance metric to measure pedestrian accessibility and the city's walkability, reflecting transportation accessibility and equity in Fort Worth. However, due to data limitations, this measure is not included in the core performance measures, as it is challenging to establish the baseline value. Future data collection efforts and methodology improvements may allow the integration of this measure into performance monitoring.

- **Number of Americans with Disabilities Act (ADA) Ramps improved/installed**

  This value measures the number of ADA-compliant ramps in the city's street network. It is an important indicator that represents accessibility and equity in Fort Worth as it assesses the accommodation of the transportation infrastructure for individuals with disabilities. However, the current data gap of ADA compliance of ramps makes it challenging to precisely track this metric. Future records that detail the ADA compliance information will allow the incorporation of this measure into M1M's performance tracking.

- **Annual hours of peak-hour excessive delay per capita**

  This measure tracks the amount of time roadway users spend in traffic delays during peak hours exceeding a normal delay threshold (the greater value of 20 miles per hour or 60 percent of the posted speed limit) from 6 A.M. to 10 A.M. and 4 P.M. to 8 P.M. It serves as a valuable indicator of the operational efficiency of the city's transportation system and residents' daily mobility. The M1M Plan is not able to incorporate this measure yet because vehicle types (e.g., SOV, shared ride) are not included in NCTCOG's TDM model, the traffic data source of M1M. This measure can be integrated into the plan once the vehicle type data is available.

D. Economy

The following measures are linked to the economic goal of supporting businesses, improving regional and global connectivity, facilitating trade and investment, promoting labor mobility, and enhancing prosperity. All economic measures track metrics across the city.

D-1: Job opportunity increase

Source: NCTCOG and ACS

Baseline (2023): 430,033 employments / 756 employers with at least 100 employees

Baseline Methodology: Job opportunity increase measures Fort Worth's economic vitality as well as accessibility to employment centers. The employment number baseline is derived from ACS's economic characteristics data profile, and the employer number is derived from NCTCOG's regional data center.

2050 Target: Upward trend

Target Setting Methodology: M1M recommends tracking this value across time with an upward trend target.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

D-2: Jobs within 1/2 mile of frequent transit

Source: Trinity Metro

Baseline (2023): 151,258

Baseline Methodology: Jobs within ½ mile of frequent transit routes measure the number of employment opportunities within a short walking distance of high-frequency transit services (transit with 15-minute service), indicating the accessibility of people to jobs utilizing public transportation. The number of jobs is gathered from the ACS and overlayed with a half-mile buffer of frequent transit routes derived from Remix.

2050 Target: Upward Trend

Target Setting Methodology: M1M recommends tracking this value across time with an upward trend target.

Responsible Agency: CoFW TPW and Trinity Metro

Reporting Frequency: Annual

Additional for Consideration:

- **Truck travel time reliability**

  This measure assesses the travel time reliability of freight movement, revealing the predictability of truck movements and the resilience of supply chain corridors under congestion, incidents, or other constraints. The M1M team is not able to incorporate this measure into the plan due to the lack of truck travel time data in the NCTCOG TDM model, which is used to calculate mobility-related measures. This measure can be integrated into the plan when truck travel time data is available.

- **Truck delay cost of freight bottlenecks**

  This performance measure estimates the economic impact of freight vehicle delays at certain congestion points. The qualified costs serve as an important indicator of lost productivity, fuel inefficiencies, and supply chain disruption, which impact Fort Worth's economic competitiveness and freight movement efficiency. This measure can be incorporated into the M1M Plan when reliable truck travel time data becomes available in the future.

- **Freight relief routes**

  The freight relief routes measure evaluates the implementation and utilization of alternative freight transporting corridors to divert freight traffic from congested urban centers or critical bottlenecks. Freight relief routes can improve travel time reliability and minimize environmental impacts in dense urban areas. This measure can be added to M1M performance tracking when Fort Worth finishes developing the dedicated freight relief routes system.

- **Plan revenue per capita per year**

  This measure of plan revenue per capita per year helps to improve the funding forecast methodology and maintain a level of sufficient funding for implementing new policies, programs, and projects that meet the needs of the city's population growth and reflects fiscal capacity and funding equity. The measure can be integrated into the M1M Plan once the funding forecasting methodology is developed in the future.

E. Technology

The following measures are linked to the technology goal of embracing flexible and resilient technology to adapt to evolving transportation needs and challenges. All economic measures track metrics across the city.

E-1: Number of EV charging stations

Source: NCTCOG

Baseline (2023): 135

Baseline Methodology: E-1 measures Fort Worth's sustainable mobility as more EV charging stations will support the adoption of EVs and ensure equitable access to clean transportation infrastructure. The baseline value is derived from NCTCOG's regional data center.

2050 Target: Upward trend

Target Setting Methodology: M1M recommends tracking this value across time with an upward trend target.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

E-2: Percentage of population with broadband connectivity

Source: ACS

Baseline (2023): 92.8 percent

Baseline Methodology: Broadband access is an important measure for the city's digital infrastructure as it enables smart transportation solutions and improves access to real-time information. The percentage is calculated using ACS's computers and internet subscription statistics.

2050 Target: Upward trend

Target Setting Methodology: M1M recommends tracking this value across time with an upward trend target.

Responsible Agency: CoFW Information Technology Solutions

Reporting Frequency: Annual

E-4: Number of transit stops with real-time signs

Source: Trinity Metro

Baseline (2023): 51 digital signals

Baseline Methodology: Trinity Metro provided the needed baseline information. Real-time signs are important for transit services as they provide live operation information to the users, which can significantly improve users' perceived service reliability.

2050 Target: Upward trend

Target Setting Methodology: M1M recommends tracking this value across time with an upward trend target.

Responsible Agency: Trinity Metro

Reporting Frequency: Annual

Additional for Consideration:

- **Number of smart parking management systems**

  This measure tracks the deployment of smart parking management systems that include real-time occupancy of on- and off-street parking, space reservations, and digital payment. These systems can effectively reduce congestion and vehicle emissions caused by vehicles cruising to find a parking spot. Due to insufficient data for the number of smart parking management devices across the city, this measure is not included in the M1M Plan performance tracking. When a continuous and comprehensive recording mechanism is established from the smart parking management system, the M1M team can incorporate this measure to the plan.

- **Number of traffic signals with transit signal priority (TSP)**

  This measure quantifies the utilization of TSP systems that adjust traffic signal timing to prioritize public transit vehicles to enhance the service reliability of the public transportation

system in the city. The M1M Plan is unable to integrate this measure because of the insufficient TSP system counts. This measure can be included in the plan's performance tracking once the statistics of TSP systems become available.

- **Number of traffic signals with emergency vehicle preemption (EVP)**

  This measure documents the number of traffic signals deployed with the EVP system that grants emergency vehicle priority to reduce responding times for roadway accidents and other emergencies such as fire and crimes, which is important to enhance public safety. However, the incorporation of this measure into the plan is hindered by a data gap in available EVPs in the city. When EVP coverage and installation numbers are determined, this measure can be integrated into the M1M Plan.

- **Number of pedestrian hybrid beacons (PHB) (new construction or upgraded)**

  This measure tracks the installation of PHBs, traffic control devices that will alert drivers to pedestrian presence through flashing beacons. PHBs can improve crosswalk safety and reduce vehicle-pedestrian crash risks, especially in high-pedestrian areas. However, insufficient records of PHB deployments make it challenging to track the number of PHBs in the city. This measure can be incorporated into the plan when a recording system of active PHBs becomes available.

- **Number of pilot projects related to Connected and Automated Vehicle (CAV) technology**

  This measure evaluates the progress of CAV innovations by quantifying the projects in Fort Worth, such as autonomous freight trucks, vehicle-to-infrastructure communications, and sensor-integrated traffic management. Those projects can promote infrastructure adaptations and inform regulatory updates. However, the study team is unable to incorporate this measure into the plan due to the absence of a comprehensive documentation mechanism for CAV pilot projects. Once established, this measure can be integrated into the plan's performance tracking.

F. Equity

The following measures are linked to the equity goal of ensuring accessible, affordable, and reliable transportation options for all ages and abilities. All equity measures track metrics across the city.

F-1: Housing and transportation costs as a percentage of household income (H+T Index)

Source: Center for Neighborhood Technology (CNT)[6]

Baseline (2023): 42 percent (24 percent on housing + 18 percent on transportation)

Baseline Methodology: The H+T Index measures the affordability of housing and transportation costs

[6] H+T Fact Sheets

by household. CNT derived the housing costs data from the U.S Census Bureau's ACS and constructed a transportation cost model that assessed auto ownership, auto use, and transit use as functions of 16 independent variables such as average household size, transit connectivity, and employment intensity to estimate the transportation cost of a typical household.

2050 Target: 30 percent

Target Setting Methodology: According to the U.S. Census Bureau, households are considered cost-burdened when they spend more than 30 percent of their income on housing. While Fort Worth's housing cost burden index is below 30 percent, expanding the consideration to transportation cost will provide a more comprehensive understanding of household affordability. Setting the H+T Index target to be 30 percent aims to improve Fort Worth's livability and encourage the development of transportation infrastructure that supports low-cost modes including public transit, walking, and biking.

Responsible Agency: CoFW TPW

Reporting Frequency: Annual

F-2: Number of transit vehicles and facilities with ADA equipment

Source: Trinity Metro

Baseline (2023): 138 fixed-route buses, 54 on-demand buses, and all facilities

Baseline Methodology: This measure tracks the number of transit vehicles and facilities that are accessible for individuals with disabilities. The baseline value is provided by Trinity Metro.

2050 Target: Upward

Target Setting Methodology: M1M recommends tracking this value across time with an upward trend target.

Responsible Agency: CoFW, Trinity Metro

Reporting Frequency: Annual

Additional for Consideration:

- **Number of community-based organizers engaged in the planning process**

  This number measures the inclusivity and equity of public engagement efforts through the development of the M1M Plan by quantifying the participation of community organizations during the planning process. This measure is a vital indicator for collaborative decision-making and equitable representation of different communities, especially those historically underrepresented. It is possible to include this measure in the performance tracking when comprehensive public engagement records are available.

- **Level of access to certain destinations/amenities in relation to environmental justice communities**

  This measure tracks disparities in proximity and connectivity to essential services and amenities such as health care, education, parks, and grocery stores for populations within environmental justice communities. However, integrating this measure into the plan is challenged by methodological complexities, including the inconsistent definition of "level of access" and the sophistication involved in quantifying this parameter. With a well-developed methodology for evaluation in the future, this measure can be incorporated into M1M's performance tracking system.

- **Percentage of accessible intersections and crossings**

  This percentage tracks the share of ADA-compliant intersections and crossings in the city. Those facilities include detectable warnings, curb ramps, median refuge islands, etc., which are important to VRUs and individuals with disability. Due to gaps in data recording, the M1M Plan is presently unable to track this measure. It can be integrated into the plan once a comprehensive ADA facility recording system is available.

APPENDIX D

TECHNICAL MEMO 4: MULTIMODAL GAP ANALYSIS & POLICY FRAMEWORK

FORT WORTH®

Master Transportation Plan

Multimodal Gap Analysis and Needs Network

Technical Memorandum

August 4, 2025

AECOM TOOLE DESIGN

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Acronyms

AASHTO	American Association of State Highway and Transportation Officials
ACS	American Community Survey
ADA	Americans with Disabilities Act
ATP	Active Transportation Plan
AV	autonomous vehicle
CR	Commuter Rail
CRIS	Crash Records Information System
DART	Dallas Area Rapid Transit
DFW	Dallas Fort Worth International Airport
DR	Demand Response
ETJ	Extraterritorial Jurisdiction
GIS	Geographic Information System
IH	Interstate Highway
ITS	Intelligent Transportation Systems
JEOC	Joint Emergency Operations Center
KSI	Killed or Seriously Injured
LEHD	Longitudinal Employer-Household Dynamics
LOS	Level of Service
LTS	Level of Traffic Stress
MaaS	mobility-as-a-service
MB	Motor Bus
mph	miles per hour
MTP	Master Thoroughfare Plan
M1M	Moving a Million
NACTO	National Association of City Transportation Officials
NCTCOG	North Central Texas Council of Governments
OD	Origin-Destination
OTP	On-Time Performance
PPP	public-private partnership
PTC	Positive Train Control
PxLTS	Pedestrian Crossing Level of Traffic Stress
ROW	Right-of-Way
SNAP	Supplemental Nutrition Assistance Program
TAZ	Transportation Analysis Zone
TCC	Tarrant County College
TDM	Travel Demand Model
TNC	Transportation Network Company
TOD	Transit-Oriented Development
TSI	Transportation Supportive Index
TSP	Transit Signal Priority
TTI	Travel Time Index
UTA	University of Texas at Arlington
V/C	Volume-to-Capacity
VIA	VIA Metropolitan Transit (San Antonio, TX)
VMT	Vehicle Miles Traveled
VP	Vanpool

1 Introduction

The City of Fort Worth is developing their Master Transportation Plan, the "Moving a Million" (M1M) Plan, building upon all of the city's transportation related plans. The plan has a 25-year planning horizon, with updates anticipated every 4 years to align with other local and regional capital planning cycles. The M1M Plan will serve as the city's fiscally responsible Capital Transportation Plan, tied to city policies and funding realities and grounded in the needs of the Fort Worth community.

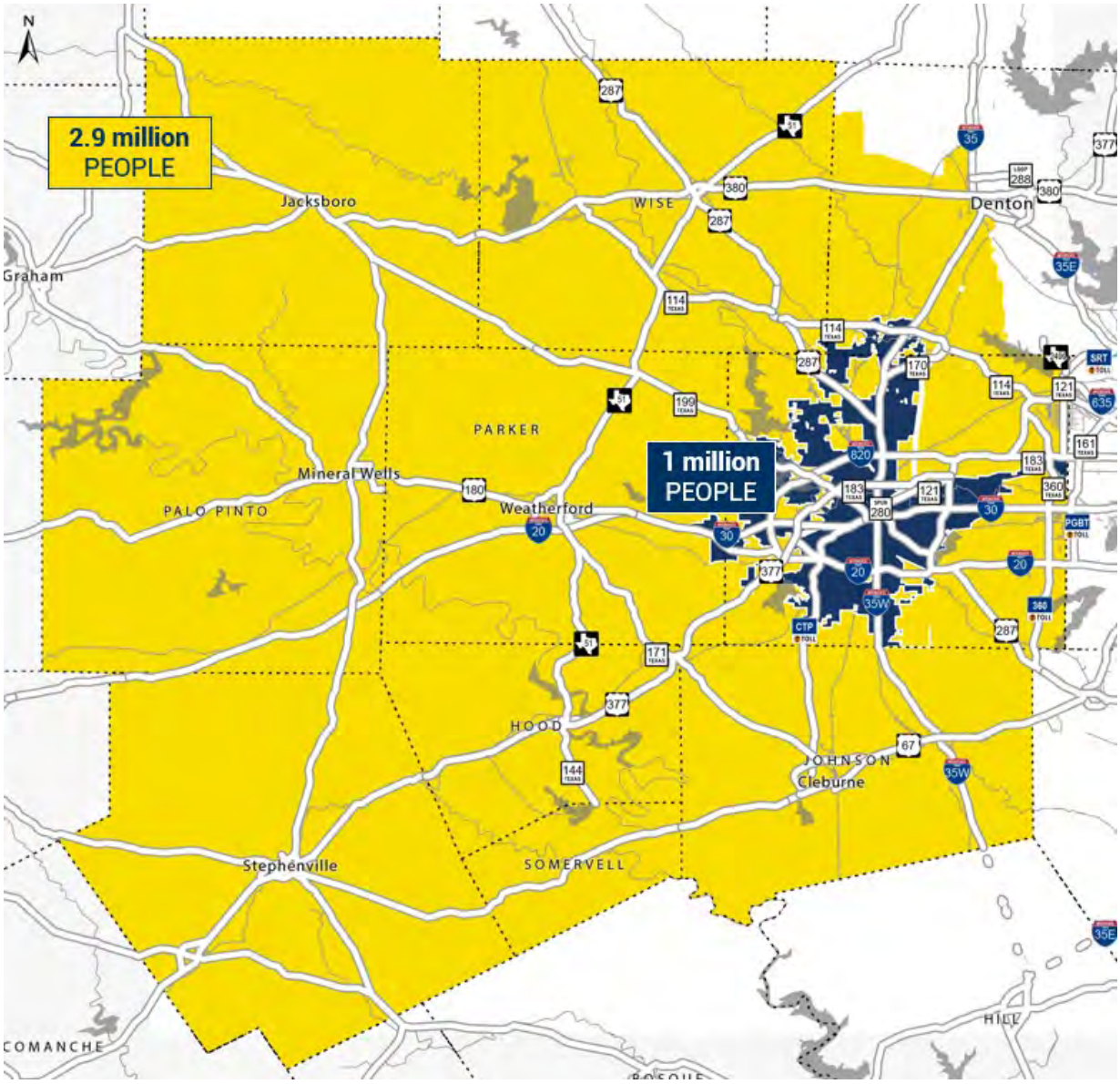
The purpose of this memorandum is to identify transportation gaps across Fort Worth's roadway, transit, active transportation, and freight networks. These gaps include physical infrastructure needs, level of service (LOS) issues, and policy limitations that impact how the system functions today—and how well it is prepared for projected growth.

To support this analysis, the project team developed a population and employment projection (**Appendix 1**) to understand how demand for travel will grow over time. These projections combine data from the North Central Texas Council of Governments (NCTCOG) Regional Projection Models and American Community Survey (ACS) 5-Year Estimates, especially for areas outside of the regional model coverage.

The projections use a linear growth method based on trends from 2013 to 2023 to estimate future conditions in 2050. The results help us understand where population and job growth will concentrate—and where connectivity and capacity upgrades are most needed.

For this analysis, the "Greater Fort Worth Area" includes Fort Worth itself, plus surrounding counties with strong commuting, economic, and infrastructure ties to the city. As shown in **Figure 1**, this includes Parker, Hood, Johnson, Wise, and other adjacent counties where growth is shaping regional travel patterns and investment needs. Dark blue areas represent the City of Fort Worth (approximately 1 million people today). Yellow areas indicate surrounding counties (collectively approximately 2.9 million people today).

Figure 1: Current Greater Fort Worth Area Population Context



By 2050, the Greater Fort Worth Area is projected to grow to approximately 4.38 million people. The City of Fort Worth alone is expected to reach a population of 1.54 million. Employment growth will also be significant. The region is projected to support 2.93 million jobs, including 719,181 jobs in Fort Worth by 2050.

These projections highlight the scale of regional growth—and reinforce the importance of planning a transportation system that can support the movement of people, goods, and services across city and county boundaries.

1.1 Context

This gap analysis serves as a foundational component of the M1M Plan by identifying areas with the greatest need for strategic transportation investment, aligned with long-term development and projected regional growth. It aims to inform targeted interventions that improve connectivity, support future growth, increase access to opportunities, and guide infrastructure prioritization. The analysis is composed of three primary steps, the Transportation Supportive Index (TSI), the Multimodal Gap Analysis, and the Policy Gap Analysis. The analysis yields the unconstrainted needs network, Metropolitan Transportation Plan (MTP) additions, and policy recommendations to be channeled through a screening criteria framework for definitive project prioritization.

1.2 Transportation Supportive Index

The TSI is a geospatial decision-making tool developed to identify areas of Fort Worth most supportive of new or infill development through the lens of transportation readiness and efficiency. The TSI integrates environmental, infrastructural, and demographic variables to help prioritize where investments will yield the greatest return and alignment with the city's growth strategy.

1.3 Multimodal Gap Analysis

The Gap Analysis and Needs Network identifies spatial and functional deficiencies in Fort Worth's transportation systems. Using multimodal and multi-source data, this analysis highlights areas with poor connectivity, high congestion, limited-service coverage, and inadequate infrastructure across four core domains: roadway, freight, transit, and active transportation.

1.3.1 Roadway

The roadway gap analysis employed geoinformatics and travel demand modeling—via NCTCOG 2050 Travel Demand Management (TDM)—to identify areas with physical network breaks, lack of connectivity to employment centers, and expectations to experience service degradation due to projected congestion. This analysis pinpointed areas of greatest projected travel demand and insufficient physical or operational capacity, forming a refined set of roadway improvement priorities.

Physical and operational capacity gap analysis steps included:

- Mapping trips and travel sheds for top employment centers
- Evaluating coverage gaps based on road proximity and projected congestion
- Scripted creation of potential infill connections to resolve dangling vertices and disconnected road segments
- LOS assessment and volume-to-capacity (V/C) ratio mapping
- Integration with the Master Thoroughfare Plan for proposed connections

1.3.2 Freight

The freight gap analysis focused on identifying deficiencies in freight truck movement, emphasizing last-mile access, corridor continuity, and safety. Key data included Replica freight volume data, freight origin-destination (OD) analysis (by census tracts), designated truck networks, and intermodal facility

connectivity.

The analysis revealed:

- Freight activity clusters with poor last-mile access or constrained infrastructure
- Regional and city freight activity cluster shortest and secondary routes
- Safety hotspots using Crash Records Information System (CRIS) data for commercial vehicle killed or seriously injured (KSI) crashes
- Gaps in first/last-mile connectivity, truck parking, and staging at freight activity clusters
- Regional and intercity routing inefficiencies due to regulatory, functional class, and physical barriers (e.g., rail crossings)

1.3.3 Transit

Transit gaps were identified through spatial, temporal, and performance-based analyses of the Trinity Metro network. Key components included:

- Walkshed analysis (0.25-, 0.5-, and 1-mile buffers) for fixed-route access
- Coverage and accessibility to key destinations such as jobs, schools, hospitals, and Supplemental Nutrition Assistance (SNAP) retailers
- Transit-supportive area classification via population and employment density
- Performance benchmarking against peer systems (Dallas Area Rapid Transit [DART], VIA, CapMetro)

Gap prioritization combined TSI, population density, employment density, and transit propensity into a weighted scoring model. Resulting priority zones guide macro-level interventions including flexible services, network expansion, realignment, and transit priority treatments.

1.3.4 Active Transportation

The active transportation gap analysis builds upon the work performed for the 2019 Active Transportation Plan (ATP) and identifies remaining gaps in the Active Transportation Network. The analysis incorporates new active transportation infrastructure constructed since 2019 to refine and update gaps and other areas of need.

1.4 Policy Gap Analysis

The Policy Gap Analysis evaluated Fort Worth's current policy framework against the transportation objectives of the M1M Plan, benchmarking practices across peer cities (e.g., Denver, Seattle, Austin). This review identifies missing or underdeveloped policy areas that limit multimodal integration, safety, equity, and future-ready infrastructure deployment.

Key policies evaluated included access management and subdivision design standards, transit-oriented development (TOD) and urban village planning, freight master plan coordination, and parking and

curbside management strategies, including shared mobility. Each policy was benchmarked against peer cities and assessed for strength, completeness, and applicability. The analysis revealed several opportunities to enhance alignment with M1M objectives, including better integration of Vision Zero principles across all modal planning efforts, stronger enforcement mechanisms for TOD zoning, the establishment of performance metrics for shared mobility and freight delivery, and broader application of transportation demand management (TDM) strategies within the private sector.

The combined physical and policy-based gap analysis provides a comprehensive, data-driven understanding of Fort Worth's multimodal transportation challenges and opportunities. With integration of spatial analyses (TSI, roadway, transit, freight) and policy benchmarking, this memorandum lays the groundwork with a weighted scoring criteria framework, project prioritization, and targeted interventions as Fort Worth advances its M1M goals.

2 Transportation Supportive Index

2.1 Approach Overview

The TSI was created as a tool to identify areas in the city for which new or infill development can be effectively served. Outputs from this analysis are used to identify priority areas for growth and transportation investment that would allow the City of Fort Worth to:

- Minimize capital and ongoing maintenance costs by prioritizing the use of existing transportation assets and limiting the creation of redundant or nonessential new assets.
- Reduce vehicle miles traveled (VMT) per capita, thereby mitigating increases in greenhouse gas emissions, traffic congestion, fatal and serious injury crashes, individual travel time, and transportation expenses.
- Shorten trips by increasing convenient access to jobs, schools, recreation, shopping, and services.

2.2 Methodology

The TSI is composed of specific indicators of the built and natural environment, along with characteristics of surrounding populations, to support city goals of both new and infill development. Its objective is to support the prioritization of network and service gaps by identifying advantageous areas, helping to select the most suitable locations for maximizing infrastructure investment efficiently.

The final product is a dataset that displays supportiveness scores, grouped by the district's potential to support targeted development and investment. To ensure consistency and clarity across all variables, the geographies for the TSI were standardized by consolidating NCTCOG Transportation Analysis Zone (TAZ) data within the 2010 Urbanized Area. This aggregation was guided by existing transportation barriers, such as interstates and water bodies, as well as areas with similar land use and area. By reducing over 5,000 individual TAZs to approximately 1,000 analysis districts, the process provided a standardized framework for evaluating all TSI variables. These analysis districts serve as the foundational boundaries for the TSI.

The TSI identifies and quantifies areas by data inputs such as (but not limited to) population and employment density, connectivity, trip density, existing transit ridership, and land use. The individual geospatial outputs and layers outlined in the six TSI inputs below can be found in **Appendix 2**.

<u>Data Inputs</u>

- **Population and Employment Density**: Residential and employment population density play a key role in the development of a city and directly impact the area's most supportive of transportation improvements. Some of the most common indicators of a successful transportation network are the number of residents and employment opportunities in each area. Residential population and employment were quantified as a density for an analysis district, based on projections from the NCTCOG TAZs, and downloaded from NCTCOG's Open Data Site.

- **Trip Density**: NCTCOG OD data by TAZ for trips made during the 2023 morning peak travel period was analyzed to better understand travel patterns in the study area. This trip data was then aggregated to count the total number of trips generated and received in each analysis district. A total district trip density was then calculated by dividing the total number of trips by the district land area.

- **Land Use**: This layer provides an understanding of the existing built and planned market areas. This involved classifying the potential of areas by synthesizing data regarding current and future land use, existing zoning, and form-based code areas. The zoning and land use datasets were classified by type for their prescribed density allowances. The change in development density, projected through changes from zoning to the future land use, indicates areas pre-determined by the city to be supportive of higher-density development, ultimately showing a desire for greater transportation networks in support of the growing activity. Further encapsulating the city's target for urban growth are the growth centers and urban villages, which were incorporated into land use classifications.

- **Infrastructure Proximity**: The extraterritorial jurisdiction (ETJ) is a legally defined area of land outside Fort Worth's limits, over which the city can regulate some activities through agreement with adjacent counties. The TSI includes the ETJ as a factor of infrastructure capacity and thus, is an indication for the need of future transportation development. The proximity of the ETJs is accounted for in the scoring of this layer. The analysis district scores are delineated by the adjacency to municipal city boundaries. The extent at which an ETJ is adjacent to a city boundary indicates their overall proximity to city infrastructure and future transference to city-based infrastructure through annexation. Districts with more coincidence to the city boundaries score higher for their proximity to infrastructure tie-ins.

- **Transportation Network**: As an index targeting to understand transportation, the transportation step is the most intensive. It is crucial to understand the capacity for the existing transportation network in different areas and the level of connectivity for the given modes. The TSI focuses separately on three modes of travel for the study area, including transit, active transportation, and private vehicles. Transit effectiveness was measured by the existing ridership numbers from both Trinity Metro and Texas Rail. Active transportation is assessed based on a city's primary urban development pattern as understood by its intersection density, as shorter block length typically means more blocks, which in turn lead to smaller parcels and higher population density. These compounding factors are strong predictors of active transportation activity. Private vehicles were accounted for in two sub-metrics: street connectivity based on the link (roads) to nodes (intersection) ratios and the V/C ratio as a sub-metric to show how intense the use of the network is in a particular segment of roadway. These variables are represented equally in this category of analysis and are combined into an aggregate score of one to five, based on the prevalence and future growth of the network.

- **Environmental**: Environmental barriers can be significant determinant for development and transportation connectivity in a specific area or community. While natural environments provide

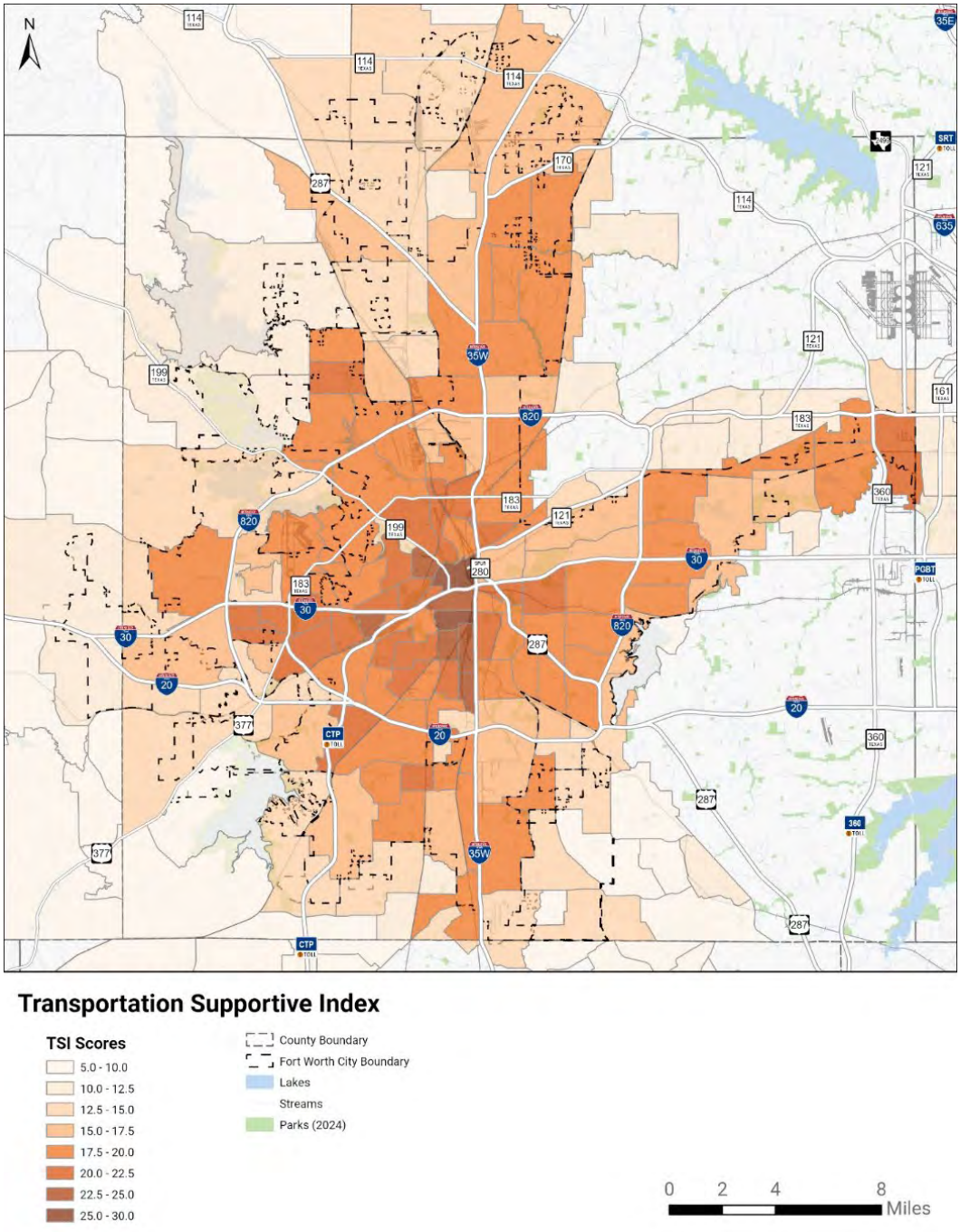
essential space for recreation and sustainability strategies for the conservation of natural lands, the spaces can inhibit further built environment and infrastructure deployment. As such, the TSI was designed to avoid identifying environmental areas as opportunities for growth. With this understanding, parks, open space priorities, bodies of water, and city flood risk areas have been identified and are combined as a criterion where a lower score denotes more prevalence of environmental constraints and a higher score indicates a district with fewer constraints.

The results from the TSI steps above were synthesized into scores ranging from one through five per analysis districts. The evaluation score for each of the six steps by district are then weighted and summed to produce a total district transportation supportive score, with a maximum of 30 points for the analysis district. The weighting options were reviewed at different thresholds but ultimately determined by stakeholder and city input. To gather the input an interactive tool was developed to provide a "scoring slider" for each metric to better align with associated with the respective priorities of the stakeholders and city. As a TSI, the existing and projected conditions of transportation network were weighed at 50 percent, and all remaining steps were weighed at 10 percent, giving a total of 100 percent.

2.3 Outputs

The TSI output (**Figure 2**) highlights a concentration of support in the city core within the I-820 and I-20 belts and areas adjacent to known high-capacity corridors in the city. The east corner of the city shows increased prospectus for transportation due to a union of multiple cities and access to the Dallas Fort Worth International Airport (DFW).

Figure 2: TSI



2.4 Recommendations

The TSI serves to focus the attention of the Gap Analysis on areas most equipped to service transportation investment. The index will serve as a tool for prioritization and selection of projects in the next phase of M1M.

3 Multimodal Gap Analysis and Needs Network

3.1 Approach Overview

The multimodal gap analysis evaluates Fort Worth's current transportation network across four core modes—active transportation, roadways, freight, and transit—to identify deficiencies in connectivity, accessibility, and safety. The findings lay the groundwork for targeted investments and policy adjustments that support M1M's goals.

3.2 Roadway Gap Analysis

3.2.1 Approach

The purpose of the roadway gap analysis is to identify needs and propose solutions for poor connectivity, congruency, and accessibility through a geoinformatics analysis. The roadway gap analysis was designed to identify gaps in network connectivity to key destinations and potential barriers in the Greater Fort Worth Area. This gap analysis provides a measurement of system gaps through compounding steps to highlight areas that exhibit the greatest gaps of physical connectivity and network functionality.

3.2.2 Methodology

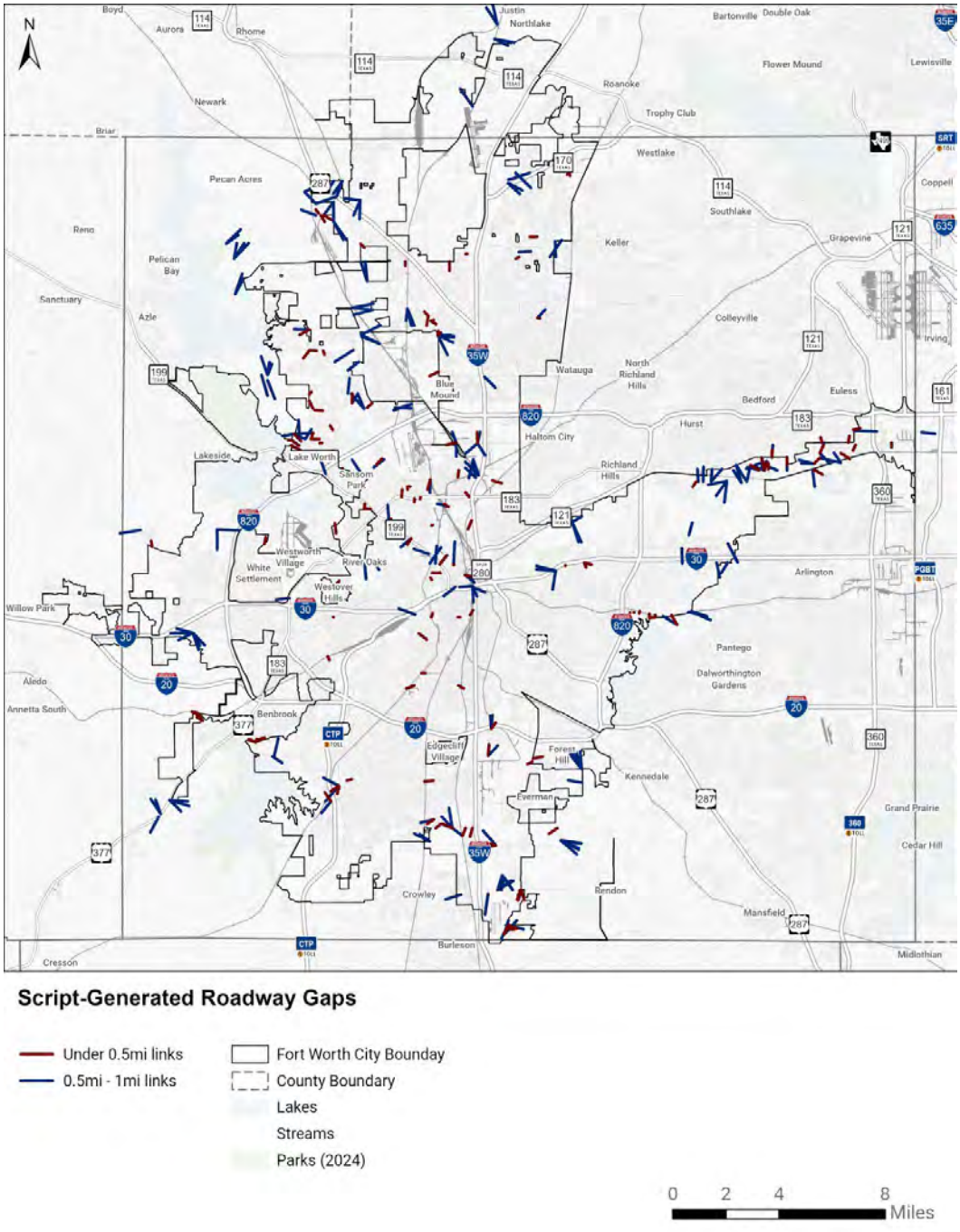
The roadway gap analysis is a composite of analyses to review physical gaps in connectivity throughout the City of Fort Worth and the periphery along with a capacity and operations analysis done to review level or service gaps on existing connections and facilities available to roadway users.

The process used to identify physical gaps in connectivity includes steps taken, including creating the network dataset, identifying key destinations, identifying travel shed gaps, and measuring gaps in the roadway network caused by development patterns, planning decisions, and physical barriers.

Travelsheds for the top 10 employment areas were created with an expected 15-minute travel time to cover a 1-mile trip to the respective employment area. A second layer showed a half-mile buffer surrounding all modeled 2036 roads with a 0.85 V/C. The combination of the travelshed buffers not serviced within 15 minutes at the 5-mile radius and congested roads buffer were combined to define a single area of focus for gaps in the network.

The roadway junctions with three-way intersections and dangling vertices (abrupt end to roadway) were entered into a script for processing potential connections to the existing roadway network for distances of under 0.5 mile and 0.5 mile to 1 mile in length. After running the script, a total of 1,212 refined node connections yielded a total of 65,676 links for the less than 0.5-mile range and 182,565 links between the 0.5- to 1-mile range. Through manual screening a total of 163 links for the less than 0.5-mile range and 227 links between the 0.5- to 1-mile range were further evaluated in the Spatial Roadway Gap Analysis (**Figure 3**).

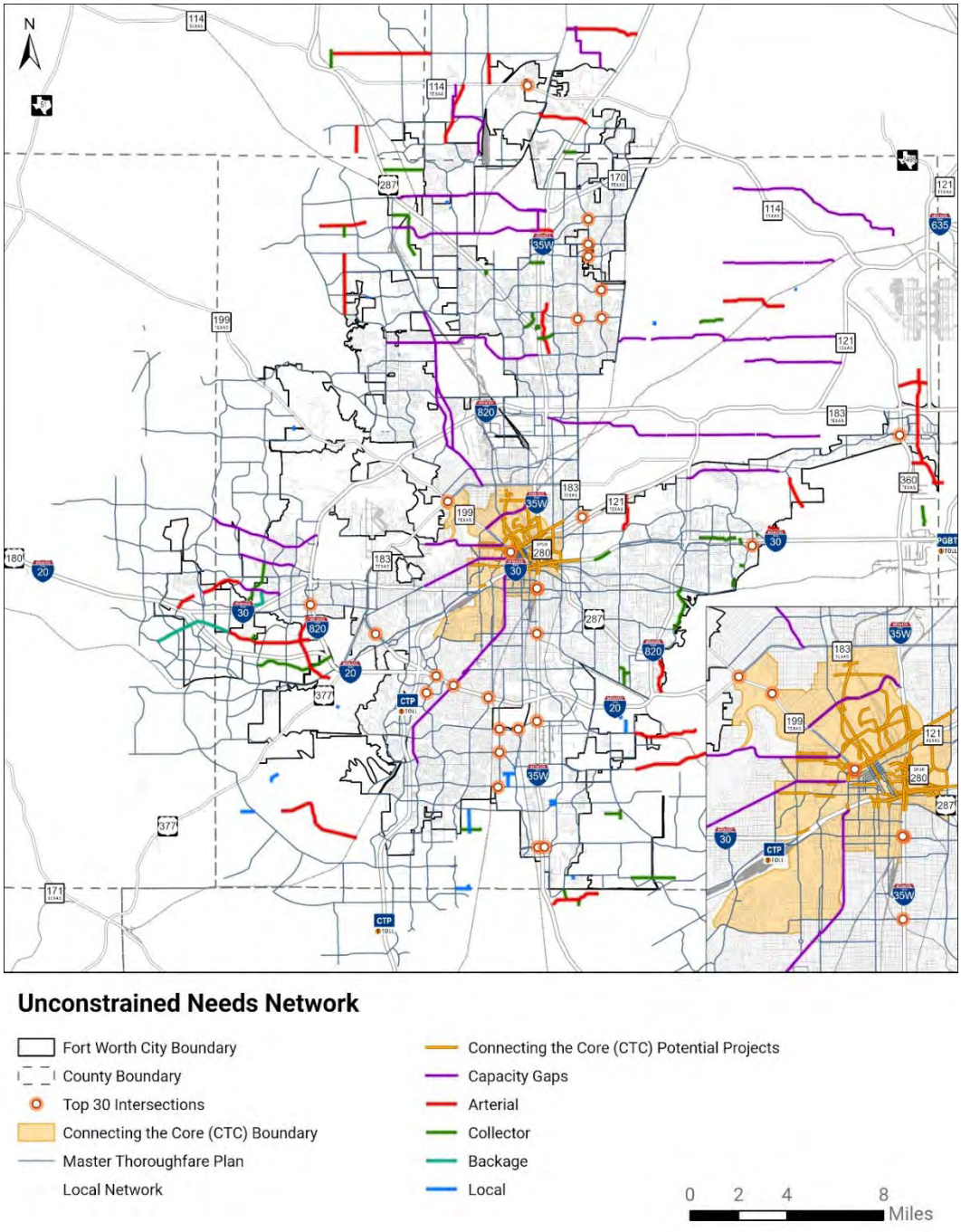
Figure 3: Script-Generated Roadway Gaps



3.2.3 Unconstrained Roadway Needs Network

Figure 4 illustrates Fort Worth's Unconstrained Needs Network—a citywide view of roadway improvements needed to support a more connected and efficient transportation system. This network combines identified connectivity, capacity, and operational gaps to show where new or upgraded facilities would improve mobility and performance across the city.

Figure 4: Unconstrained Roadway Needs Network



Importantly, this view is unconstrained, meaning it does not consider real-world limitations like right-of-way (ROW) availability, environmental impacts, or cost. It simply reflects where the network is falling short today and where enhancements would be most beneficial from a performance standpoint. In subsequent sections of this memo, these needs are further refined based on constraints and implementation considerations to arrive at preliminary project lists.

3.2.4 Spatial Gaps Results

The spatial gaps shared below encompass the results of both the script-generated and manually generated links elevated from previous iterations of Master Thoroughfare planning activity. The geospatial outputs from the physical roadway gap analysis steps can be found in **Appendix 3**.

3.2.4.1 Priority Gaps

The priority gaps shared are recommended for future inclusion in the Master Thoroughfare Plan Update. The priority gaps are shown at the functional classification of arterials and collectors. **Figure 5** shares both the priority gaps and project links identified as “roadway gaps” in the City of the Fort Worth Connecting the Core project. Each project's identified gaps are displayed with its corresponding project ID number and are corresponding to the following tables. Priority gaps are listed in

Table 1 and Connecting the Core projects are shown in **Table 2**.

Figure 5: Roadway Priority Gaps

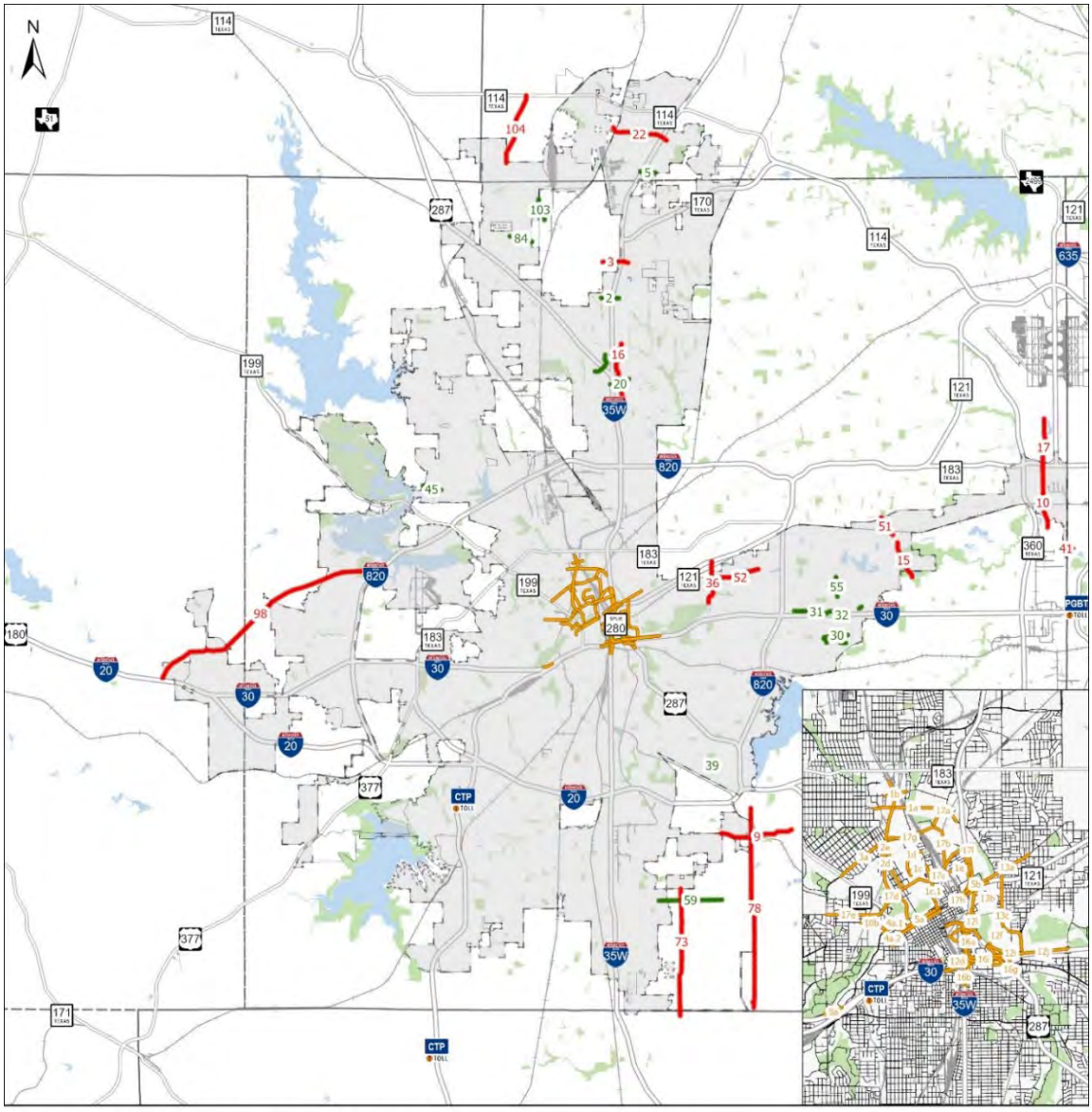


Table 1. MTP Priority Gaps Table

Project ID	Street From	Street To	Functional Class	Connection	Length (Miles)
2	Golden Triangle Boulevard	Riverside Drive	Collector	Industrial	0.65
3	Blue Mound Road	Old Denton Road	Arterial	Residential	0.94
5	Texas Longhorn Way	Elizabethtown Cemetery Road	Collector	Industrial	0.57
6	Tarrant Parkway	Harmon Road	Collector	Industrial	0.87
9	Anglin Drive	Sublett Road	Arterial	Residential	2.67
10	Trinty Boulevard	Great Southwest Parkway	Arterial	Industrial	1.25
15	Greenbelt Road	Green Oaks Boulevard	Arterial	Residential	1.40
16	Alliance Town Center	Basswood Boulevard	Arterial	Industrial	2.27
17	Airfield Drive	Trinity Boulevard	Arterial	Industrial	2.78
20	North Freeway	Old Denton Road	Collector	Industrial	0.73
22	FM 156	Litsey Road	Arterial	Industrial	2.11
29	Morrison Drive	Meadowbrook Drive	Collector	Residential	0.21
30	Morrison Drive	Dottie Lynn Parkway	Collector	Residential	0.91
31	Anderson Boulevard	Anderson Boulevard	Collector	Industrial	1.59
32	Anderson Boulevard	Ederville Road	Collector	Residential	0.29
33	Little Cina Lane	Randol Mill Road	Collector	Industrial	0.12
34	Ranger Drive	Dottie Lynn Parkway	Collector	Residential	0.21
36	Airport Freeway	1st Street	Arterial	Industrial	1.59
39	Village Lane	Parker Henderson Road	Collector	Mixed	0.29
41	114th Street	Roy Orr Boulevard	Arterial	Industrial	0.50
45	Hodgkins Road	Over Lake Drive	Collector	Residential	0.70
51	Hurst Boulevard	Trinity Boulevard	Arterial	Residential	0.78
52	Elliot Reeder Road	Jack Newell Boulevard	Arterial	Industrial	1.49
55	Randol Mill Road	Austonio Drive	Collector	Residential	0.72
59	Wichita (MTP)	Shelby Road	Collector	Residential	2.29
73	Risinger (MTP)	Secondary Gap #75	Arterial	Regional	4.63
78	Kennedale Parkway	Retta Mansfield Road	Arterial	Mixed	7.35

Project ID	Street From	Street To	Functional Class	Connection	Length (Miles)
84	Whisper Willows Drive	Letara Ranch Road	Collector	Residential	0.84
98	I-20	I-820	Arterial	Regional	9.03
103	John Day Road (MTP)	Avondale Haslet Road	Collector	Residential	0.82
104	Rancho Canyon Way	Highway 114	Arterial	Residential	2.62

Table 2. Connecting the Core Projects

Project ID	Facility Name	On or Off System	Project Type	Length (Miles)
3a	Northside Drive, between Main Street & Henderson	Mix	Reconfiguration	1.48
1b	Brennan & East Exchange Avenue	Off System	Mix	0.38
1a	23rd Street	Off System	Mix	1.27
2e	Main Street Bridge (new channel area)	Off System	New Facility	0.25
13a	Belknap	On System	Reconfiguration	0.89
13b	4th Street	Off System	New Facility	0.21
13c	Sylvania Avenue	Mix	Reconfiguration	1.30
13d	Riverside Drive Bridge	Off System	Reconfiguration	0.20
12h	Pine Street Bridge & Stitch	Mix	Reconfiguration	0.20
9a	West Freeway @ South University Drive	Mix	New Facility	0.34
12d	19th Street	Mix	New Facility	0.31
12f	IM Terrell to Riverside	Mix	New Facility	0.44
1c.1	Samuel Drive	Off System	Supportive Project	0.65
5a	Belknap & Weatherford, between Henderson Street and east of Pecan Street	Mix	Reconfiguration	0.79
5a	Belknap & Weatherford, between Henderson Street and east of Pecan Street	Mix	Reconfiguration	0.78
10b	Kansas Street grade separation	Mix	New Facility	0.50
4a	Forest Park Boulevard to Henderson	Mix	New Facility	0.27
4a.2	West 7th / Henderson / Summit Street circulation	Mix	Supportive Project	0.37
4a.1	North Henderson Street	On System	Supportive	0.13

Project ID	Facility Name	On or Off System	Project Type	Length (Miles)
			Project	
3b	White Settlement to Main Street bridge	Off System	New Facility	0.36
12a	9th Street Union Pacific Railroad underpass	Off System	New Facility	0.30
12i	Slate Street	Mix	Reconfiguration	0.59
17a	North - Alternative	Mix	Supportive Project	0.63
17b	North - Alternative	Off System	Supportive Project	0.74
17g	North - Primary Route	Off System	Supportive Project	1.91
17c	Central - Alternative	Off System	New Facility	1.34
17h	South - Alternative	Mix	Supportive Project	0.35
17i	South - Alternative	Mix	Supportive Project	0.27
17l	I-35W Frontage Road	Mix	New Facility	2.36
17d	White Settlement Road	Off System	Reconfiguration	0.53
17e	White Settlement Road	Off System	Reconfiguration	0.99
12k	US 280	On System	Reconfiguration	0.71
16d	Modified Interstate Highway (IH) 35W Freeway Access (US 287, IH 30 East, & Lancaster)	Mix	Supportive Project	0.59
16n	IH 30W Access (US 287/Lancaster)	Mix	Supportive Project	0.58
16m	IH 30W Access (US 287/Lancaster)	Mix	Supportive Project	0.77
16b	Continuous IH 35W Local Access	On System	New Facility	1.24
16a	Continuous IH 35W Local Access	On System	New Facility	1.26
16e	Modified IH 35W Freeway Access (US 287, IH 30 East, & Lancaster)	Mix	Supportive Project	0.48
16g	Modified IH 35W Freeway Access (US 287, IH 30 East, & Lancaster)	Mix	Supportive Project	0.42
16h	Modified IH 35W Freeway Access (US 287, IH 30 East,	Mix	Supportive	1.11

Project ID	Facility Name	On or Off System	Project Type	Length (Miles)
	& Lancaster)		Project	
16i	Modified IH 35W Freeway Access (US 287, IH 30 East, & Lancaster)	Mix	Supportive Project	1.33
16f	Modified IH 35W Freeway Access (US 287, IH 30 East, & Lancaster)	Mix	Supportive Project	0.29
12l	280 / I35 NB ramp	Mix	Reconfiguration	0.87
12b	9th Street	Mix	New Facility	0.41
1d	(New) Panther East Bridge Alt. 2	Off System	New Facility	0.57
1c	(New) Panther East Bridge Alt. 1	Off System	New Facility	0.32
2d	UPR ROW high-capacity corridor	Mix	New Facility	2.60
1e	Samuel Drive to I-35	Mix	New Facility	0.71
5b	Belknap / Weatherford & US 121 interchange with I-35	On System	Supportive Project	0.39
5b	Belknap / Weatherford & US 121 interchange with I-35	On System	Supportive Project	0.44
12j	US 287 frontage @ Beach Street & IM Terrell Way	Mix	Reconfiguration	1.38
17m	New Trinity River bridge	Off System	New Facility	0.07
1c.2	Samuel Drive & Belknap / Weatherford	Mix	Supportive Project	0.12

3.2.4.2 Secondary Gaps

The following section shares the results of both the script-generated and manually generated links elevated from previous iterations of Master Thoroughfare planning activity. The Secondary Gaps are shown at the functional classification, including arterials, collectors, backage, and local roads, and are shared for analysis purposes. **Figure 6** shares the Secondary Gaps where arterials, collectors, and backage roads are identified with their corresponding project ID number. Secondary gaps are listed in

Table 3.

Figure 6: Roadway Secondary Gaps

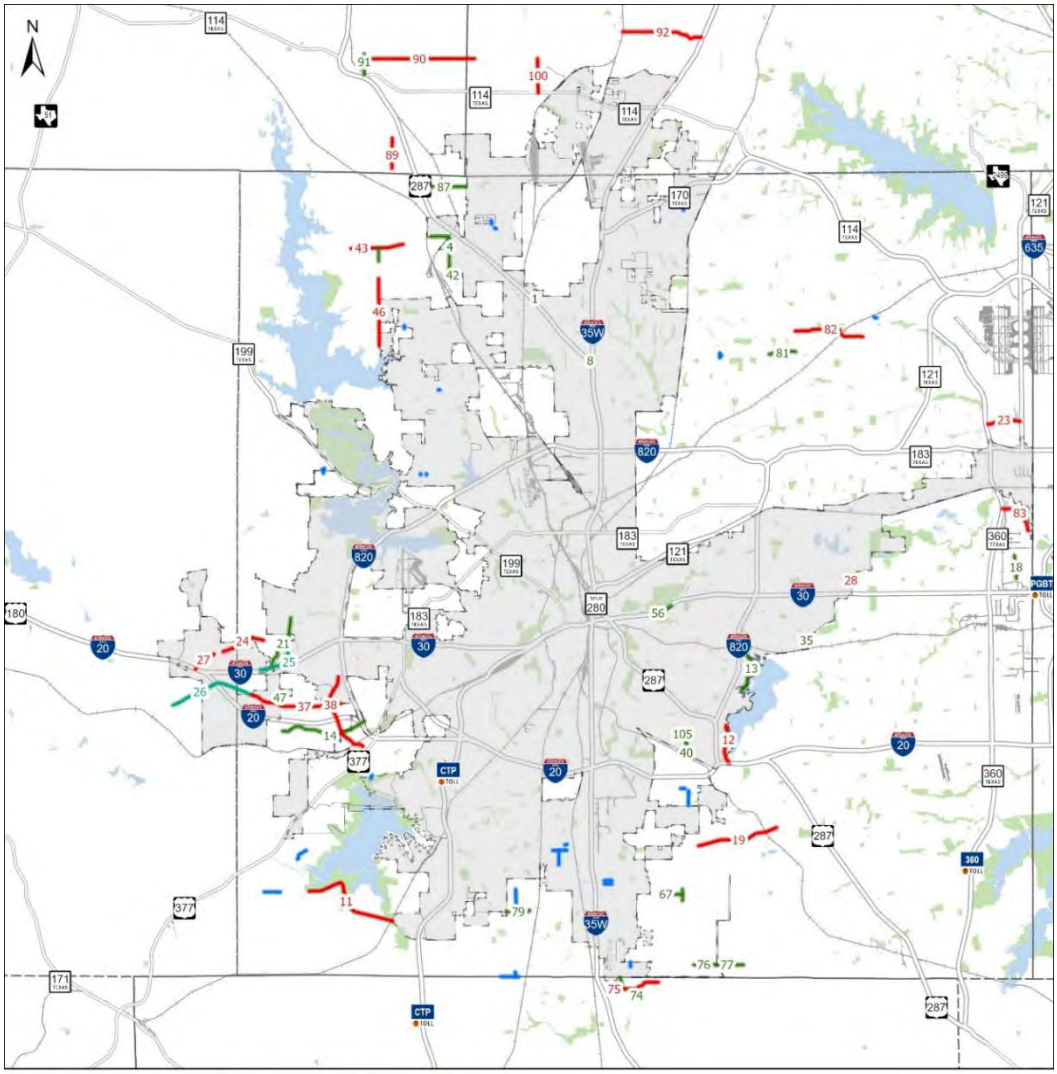


Table 3. Roadway Secondary Gaps (List)

Project ID	Street From	Street To	Functional Class	Connection	Length (Miles)
1	Bonds Rand Road	Berkshire Lake Boulevard	Collector	Residential	0.21
4	Highway 287	Hicks Avondale School Road	Collector	Residential	1.90
7	North Freeway	North Freeway	Collector	Industrial	0.18
8	North Freeway	North Freeway	Collector	Industrial	0.23
11	Westcreek Circle	Old Granburry Road	Arterial	Residential	4.00
12	Martin Street	Loop 820 South	Arterial	Residential	1.47
13	Lancaster Avenue	Berry Street	Collector	Residential	1.98
14	Markum Ranch Road	Cook Ranch Road	Collector	Regional	3.35
18	Sunnyvale Road	Avenue J	Collector	Industrial	0.89
19	Shelby Road	Mansfield Cardinal Road	Arterial	Residential	3.07
21	Westpoint Boulevard	Secondary Gap #25	Collector	Residential	2.13
23	Highway 360	Service Road	Arterial	Commercial	1.24
24	Walsh Ranch Parkway	Haywire Ranch (MTP)	Arterial	Residential	1.69
25	Linkcrest Drive	Chapin Road	Backage	Mixed	1.64
26	Haywire Ranch Road (MTP)	Aledo Drive (MTP)	Backage	Mixed	3.11
27	Walsh Ranch Minor (MTP)	Nouvelle Center	Arterial	Residential	0.91
28	John T White Road	Green Oaks Boulevard	Arterial	Mixed	0.49
35	Cooks (MTP)	Dottie Lynn Parkway	Collector	Residential	0.39
37	Haywire Ranch (MTP)	Palencia Drive	Arterial	Residential	3.59
38	Chapin Road	Vista Way	Arterial	Mixed	3.29
40	Arbor Avenue	Mansfield Highway	Collector	Residential	0.90
42	Hicks Avondale School Road	Alpine Court	Collector	Residential	0.53
43	Dido Hicks Road	Sarah Lane	Arterial	Residential	1.97
44	Westport Parkway	Palancar Drive	Local	Residential	0.11
46	Peden Road	Boat Club Road	Arterial	Residential	2.52
47	Lost Creek Boulevard	Corporation Parkway	Collector	Residential	0.74

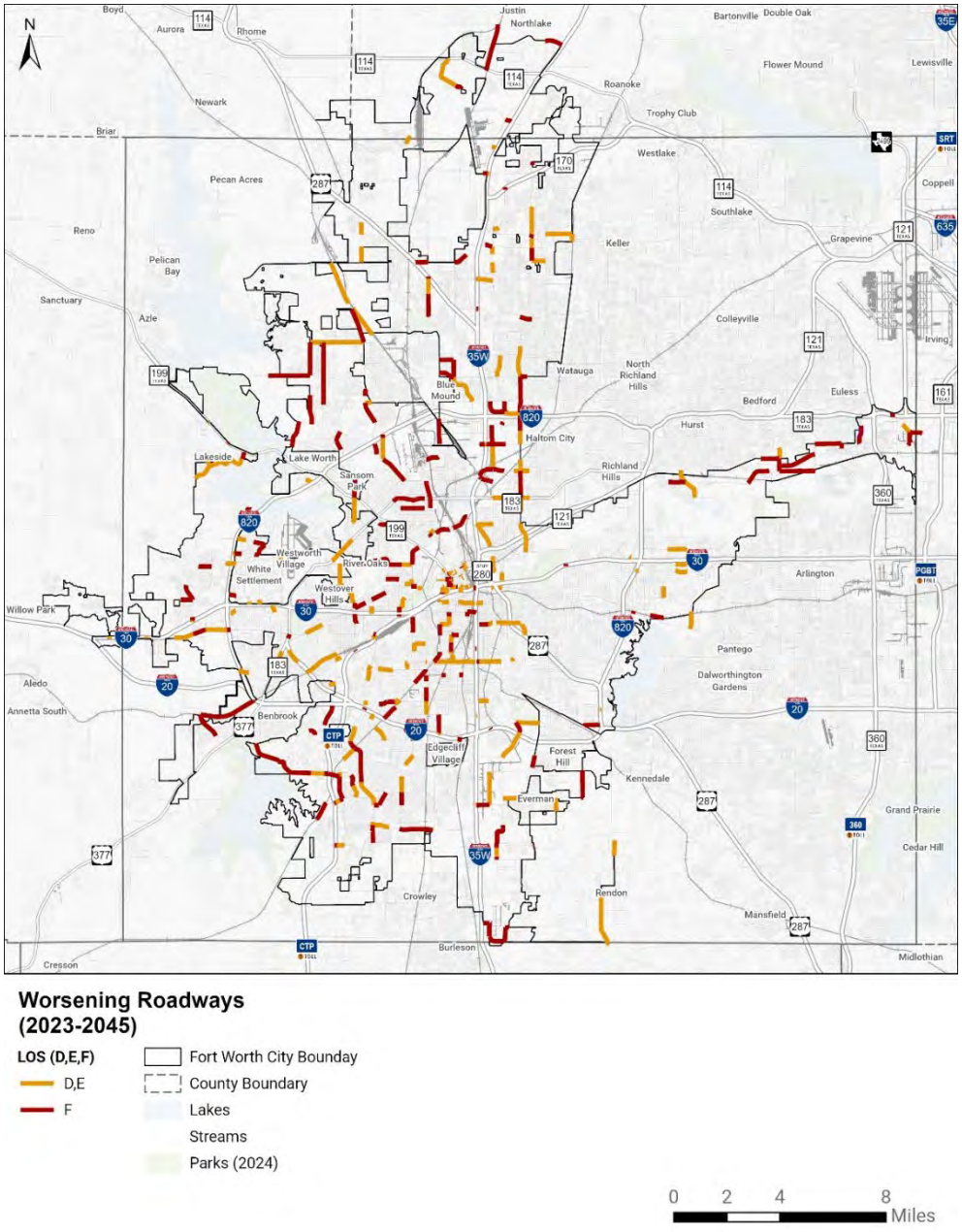
Project ID	Street From	Street To	Functional Class	Connection	Length (Miles)
48	Pearl Ranch Road	Twilight Trail	Local	Residential	0.51
49	Bryant Street	Winscott Road	Local	Residential	0.13
50	Lower Tarrant Road	Hardrock Road	Arterial	Mixed	0.41
54	Bowam Roberts Road	Lochmoor Drive	Local	Residential	0.06
56	Ben Avenue	Menzer Road	Collector	Residential	0.77
57	Blanchard Way	FM 1187	Local	Residential	0.61
58	Abner Lee Drive	Hurst Road	Collector	Mixed	0.44
60	Bursey Road	Old Mill Road	Local	Residential	0.18
61	Secondary Gap #60	Sagebrush Court	Local	Residential	0.07
62	Carriage Hill Drive	Parkwood Drive	Local	Residential	0.17
63	Parkwood Drive	Lon Stephenson Road	Local	Residential	0.55
64	High Meadow Trail	Tamarron Drive	Local	Residential	0.14
65	High Meadow Trail	Adelbert Drive	Local	Residential	0.10
66	Cibolo Hills (MTP)	Lighthouse Hill Lane	Local	Residential	0.11
67	Oak Grove Road	Secondary Gap #68	Collector	Residential	0.67
68	Rendon Road	Pecan Meadow Court	Collector	Residential	0.43
69	Colleyville Boulevard	Danielle Drive	Local	Residential	0.11
70	FM 1187 (MTP)	Horse Creek Road	Local	Residential	0.67
71	Rockey Creek Road	Secondary Gaps #70	Local	Residential	0.17
72	Burleson Retta Road	Bandon Dunes Drive	Local	Residential	0.17
74	Secondary Gap #75	Fox Lane	Collector	Residential	0.27
75	Rentro Street	Priority Gap #78	Arterial	Regional	2.06
76	Burleson Retta Road	Rendon Road	Collector	Residential	0.86
77	Rendon Road	Priority Gap #78	Collector	Residential	0.50
79	Tullamore Road	Karis Boulevard	Collector	Residential	0.90
80	Simbra Lane	Trail Street	Local	Residential	1.02
81	Davis Boulevard	Precinct Line Road	Collector	Residential	1.03
82	Precinct Line Road	Colleyville Boulevard	Arterial	Mixed	2.71
83	Highway 360	Post N Paddock Street	Arterial	Industrial	1.46

Project ID	Street From	Street To	Functional Class	Connection	Length (Miles)
85	Rocking Horse Drive	Priority Gap #84	Local	Residential	0.07
86	Boaz Road	Chisholm Ranch Drive	Local	Residential	0.13
87	Highway 287	Willow Springs Road	Collector	Residential	1.67
88	Secondary Gap #43	Grants Lane	Collector	Residential	0.49
89	Ramhorn Hill Road	Skeedaddle Street	Arterial	Residential	1.14
90	Secondary Gap #91	County Line Road	Arterial	Mixed	4.15
91	Hickory Street	Highway 287	Collector	Residential	0.79
92	FM 156 South	I-35	Arterial	Residential	3.04
93	Eastview Street	MTP	Local	Residential	0.08
94	Cunningham Street (PG)	Risinger Road	Local	Residential	0.54
95	Ronald Drive	Hemphill (MTP)	Local	Residential	0.53
96	Flagstaff Run	Oak Grove Road	Local	Residential	0.28
97	Tammaron Trail	Oak Grove Road	Local	Residential	0.29
99	Priority Gap #78	Berry Road	Collector	Residential	0.50
100	Sam Reynolds Road	Highway 114	Arterial	Residential	1.28
101	Over Lake Drive	Basswood Drive	Local	Residential	0.04
102	Priority Gap #45	Basswood Drive	Local	Residential	0.04
105	Arbor Avenue	Mansfield Highway	Collector	Residential	0.90

3.2.5 Poor Performing Roads

Road network data from the 2023 and 2045 model years were analyzed to generate the layer of worsening roadways. A Python script was developed to compare the LOS for each link in the 2045 network against its corresponding link in the 2023 network. Since the unique identifiers for the links differed between the two model years, spatial matching was used instead for comparison. Overlapping links from 2023 and 2024 were matched and joined based on their geographic location and made into a new network comparison layer. Based on the LOS comparisons, each link was categorized as having worsened, improved, or remained unchanged. For example, if a link between two intersections had an LOS of A, B, or C in 2023 and an LOS of D, E, or F in 2045, it was categorized as a worsening road link. The map below shows the links that worsened between 2023 and 2045 and had a LOS rating of D, E, or F.

Figure 7: Worsening Roadways (2023 to 2045)



3.2.6 Capacity Gaps Results

The LOS gap analysis provides a measurement of serviceability gaps through compounding steps to highlight areas where the projected traffic (2050) exceeds the capacity of the roadway (i.e., V/C > 1) and capacity improvement projects are feasible based on projected capacity and ROW. Corridors in the city as well as regional gaps in the vicinity of city boundary were included in the analysis.

Corridors identified as potential capacity improvement projects meet the following criteria:

- 2050 NCTCOG projected V/C is greater than 1.0, i.e., segment is exceeding capacity.

- The number of lanes in 2050 is lower or equal to 2, as higher capacity corridors are less feasible to be widened further.
- Only considering off-system roadways.
- Include only corridors that are more than 2 miles long.
- For locations where multiple parallel facilities were identified, consider the longest among them.
- ROW feasibility for most of the corridor. The existing ROW was reviewed and compared to the potential increase of capacity, assuming 11-foot lanes and 6 additional feet on both sides. If few segments (<10 percent of the corridor) did not have enough ROW, a high-level feasibility analysis was done considering natural boundaries and land use.

Figure 8 shows the resulting roadway corridors that met the criteria for capacity improvement. For these corridors, a one-lane capacity increase is proposed to improve congestion, up to a maximum of six-lane corridors. The details of the corridors and suggested lane configurations are specified in **Table 4**.

Figure 8: LOS Gaps

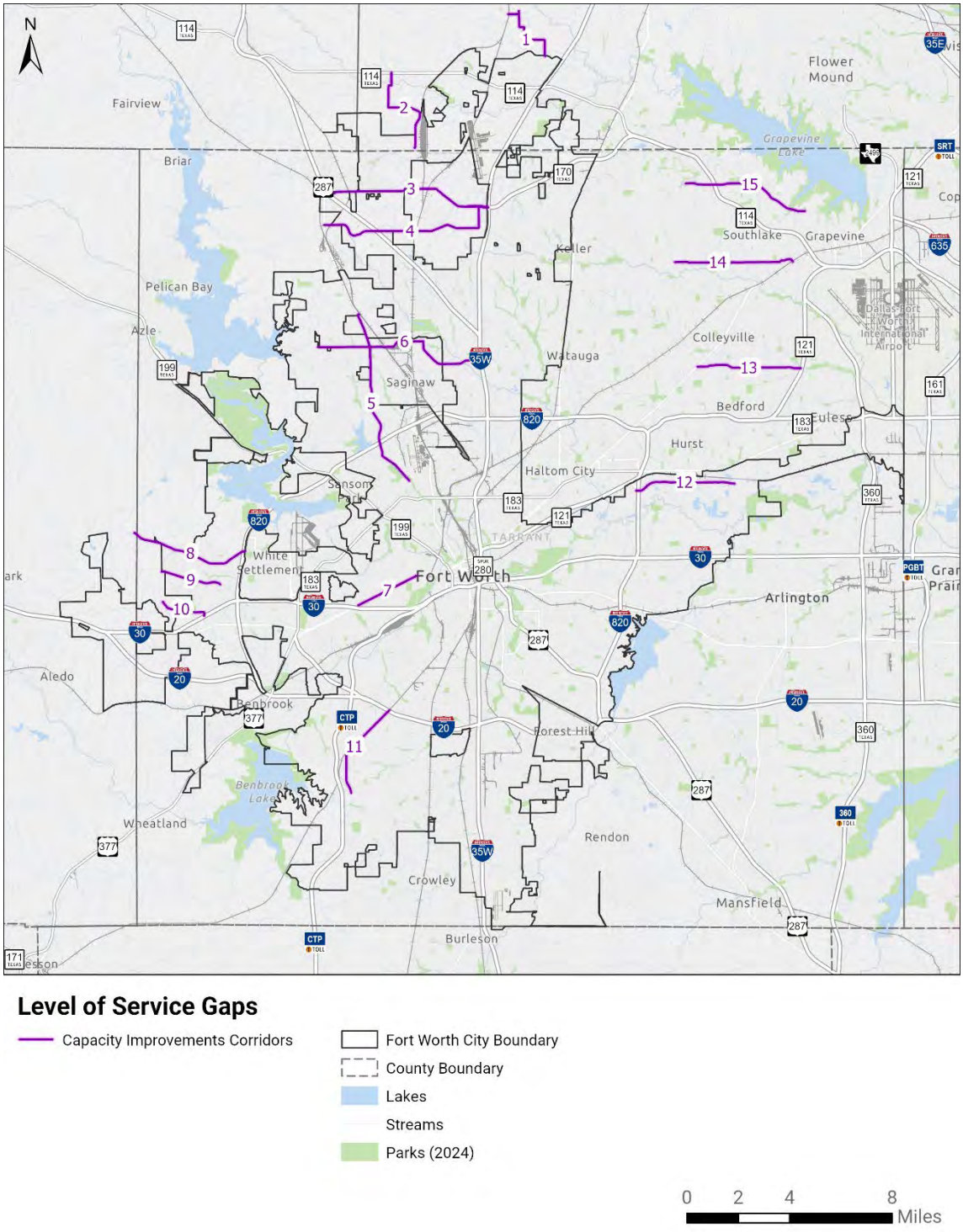


Table 4. LOS Gap Projects

Project ID	Corridors	Number of Lanes Existing	Number of Lanes Proposed	Length (miles)
1	Harmonson Road	2	4	3.13
2	John Day Road	2	4	4.17
3	Avondale Haslet Road - Haslet Parkway	4	6	7.29
4	Blue Mound Road - Harmon Road	2 – 4	4	7.19
5	Angle Avenue - Heritage Trace Parkway - Marine Creek Parkway - Old Decatur Road	2 – 4	6	7.18
6	Bailey Boswell Road - Basswood Boulevard	4	6	6.92
7	Camp Bowie Boulevard	4	6	2.54
8	Clifford Street - White Settlement Road	2 – 4	6	4.72
9	Westpoint Boulevard	2 – 4	6	2.38
10	Chapel Creek Boulevard	2	4	1.90
11	Granbury Road - Summer Creek Drive	4 – 6	6	3.93
12	Trinity Boulevard	4	6	3.96
13	Cheek Sparger Road	2	4	4.09
14	Continental Boulevard	2	4	4.67
15	Dove Road	2 – 4	4	5.04

3.3 2050 Origin-Destination Analysis

Projected travel patterns were reviewed from the NCTCOG 2050 Travel Demand Model. These travel patterns represent the most significant OD pairs for the projected 2050 future, which includes population and employment growth, as well as infrastructure improvements. Each figure below contains the following information:

- The dots represent the numbers of internal trips of the districts.
- The larger and darker the dot, the more internal trips.
- The lines represent the numbers of inter-district trips.
- The thicker and darker lines indicate more inter-district trips.
- The lines only show inter-district trips larger than 500.
- The color of the district represents the density of trips produced and attracted (number of trips produced or attracted per square mile). Pink indicates trip production density, while blue

represents trip attraction density. The brighter colors indicate higher density. Purple indicates the district has both high densities of trip production and attraction.

Figure 9 shows the travel patterns of trips in the City of Fort Worth. As shown in the map, the districts on the west side have the most internal trips and inter-district trips due to high projected growth. As in current travel patterns, the future projections keep showing the north of the city as a big attractor/ generator given by Alliance. Downtown is mostly connected to south and west of the city, and districts in the south create another hub of strong trip connections.

Figure 10 and **Figure 11** show the travel patterns of trips between the City of Fort Worth and the districts outside of the city based on the NCTCOG 2050 model. **Figure 10** shows the travel patterns of trips from the city to the districts outside, while **Figure 11** shows the travel patterns of trips from district outside the city to the city. The lines only show inter-district trips larger than 250. **Figure 10** shows that the origins of trips going from the city to the outside, mostly concentrated in the north, and their destinations are on the east side of the city, traveling to areas such Highland Park, residential communities to the north, and DFW Airport. **Figure 11** indicates that trips originating from outside the city are predominantly concentrated at the four cardinal points: east, north, west, and south, with relatively short distances, while few trips are from west to the center of the city.

Figure 9: OD Analysis for trips in the City of Fort Worth

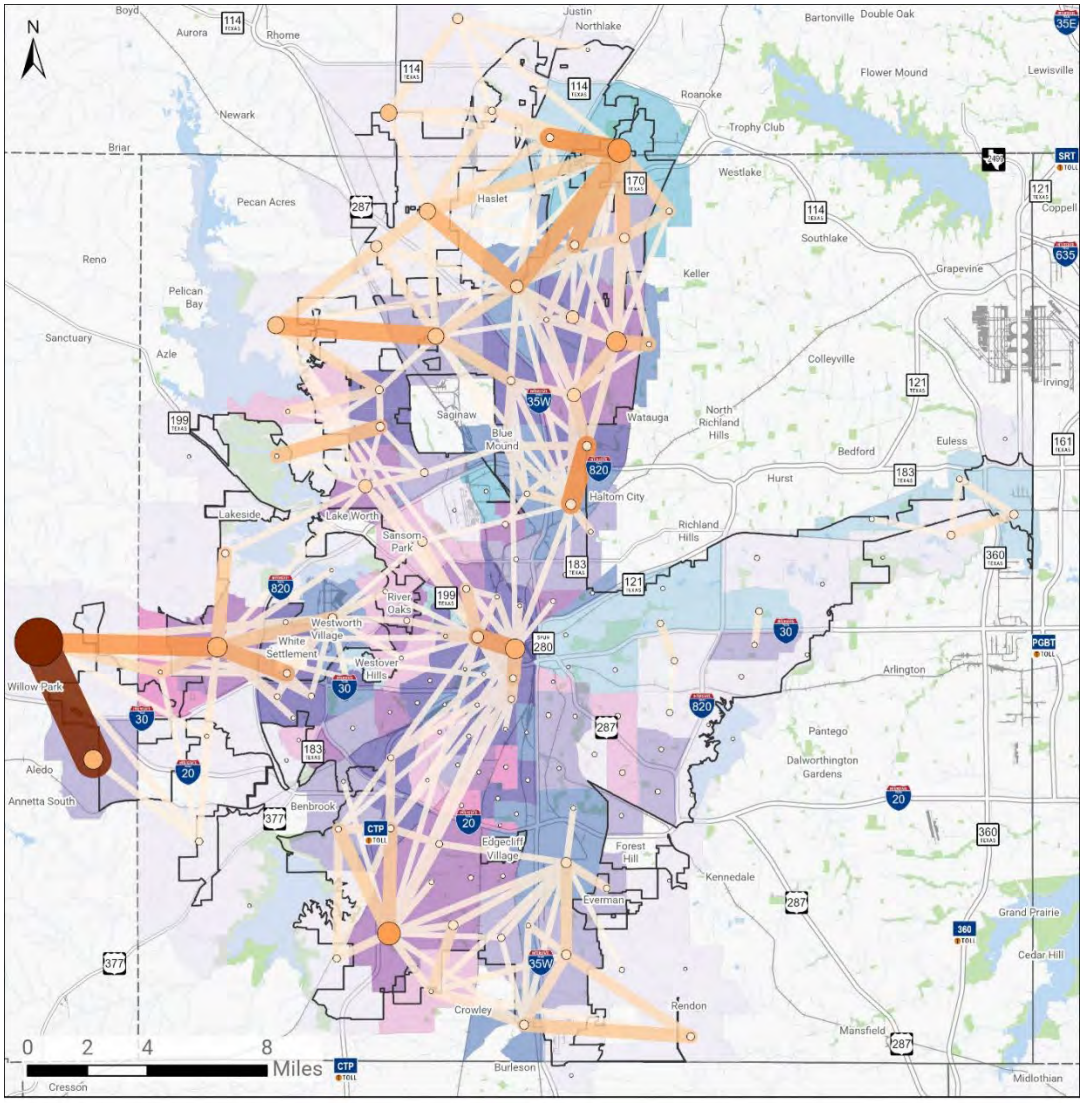


Figure 10: OD Analysis for trips traveling from the City of Fort Worth

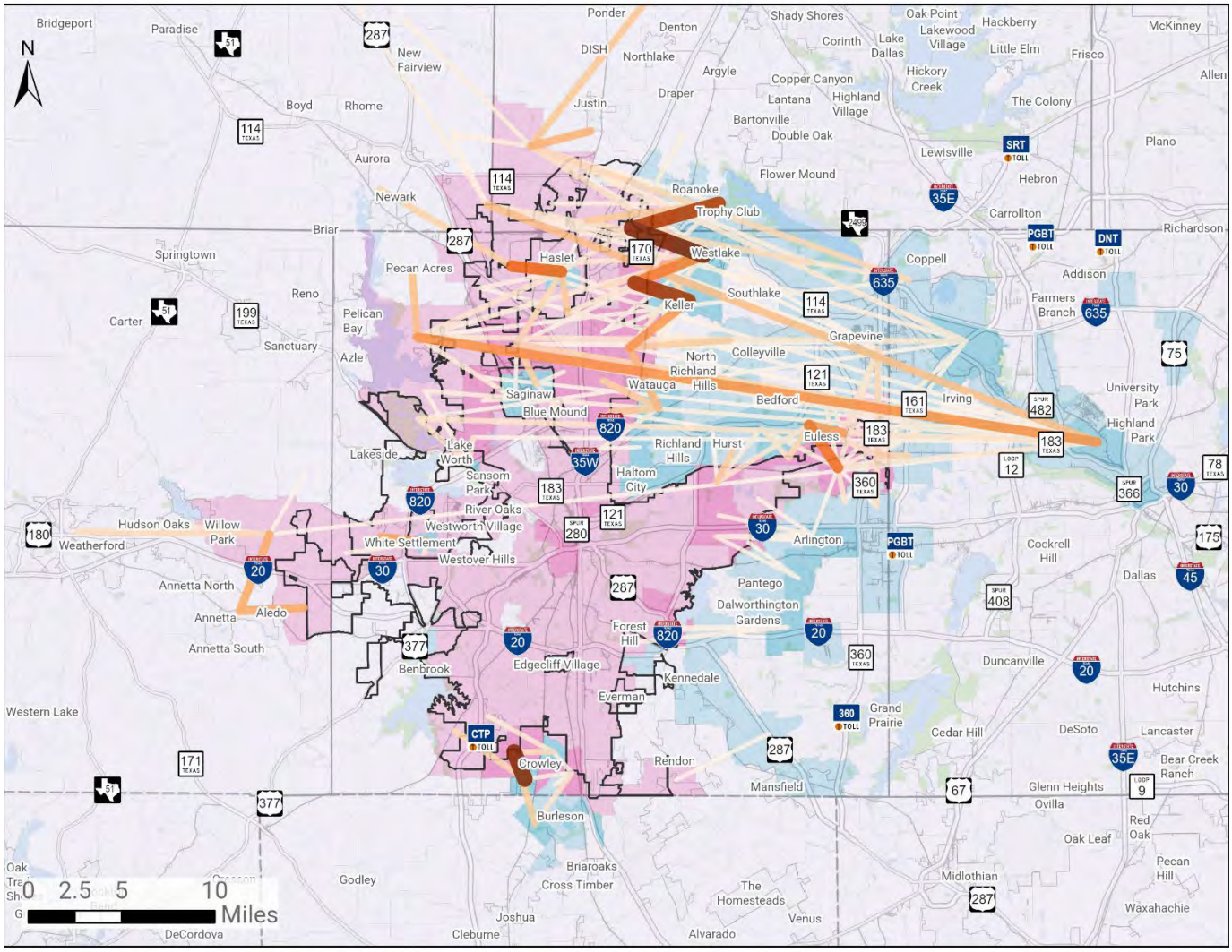
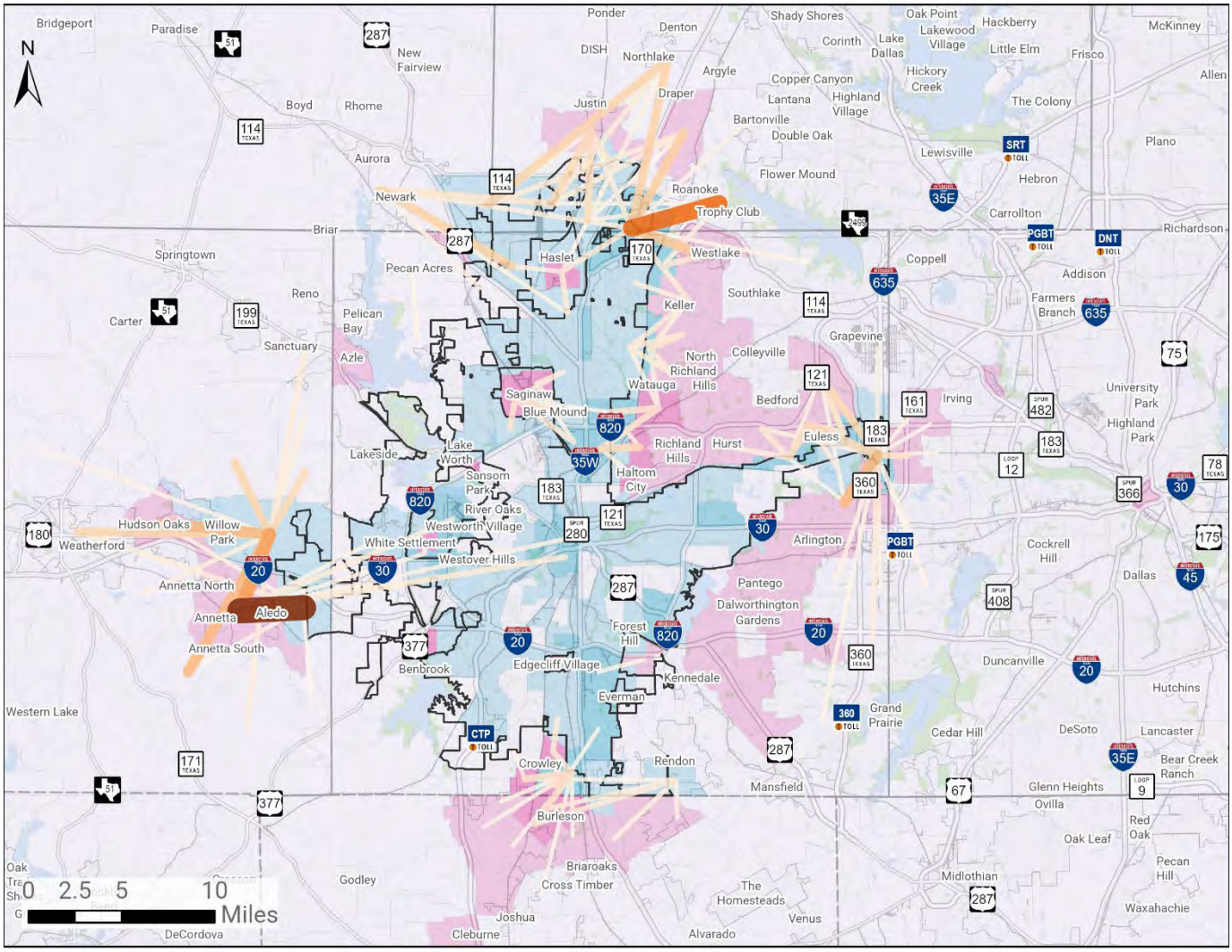


Figure 11: OD Analysis for trips traveling to the City of Fort Worth



3.3.1 Commuter Patterns to/from City of Fort Worth

The U.S. Census Bureau produces the Longitudinal Employer-Household Dynamics (LEHD) to capture commuting patterns (home locations and work locations) across the country. We used the most recent (2022) data from LEHD to produce the commuter patterns for the City of Fort Worth. **Figure 12** shows

the distribution of commuters:

- Inflow: A total of 43 percent of commuters live outside of the City of Fort Worth and work in the city.
- Internal: 21 percent of commuters live and work in the City of Fort Worth.
- Outflow: 36 percent of commuters live in the City of Fort Worth and work outside the city.

Figure 12: Inflow/outflow commuting patterns in the City of Fort Worth

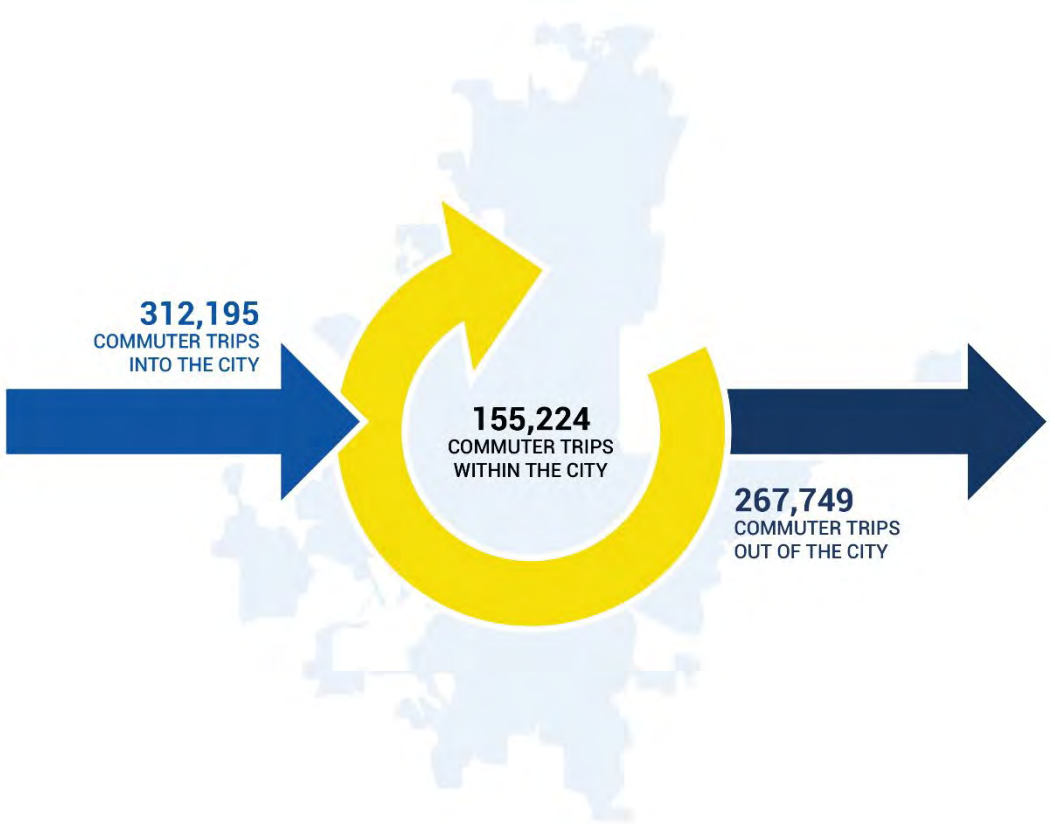
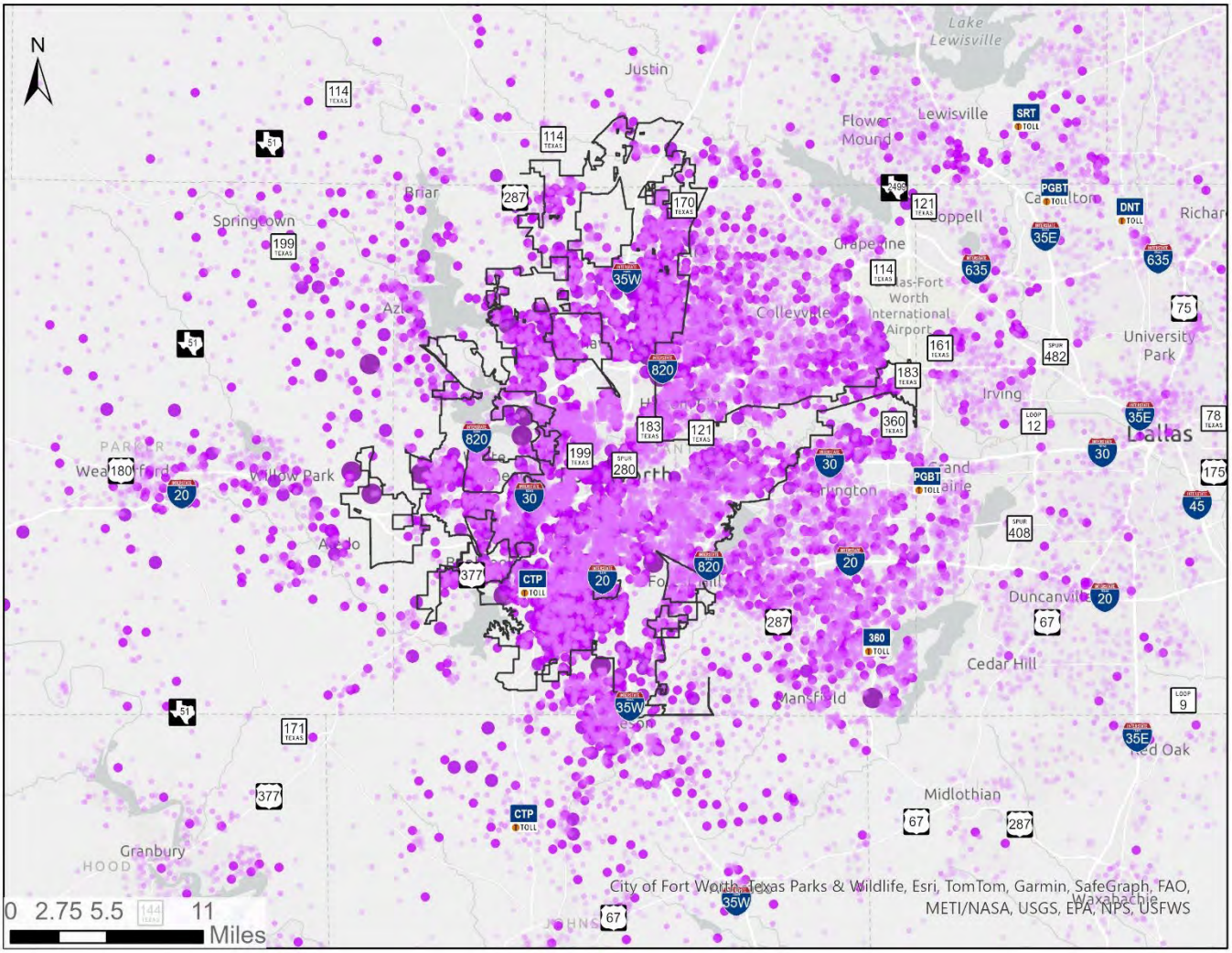


Figure 13 presents a closer look at the people working in the city (i.e., inflow + internal) to identify home locations and critical OD patterns. As expected, the highest density of commuters to Fort Worth live in Tarrant County, specifically connections east of the city seem to have the highest concentration of commuters, which is consistent with the OD trip analysis shown in **Figure 11,** where the highest connections are northeast. On the other hand, Parker and Johnson counties have the highest concentration of residents working in City of Fort Worth.

Figure 14 looks at the commuting patterns of the residents of the Greater Fort Worth Area. The analysis excluded the residents of the City of Fort Worth, as its purpose is to understand travel patterns that might traverse the city. Per the figure below, a portion of the jobs are allocated within Greater Fort Worth Area counties, but a significant portion of the jobs are concentrated in Tarrant and Dallas counties. As most of the Greater Fort Worth Area residents live east of the City of Fort Worth, most of these trips

must traverse the City of Fort Worth.

Figure 13: Home location of commuters that work in the City of Forth Worth



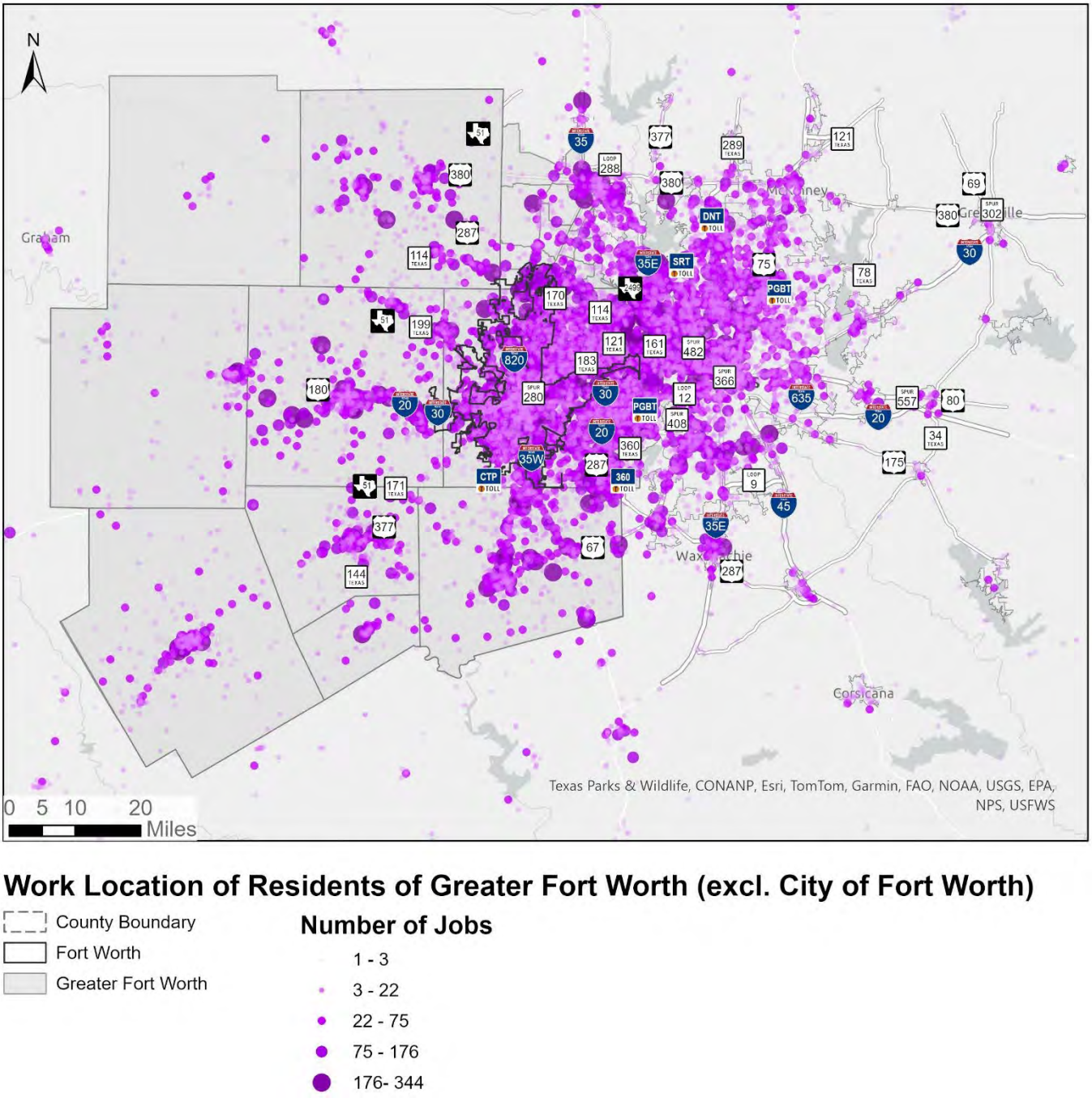
Home Location of Commuters to City of Fort Worth

County Boundary
Fort Worth

Number of Workers

- 1 - 3
- 3 - 22
- 22 - 75
- 75 - 176
- 176- 344

Figure 14: Work location of commuters that live in the Greater Fort Worth Area (excluding residents of the City of Fort Worth)



3.4 Intersection Gaps

3.4.1 Approach Overview

The purpose of the Intersection Gap Analysis was to identify the most critical intersections in the city

based on usage (i.e., traffic movements) and performance (i.e., time). Replica 2023 was used to analyze all intersections.

3.4.2 Methodology

Traffic Movement Counts for 2023 from Replica were used to identify the top 10 intersections in each of the 10 districts. Intersections with the highest total traffic movements were selected to be part of this list. This first subset provides the 100 top intersections (**Figure 15**) in terms of usage. Therefore, improvements made over any of these intersections would likely have high benefits for travelers.

The second filter applied was regarding performance, to identify the most critical intersections (i.e., highest usage, lowest performance). Performance was estimated using a representation of delay—Travel Time Index (TTI). Replica Quarter-Hour Speeds for 2023 was used to estimate this measure over all the approaching roadways for each of the 100 intersections, and TTI is estimated as:

$$TTI = \frac{t_{peak}}{t_{free-flow}} \approx \frac{v_{free-flow}}{v_{peak}}$$ [1]

Where,

- t_{peak} is travel time in the peak periods.
- $t_{free-flow}$ is travel time at free flow.
- v_{peak} is speed in the peak periods. Assumed as the lowest speed from AM and PM peaks.
- $v_{free-flow}$ is free flow speed. Assumed as the maximum speed across the day.
- Peak periods are A.M. (6:30 A.M. to 9:00 A.M.) and P.M. (3:00 P.M. to 6:30 P.M.) per NCTCOG's TDM definitions.

TTI was derived for all legs of the intersection without considering slip ramps. To get a weighted average TTI per intersection, each leg was assigned a weight based on the facility type, considering orders of magnitude of traffic that different facilities can carry. Replica's "category" labels were used as a proxy for this, and the weights are shown in **Table 5**.

Table 5. Weights per Roadway Category

Category	Weight
Highway Trunk	10.0
Primary	5.0
Secondary	5.0
Tertiary	2.5
Trunk Link	1.25

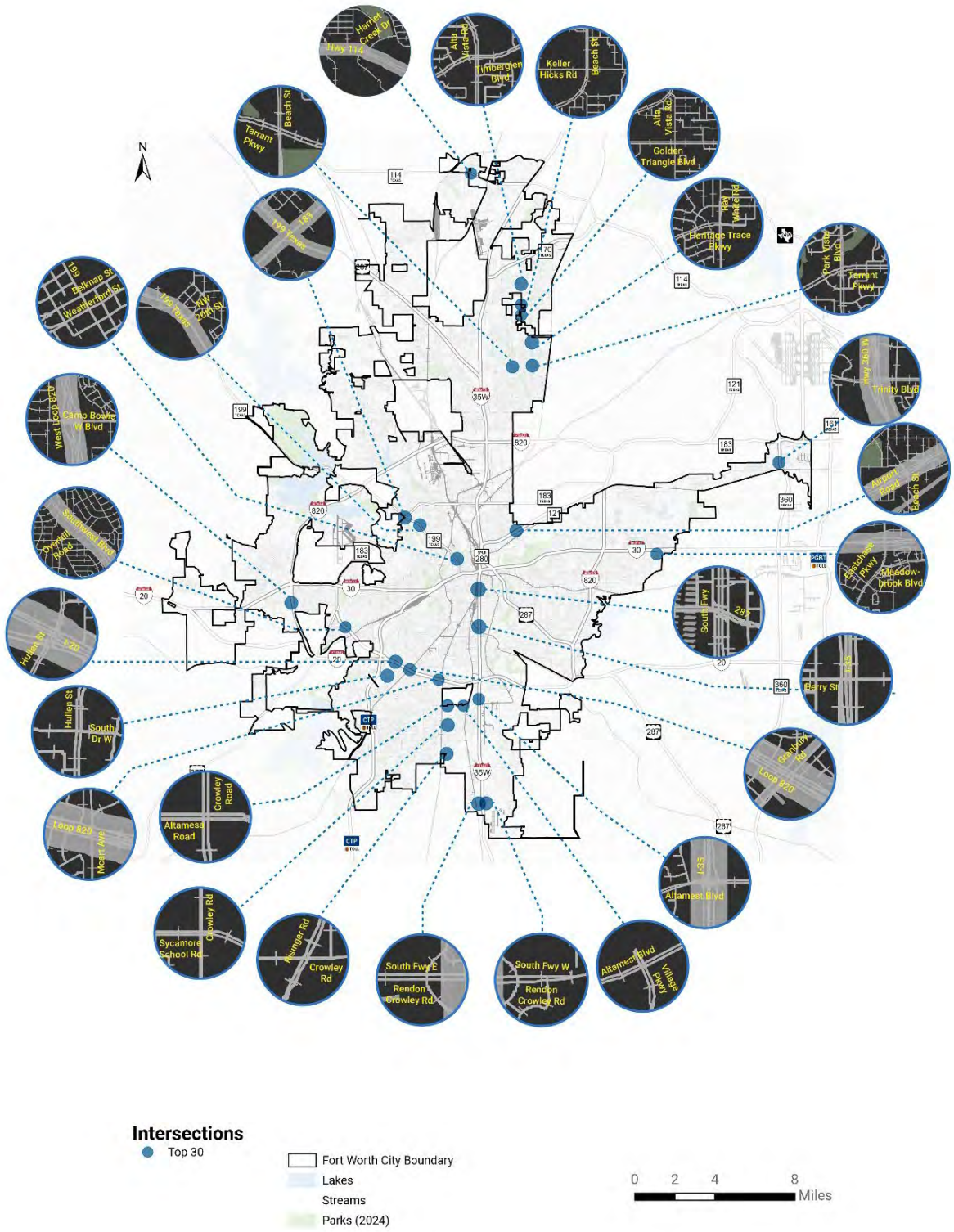
[1] Assuming the analysis is done for the same segment length.

Category	Weight
Unclassified	1.0

3.4.3 Identified Gaps

The average score based on the weighted average TTI was then calculated for each intersection and the average score was ranked based on all the 100 intersections, where the lowest 30 were picked (**Figure 15**).

Figure 15: Intersection Performance Priorities



3.5 Transit Gap Analysis

3.5.1 Data Sources and Assumptions

The analysis draws on multiple data sources to evaluate transit coverage and performance. Key datasets include National Transit Database reports, population and employment census data, TSI scores, and the Trinity Metro routes and service area. Assumptions made to standardize service definitions and thresholds for identifying gaps will be identified in detail below.

3.5.2 Identified Gaps

Spatial and temporal transit gaps, including gaps in network connectivity and accessibility to key destinations were identified by analyzing existing service coverage, headways, and connectivity across the network. This step served as a tool to determine where populations and destinations are not adequately served by fixed-route transit on the Trinity Metro network.

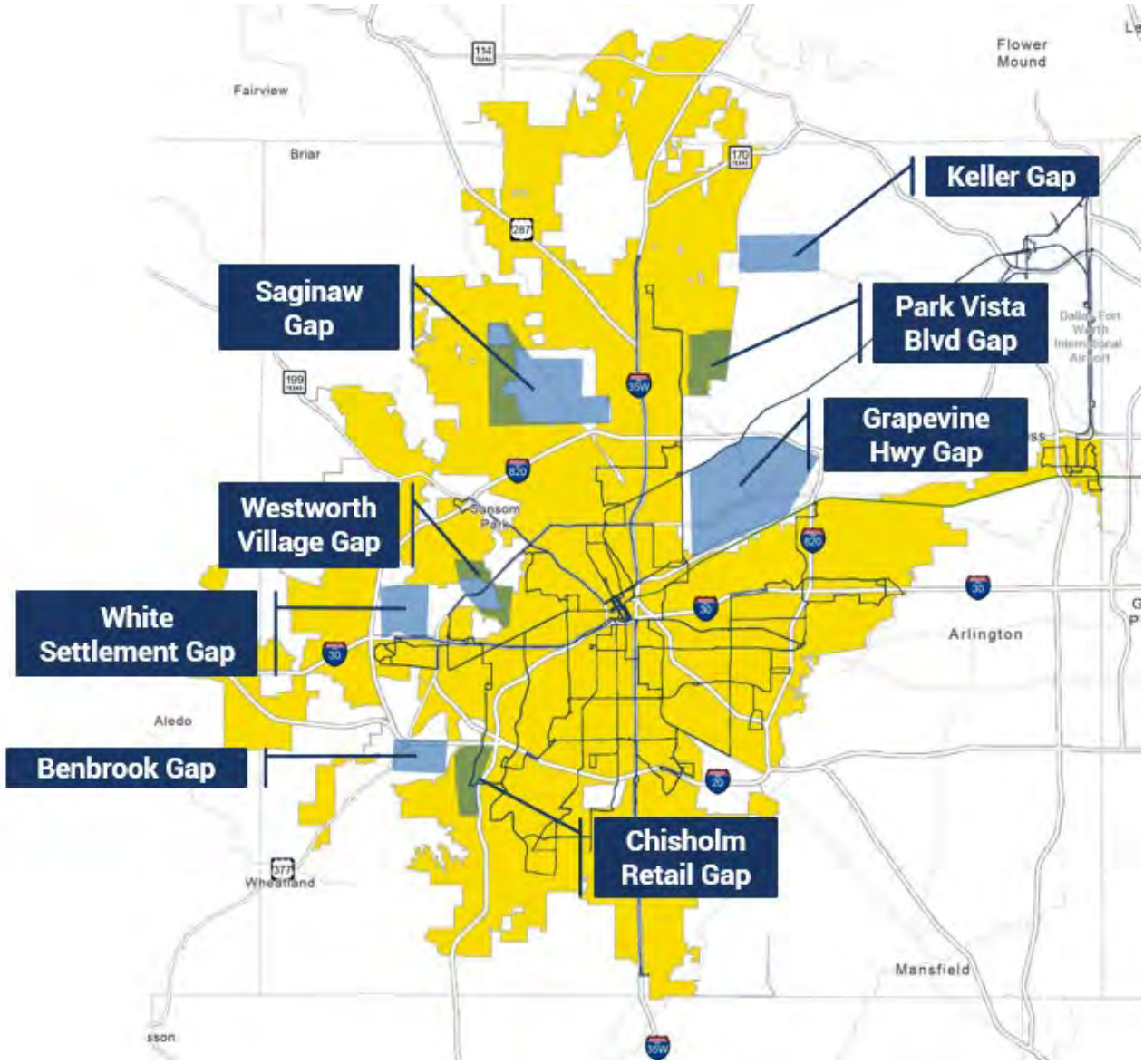
3.5.2.1 Coverage Gaps

Coverage gaps were defined as areas in the study region that lack general access to public transit services. These gaps are locations where no fixed-route service operates within a reasonable walking distance, which was set at 0.25 mile. Using Geographic Information System (GIS)-based buffer analysis, neighborhoods, corridors, and activity centers were identified that fall entirely outside the existing transit catchment area. This spatial analysis highlighted key zones across Fort Worth that are underserved or entirely unserved by transit, highlighting opportunities for service interventions to improve access.

Figure 16: below highlights transit coverage gaps, shown using blue polygons, that were identified across the Fort Worth region, where fixed-route service is limited or absent. A total of eight distinct coverage gaps were identified:

- Saginaw Gap
- Keller Gap and Park Vista Boulevard Gap
- Grapevine Highway Gap
- Chisholm Retail Gap
- Benbrook Gap, White Settlement Gap, and Westworth Village

Figure 16: Coverage Gaps

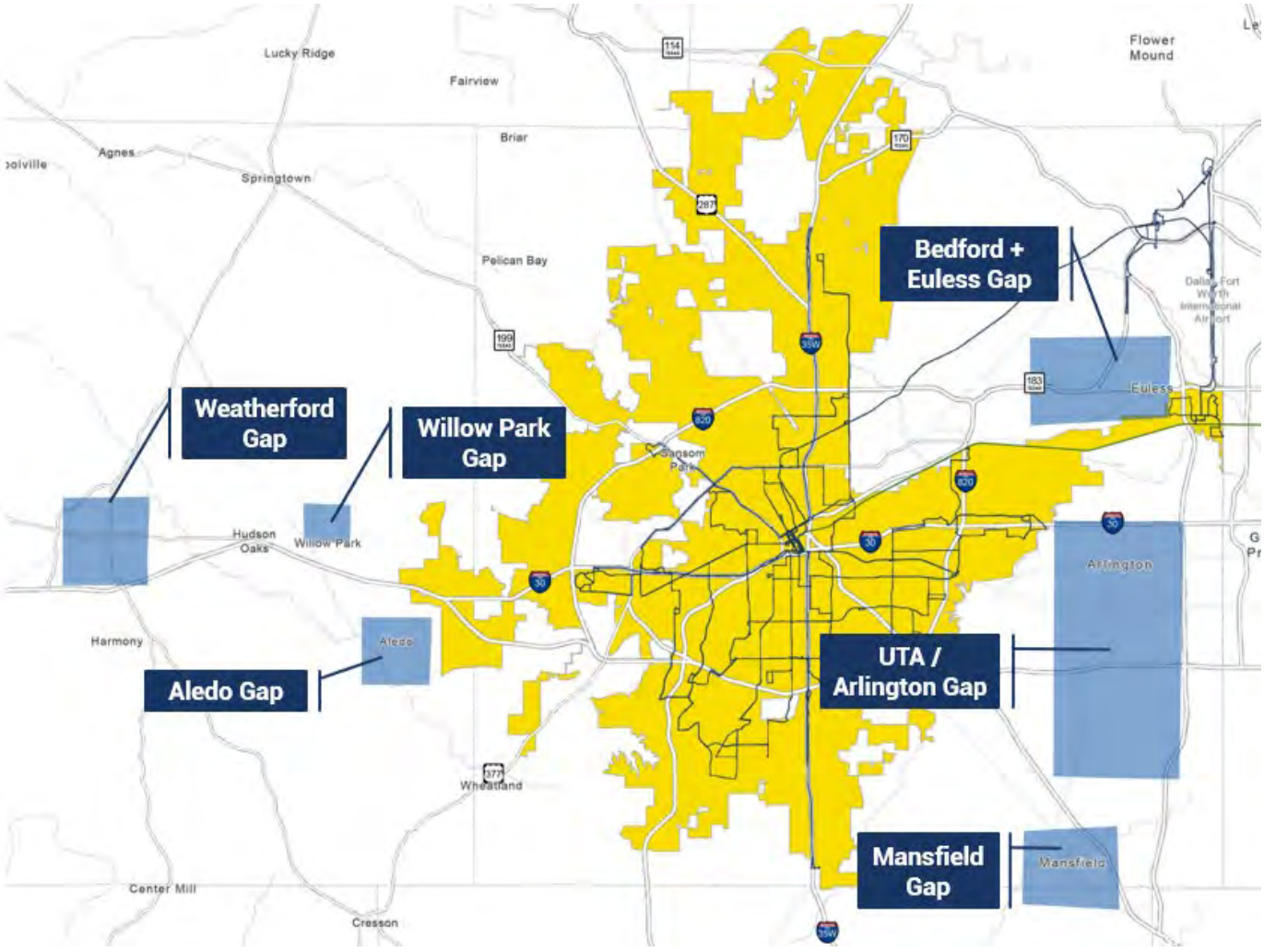


These gaps are largely located in growing suburban and edge communities, many of which have seen recent residential and commercial development, which present opportunities for increased transit ridership. Notably, Saginaw, Keller, and Park Vista Boulevard have seen high growth and suburban expansion. Grapevine Highway and Chisholm Trail areas include major retail and employment centers that could generate significant ridership if connected. Benbrook and White Settlement are adjacent to existing service areas but lack direct connectivity to the broader network, and Westworth Village sits near major corridors and could serve as a link between western neighborhoods and Downtown Fort Worth.

While the analysis primarily focuses on spatial proximity, it is also important to consider transit propensity to fully understand the implications of these gaps. Areas with high population and

employment density, low vehicle ownership, and a high number of essential services—medical centers, urgent care, public school, and supplemental colleges—tend to generate transit demand. In many of the identified coverage gaps, these factors are present and expected to grow based on the upcoming development.

Figure 17: Coverage Gaps in Outlying Areas Surrounding Fort Worth



In addition to the urban service gaps, several outlying areas beyond the Fort Worth boundary (**Figure 17**) exhibit significant coverage gaps. These suburban and exurban communities, as highlighted in blue polygons, are experiencing rapid growth and increasing travel demand, yet currently fall outside of the existing transit service area.

A total of six outlying area coverage gaps were identified:

- Weatherford Gap
- Willow Park Gap
- Aledo Gap

- Bedford + Euless Gap
- University of Texas at Arlington (UTA)/Arlington Gap
- Mansfield Gap

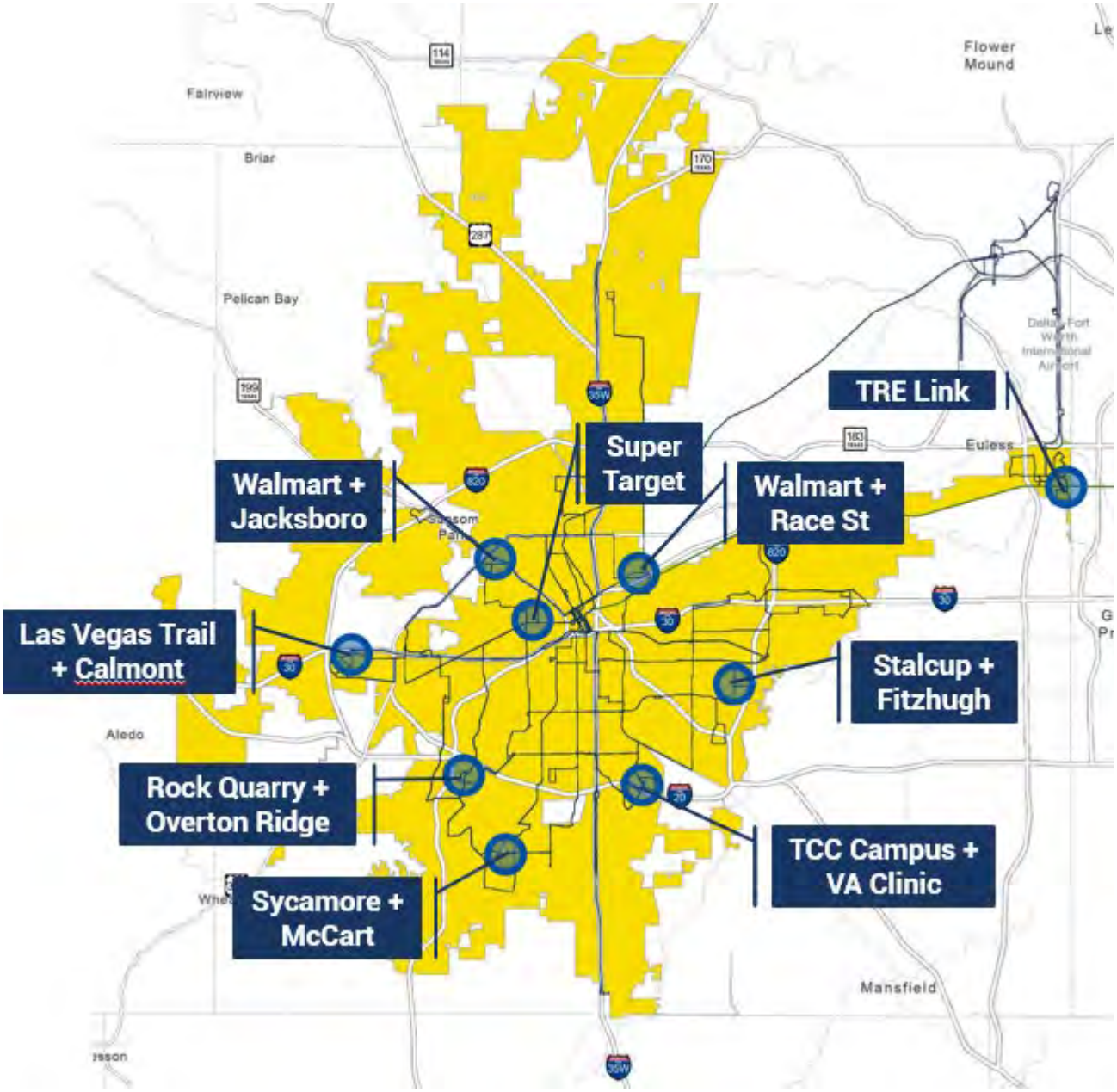
Many of these gaps are located along major highway throughfares, providing an opportunity for connection to Forth Worth. Weatherford, Willow Park, and Aledo Gaps are located along the I-20 corridor west of Fort Worth and are seeing ongoing residential development. The Mansfield Gap in the southeast region highlights a high-growth and car-dependent suburb with emerging employment and retail centers. UTA/Arlington Gap includes one of the region's largest universities and highlights an area with significant residential and commercial density, and opportunity for collaborative innovation. The Bedford + Euless Gap represents two northeastern communities located along SH 183 and SH 121 near DFW Airport. Given their strategic location between Fort Worth and Dallas, and their proximity to major employment centers, they are prime candidates for improvements in regional service coverage.

The identified outlying regional gaps are strategically located along major highways and key destinations like DFW Airport and UTA Arlington. These locations play a significant role in Fort Worth's regional connectivity for future transit expansion to improve inter-city mobility and access to employment and education.

3.5.2.2 Temporal Gaps

Temporal gaps were identified as service limitations or gaps tied to frequency, span, and availability during non-peak periods. Using route schedules, we identified routes operating with headways of 60 minutes or longer, limited or no weekend service, and minimal evening or early morning coverage. These routes were identified as gaps because they limited the use of transit, especially for members of the community who are transit dependent or have travel needs outside traditional community hours.

Figure 18: Temporal Gaps



As shown above in **Figure 18**, several temporal gaps were identified in the Trinity Metro service area as locations where transit service may technically exist but is infrequent, limited to certain times of day, or not available on weekends, resulting in functional inaccessibility for many riders. Nine temporal gaps were identified:

- Las Vegas Trail + Calmont
- Walmart + Jacksboro

- Super Target
- Walmart + Race Street
- TRE Link
- Stalcup + Fitzhugh
- Tarrant Community College (TCC) Campus + Veterans Affairs Clinic
- Sycamore + McCart
- Rock Quarry + Overton Ridge

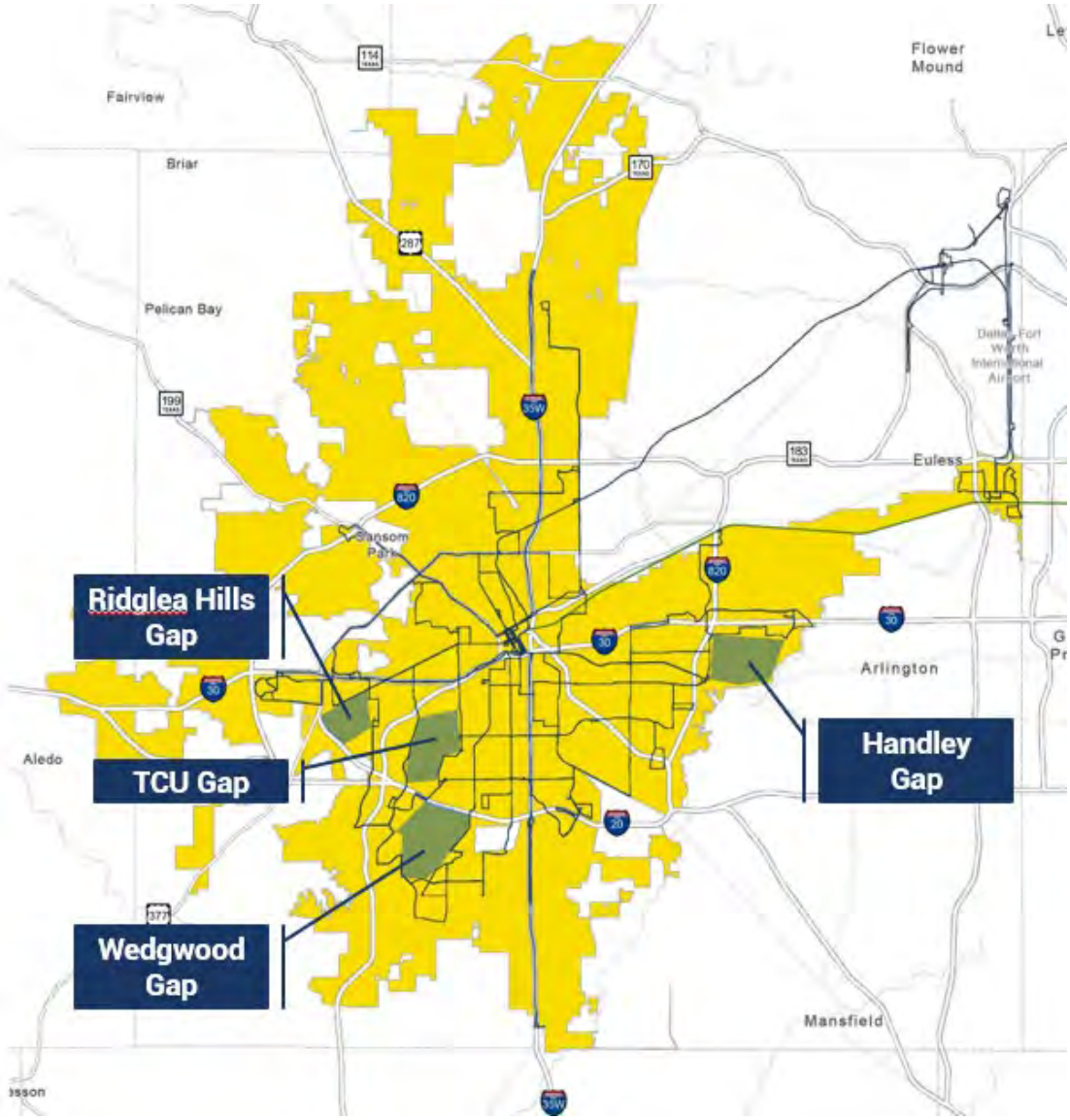
These temporal gaps were primarily located at key trip generators and corridors that serve destinations such as retail, education, healthcare, and employment. They reflect a mismatch between service availability and need, particularly for essential workers, low-income riders, students, and those without flexible work or travel hours. Fixed-route services operate in several areas of Fort Worth, but infrequent schedules, limited-service span, and weekend or evening service gaps limit transit availability, affecting the population who rely on transit as their primary mode of commute. The analysis of temporal gaps underscores the importance of not just where service exists but when it operates, emphasizing the need for improved and more frequent coverage on key corridors and to key destinations.

While this analysis identifies routes and locations with limited span and frequency, further evaluation on time-of-day ridership performance, route scheduling, and community engagement will improve transit performance and promote transit usage in the region.

3.5.2.3 Connectivity Gaps

Connectivity gaps were defined where transit routes fail to effectively interline or provide seamless transfer points, limiting mobility across the network. Using headway data and route schedules, this step reviewed transfer points across the Trinity Metro network to identify locations with poor schedule alignment or lack of physical connection between intersecting routes. Long transfer wait times, defined as over 15 minutes, at key hubs were also flagged as barriers to seamless travel, particularly where multiple routes intersect.

Figure 19: Network Connectivity Gaps



As shown in **Figure 19**, a few areas across Fort Worth show connectivity gaps where existing routes do not provide sufficient transfer opportunities or connections to the rest of the transit system. The following areas were identified:

- Handley Gap: Located on the eastern edge of Fort Worth, this area has poor connectivity with other parts of the city and no direct connection to nearby well-served peripherals.
- Ridgelea Hills Gap: This area is in west Fort Worth and lacks connections in the neighborhood and to nearby well-served peripherals.
- Texas Christian University Gap: Texas Christian University is served by on-demand southside and north-south Route 53; however, nearby neighborhoods are not integrated into the broader network, limiting transit accessibility for students, residents, faculty, and staff.

- Wedgewood Gap: Located in the far southwest, this neighborhood is underserved by the current network. It is surrounded by well-served peripherals, yet north-south route options are limited.

Connectivity gaps limit transit usage between otherwise active routes. Riders in these areas may be forced to make longer trips, endure higher wait times, or rely on alternative modes of transportation. These gaps can be improved by redesigning the network, schedule coordination between intersecting routes, and making infrastructure improvements such as shelters, signage, and crosswalks to attract riders.

The transit gap analysis identifies spatial gaps in the Fort Worth region where riders can access the Trinity Metro system. Regional connectivity gaps identify potential cities outside of Fort Worth—such as Arlington, Mansfield, and Weatherford—where transit services can be integrated by Trinity Metro but currently remain unserved. Optimization of route network, schedule frequency gaps, and off-peak service hours could improve transit accessibility and availability. The gaps identified in this analysis affect both where and when transit is available and how well transit connects to users in the city. As the region continues to grow, addressing these gaps will increase transit ridership and bolster the transit network in the region.

3.5.2.4 Accessibility to Key Destinations

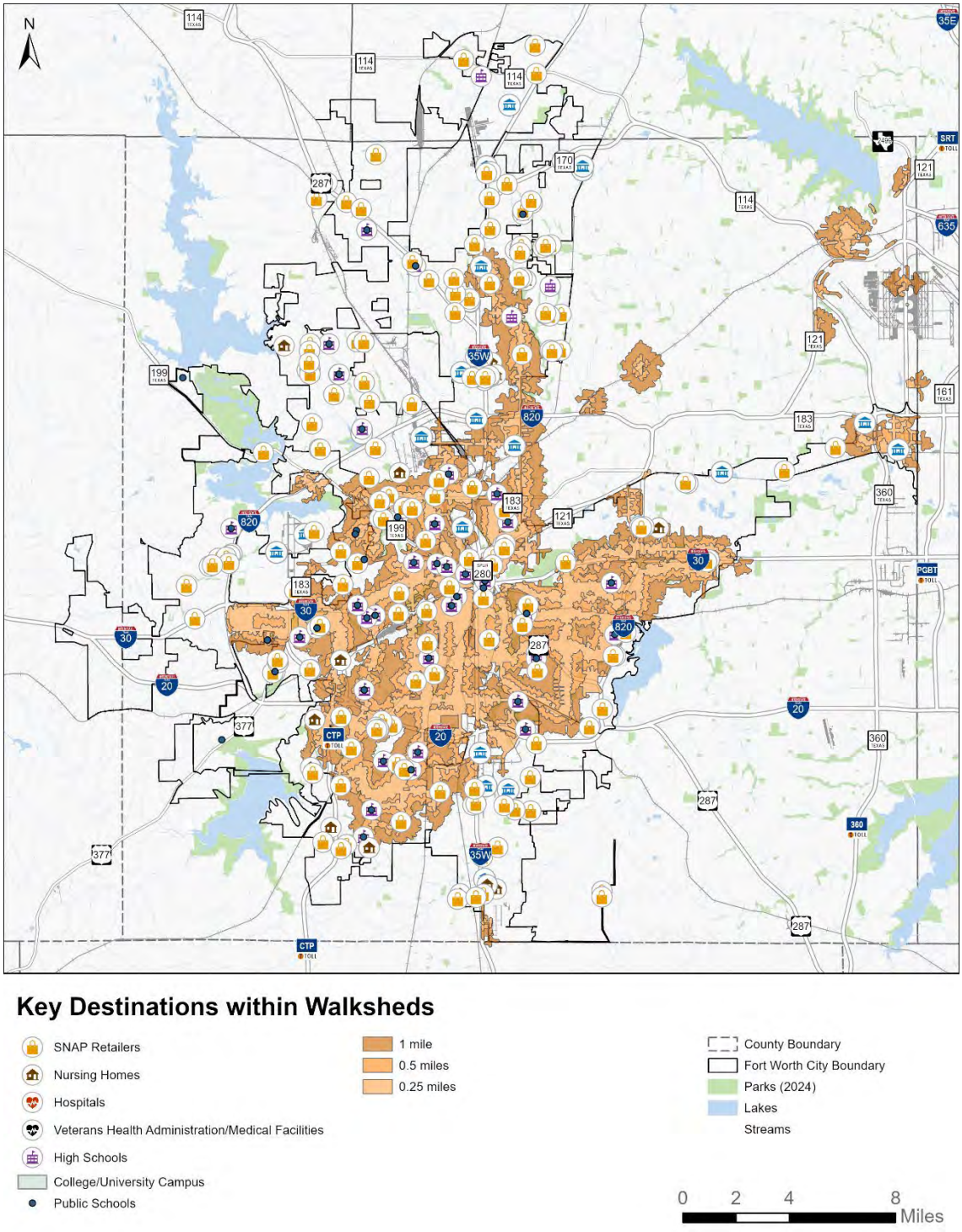
A critical component of transit equity and effectiveness is ensuring that residents can access key destinations. This section evaluates how well the current network connects residents to key destinations such as employment centers, educational institutions, medical facilities, grocery stores, and civic services. Accessibility gaps can limit economic opportunity and quality of life, particularly for transit-dependent populations, and identifying these gaps can help promote strategic improvements towards a more equitable system.

3.5.2.4.1 Building the Network Dataset

The analysis began with the development of a network dataset to evaluate transit accessibility across the service area. General Transit Feed Specification files provided by the city were used to construct a transit data model incorporating bus stops, bus routes, and the rail network. To enable walkshed analysis, a 2019 local roads dataset was integrated into the model. Road classifications that typically lack pedestrian access, such as primary highways, secondary highways, ramps, and connecting roads were excluded from the walkable network.

The analysis mode was set to walking, and service area polygons (walksheds) were generated using bus stops and train stations as origin points. Walksheds were calculated at quarter-mile, half-mile, and 1-mile intervals to reflect varying levels of pedestrian access to the transit network.

Figure 20: Identifying Key Destinations



3.5.2.4.2 Identifying Key Destinations

As shown in **Figure 20** above, the second phase of the analysis assessed the current transit system's access to major destinations commonly served by public transit. The following categories of key

destinations were selected based on their significance to the community:

- High schools
- Universities and college campuses
- Veterans' health administration and medical facilities
- Nursing homes
- Hospitals
- SNAP retailers
- Employers

Using a custom Python script, the number of these key destinations in each walkshed (0.25 mile, 0.5 mile, and 1 mile) was quantified. In addition, the population of each block group intersecting the walksheds was calculated to understand how many residents were potentially affected by access conditions.

3.5.2.4.3 Identifying Transit-Supportive Areas

To determine where transit demand may be highest, the analysis identified transit-supportive areas based on population density. Using 2023 census data, population densities were calculated at the block group level and categorized into quartiles. Block groups in the top quartile were defined as those exceeding 6,200 residents per square.

3.5.2.5 Evaluation of Transit Network Performance

Beyond spatial and temporal coverage gaps, evaluating the performance of the existing transit network helps identify opportunities to improve efficiency, reliability, and rider experience. This assessment examines how well the current network is functioning using a series of key performance metrics, with a focus on identifying underperforming routes, zones, or service patterns. These metrics also provide a basis for benchmarking Fort Worth's system against peer transit agencies to understand how Trinity Metro compares and where improvement is most critical.

3.5.2.5.1 Peer Benchmarking

As part of this evaluation, Trinity Metro's performance was compared to a set of peer transit agencies of similar size, operating context, and ridership profile. Benchmarking offers insight into how Fort Worth's system performs relative to those of its regional partners, and it helps set realistic targets for improvement. The agencies chosen for this review were:

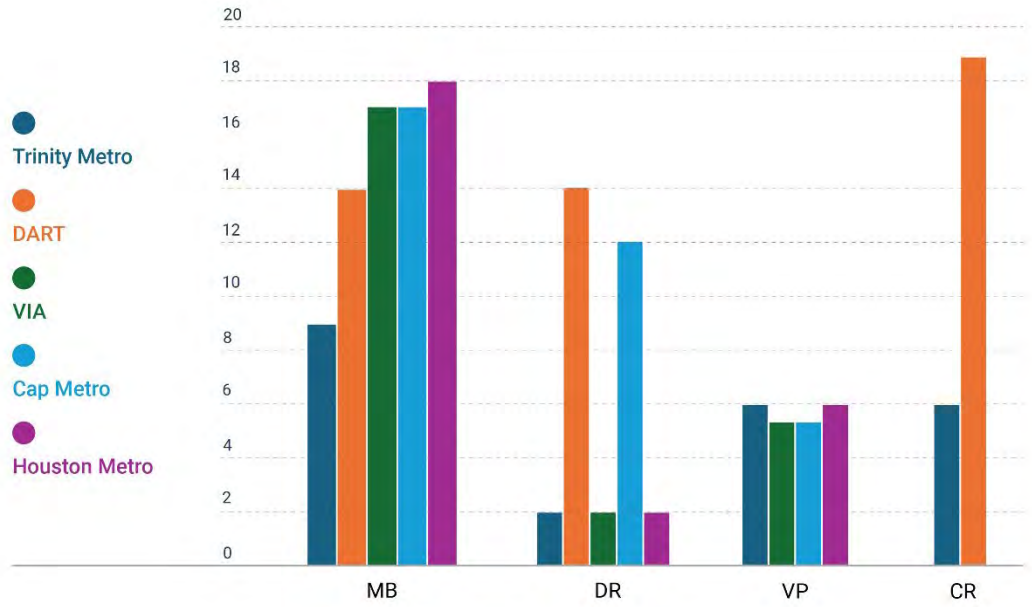
- DART, Dallas, TX
- CapMetro, Austin, TX
- VIA, San Antonio, TX

3.5.2.5.2 System Productivity

System productivity was assessed by comparing the number of unlinked passenger boardings per revenue service hour across each agency and mode. This metric reflects how efficiently each system

attracts riders relative to the LOS provided. **Figure 21** displays productivity by mode—MB (Motor Bus), DR (Demand Response), VP (Vanpool), and CR (Commuter Rail)—for Trinity Metro and peer agencies (DART, VIA, CapMetro, and Houston METRO).

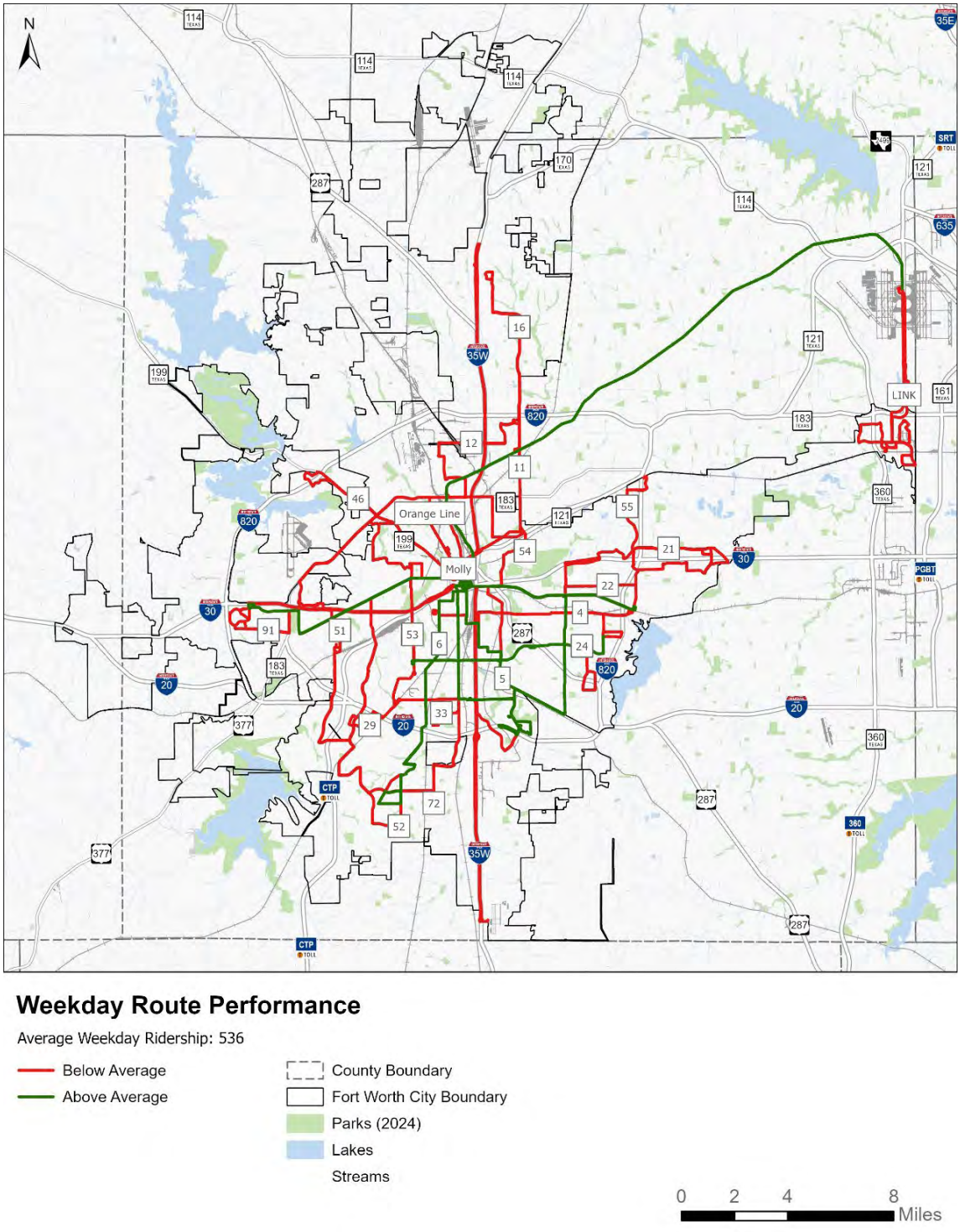
Figure 21: Peer City System Productivity



For motor bus productivity, Trinity Metro falls below peer agencies, with approximately 9 riders per hour compared to the 17 to 18 riders per hour for CapMetro, DART, and Houston METRO. For demand response, Trinity Metro shows significantly lower productivity, with fewer than 3 riders per hour. In contrast, DART and CapMetro achieve 13 to 14 riders per hour. Vanpool productivity is more consistent across agencies, with Trinity Metro performing on par or slightly above others. DART's commuter rail system stands out with extremely high productivity (~19 riders per hour), compared to lower commuter rail figures for Trinity Metro and others.

These results suggest that while Trinity Metro performs reasonably well in vanpool operations, there is substantial opportunity to improve productivity in fixed-route bus and demand-response services.

Figure 22: Weekday Route Performance



For a comprehensive review of Trinity Metro's operational performance, **Figure 22** above illustrates system productivity based on weekday route performance by ridership across Trinity Metro's fixed-route bus network. Routes shown in green exceed the system average of 536 weekday boardings, while

those in red fall below it. This spatial analysis reveals that higher-performing routes are concentrated in and around Fort Worth's urban core, where population and employment densities are highest, while more peripheral or crosstown routes tend to have lower ridership. These patterns reinforce broader productivity trends and underscore the importance of aligning service levels with demand.

Overlaying route-level ridership performance with population density reveals the extent to which transit supply is aligned with potential demand. As shown in the map, many of Trinity Metro's highest-performing routes travel through the city's densest areas, affirming the link between density and productivity. However, there are also high-density pockets underserved by productive routes, signaling potential areas for service enhancement.

3.5.2.5.3 On-Time Performance by Route Type

On-time performance (OTP) is a critical indicator of service reliability and customer satisfaction. OTP was evaluated for two major fixed-route service types: local bus and express routes, using average system-wide percentages reported by each agency (**Figure 23**).

Figure 23: Peer Cities OTP

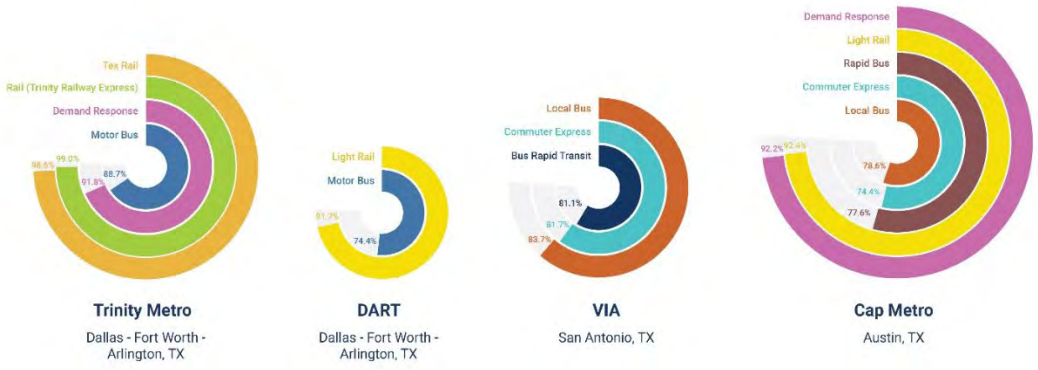
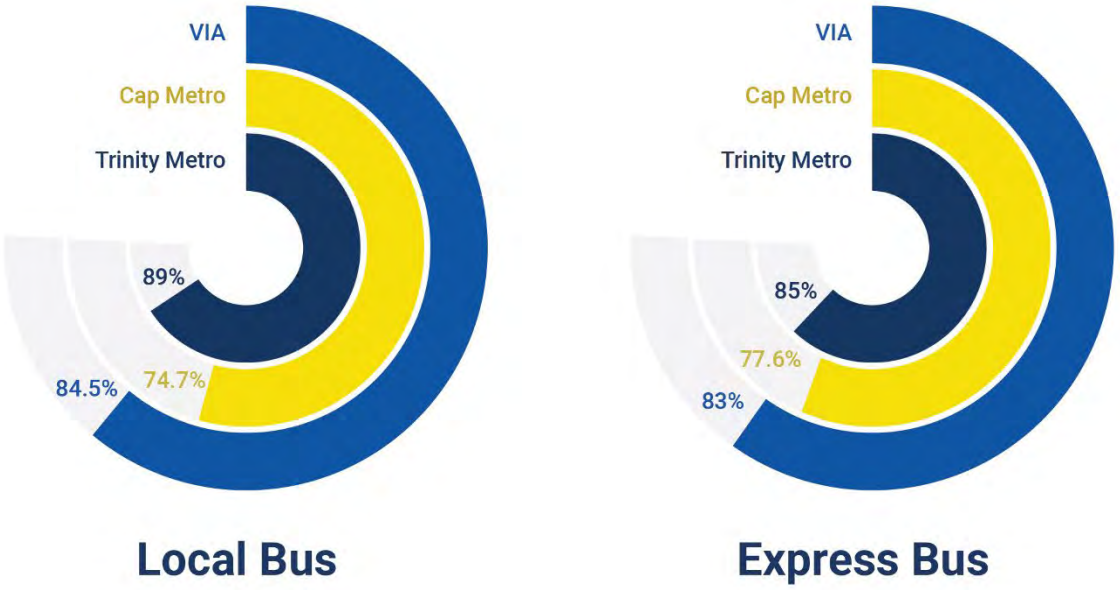


Figure 24: OTP by Route Type



For local bus services, Trinity Metro demonstrated the highest OTP among its peers, with an average of 89 percent of trips operating on time. This significantly outpaces VIA at 84.5 percent and CapMetro at 74.7 percent. Trinity Metro's strong performance may reflect advantages such as less congested operating environments or more effective schedule adherence.

For Express routes, Trinity Metro Trinity Metro also led in OTP, achieving 85 percent OTP, with VIA following closely at 83.0 percent. These findings suggest that Trinity Metro performs well in maintaining schedule reliability across both service types, especially when compared to its Texas peer agencies.

Figure 25: Routes by OTP

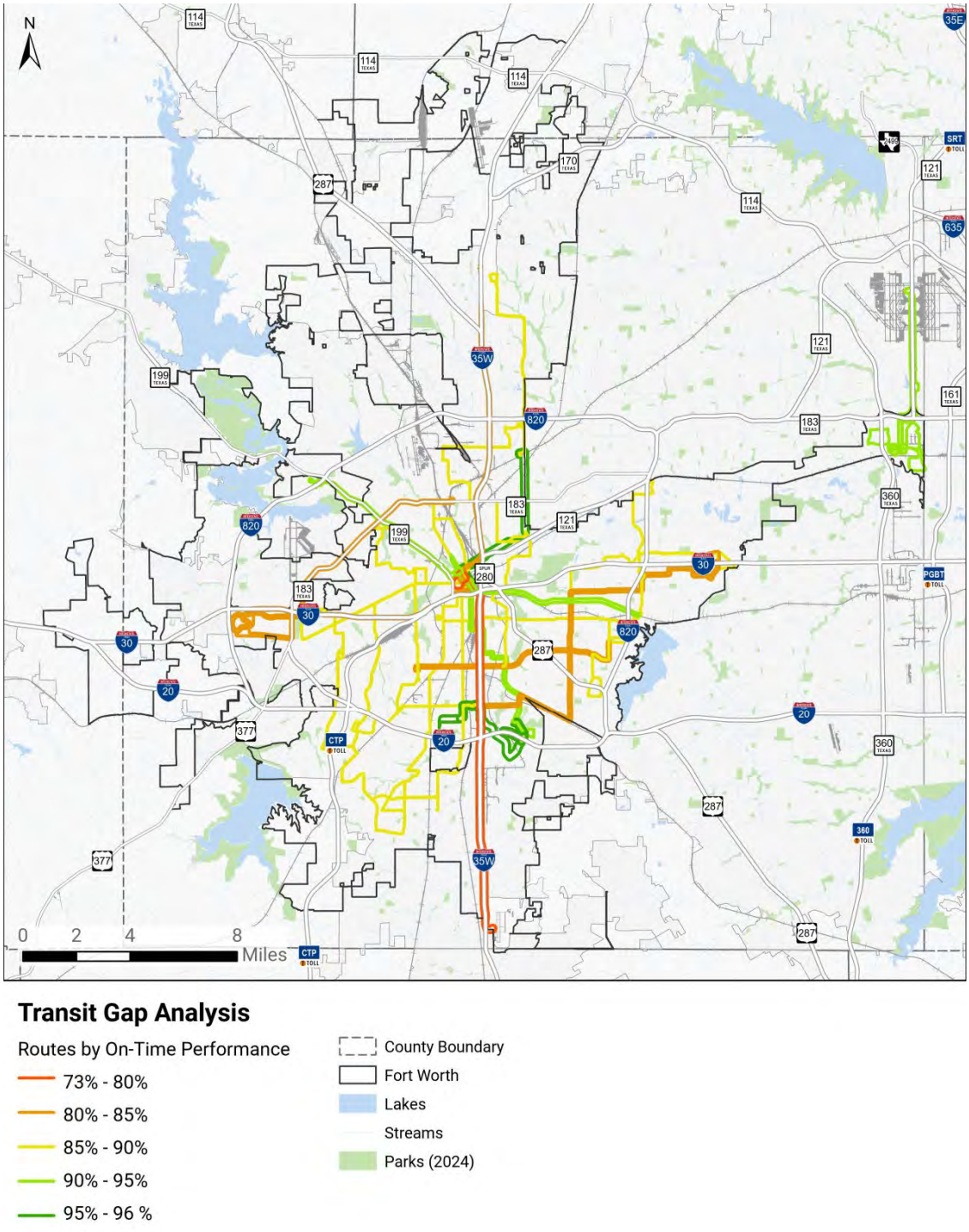


Figure 25 above highlights provides a more detailed view of route-level OTP performance across Trinity Metro's network. Each route is color-coded based on its OTP, ranging from the lowest in red (73 to 80 percent) to highest in dark green (95 to 96 percent). While the core network generally achieves high

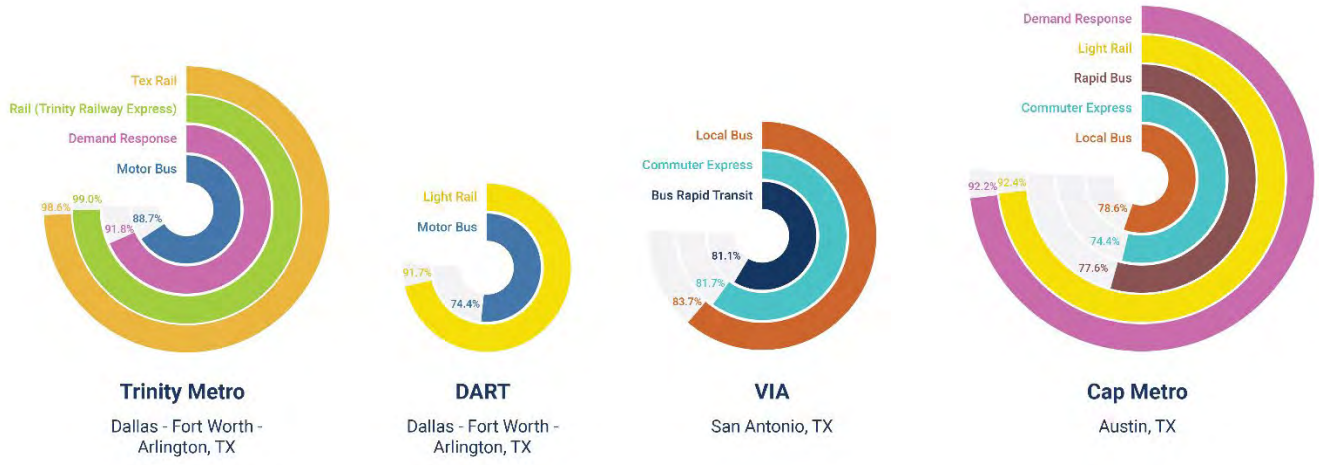
levels of OTP, particularly along major north-south and east-west corridors, there are pockets of lower performance in the southern and far western parts of the system.

3.5.2.5.4 On-Time Performance by Mode

To further assess reliability, OTP was evaluated across different transit modes, offering an alternate view of how service types perform both within Trinity Metro and among its peer systems.

As shown in **Figure 26** below, Trinity Metro demonstrated consistently strong OTP across all its operating modes. Local bus service achieved an OTP of 88.7 percent, while demand-response service reported a slightly higher OTP of 91.8 percent. Notably, both of Trinity Metro's rail services, Trinity Railway Express and TexRail, delivered exceptional reliability, with OTP rates of 99.0 and 98.6 percent, respectively.

Figure 26: Peer Cities OTP



DART also achieved high OTP (91.7 percent) for its light rail network. However, DART's local bus service performed notably lower, with an OTP of 74.4 percent. VIA in San Antonio reported more consistent OTP across its services, with bus rapid transit achieving 81.1 percent, commuter express service at 81.7 percent, and local bus service at 83.7 percent. Although VIA's performance is stable across modes, all values fall short of Trinity Metro's levels, particularly in rail and demand-response services. CapMetro in Austin displayed a mixed performance profile. Its core bus services, including regular bus (78.6 percent), Express bus (74.4 percent), and rapid bus (77.6 percent), all performed below Trinity Metro's local bus OTP. In contrast, CapMetro's light rail service achieved a strong OTP of 92.4 percent, while demand-response service reported an OTP of 92.2 percent, aligning closely with Trinity Metro's performance in those categories.

Overall, these comparisons highlight Trinity Metro's strong operational reliability, particularly in its rail and demand-response services.

3.5.3 Transit Gaps Prioritized

To identify and prioritize areas with the greatest need for transit improvements, we developed a prioritization framework that integrates three key indicators: the TSI, transit propensity, population

density, and employment density. Each variable captures a different dimension of transit demand and supports a data-driven approach to targeting service enhancements and infrastructure investments.

3.5.3.1 Methodology

3.5.3.1.1 Normalization of Variables

To ensure comparability across different units and scales, the TSI, transit propensity, population density, and employment density were normalized to a 0 -1 scale. This was achieved by dividing each variable's value by the maximum value observed across all gap type areas. A weighted score was calculated for each gap area using Equation 1 below:

Equation 1: Weighted Priority Score

$$\textit{Priority Score} = (0.30 \times \textit{TSI}) + (0.30 \times \textit{Transit Propensity}) + (0.20 \times \textit{Population Density}) + (0.20 \times \textit{Employment Density})$$

Using this weighting formula, TSI and transit propensity are emphasized more heavily (30 percent each) due to their direct correlation with potential mode shift and ridership potential, while population density and employment density contribute 20 percent each, reflecting their importance in supporting sustainable transit service.

3.5.3.1.2 Classification of Gap Priority

The resulting composite scores were classified into three tiers of priority using a natural breaks (Jenks) classification method:

- High-Priority Gaps: Areas with the highest potential demand and suitability for transit investments. Shown in red symbology across priority maps.
- Medium-Priority Gaps: Moderate potential that may benefit from enhanced service or targeted infrastructure. Shown in orange symbology across priority maps.
- Low-Priority Gaps: Lower relative demand, but still potentially valuable as part of a long-term strategy. Shown in orange symbology across priority maps.

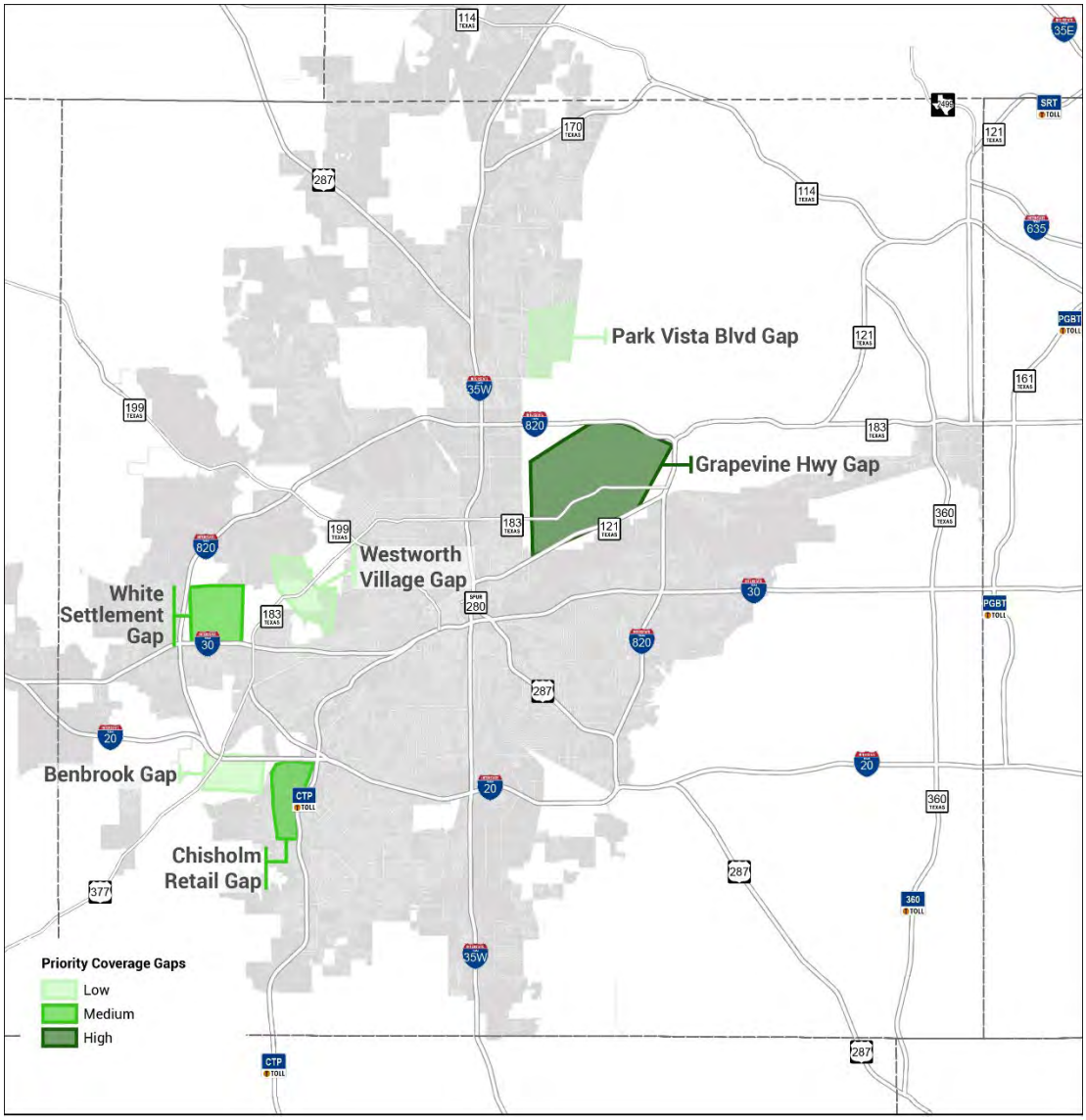
3.5.3.1.3 Mapping

The priority scores were mapped for each gap type to visualize the spatial distribution of need across the service area.

3.5.3.2 Priority Coverage Gaps

Amongst the local gaps, a few priority gaps were highlighted as part of the prioritization analysis. These local gaps are areas where no fixed-route service operates within a reasonable walking distance, of the existing fixed-route transit system which was set at 0.25 miles.

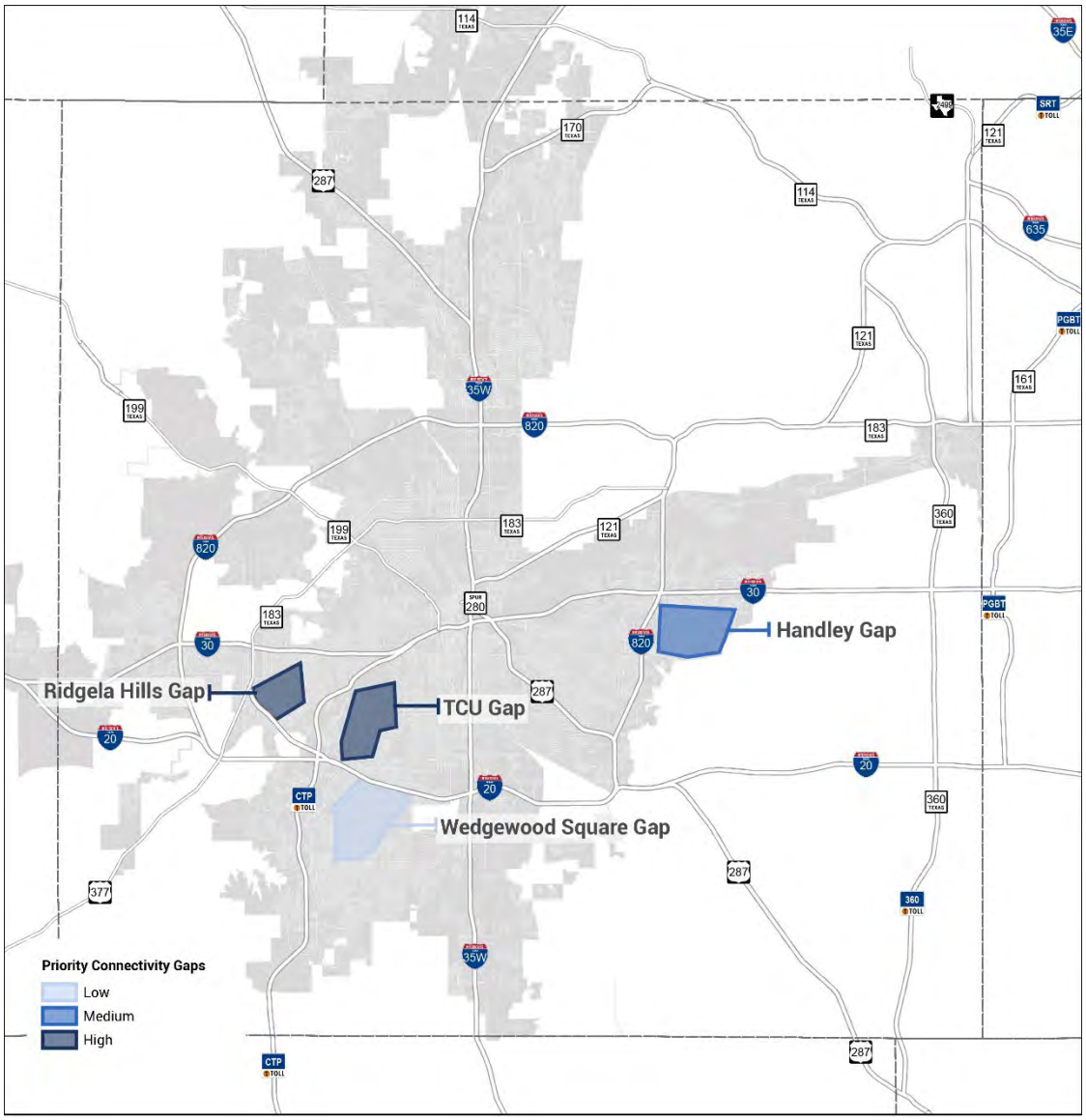
Figure 27: Priority Coverage Gaps



This analysis highlighted a standout high-priority local gap in the northeast section of the city near the Grapevine Highway corridor, as shown in **Figure 27**. This area has a mix of land uses, dense development, and proximity to key corridors which makes it a top candidate for service enhancements. Medium-priority local gaps are more dispersed across the network, including gap areas clustered southwest of I-20 and near Benbrook. These areas have a mix of moderate density and employment activity, suggesting that targeted investments, such as micro transit or first/last-mile infrastructure could meaningfully improve accessibility. Low-priority gaps, while less urgent, still represent long-term opportunities for transit investments as growth and development patterns shift.

3.5.3.3 Priority Network Connectivity Gaps

Figure 28: Priority Network Connectivity Gaps



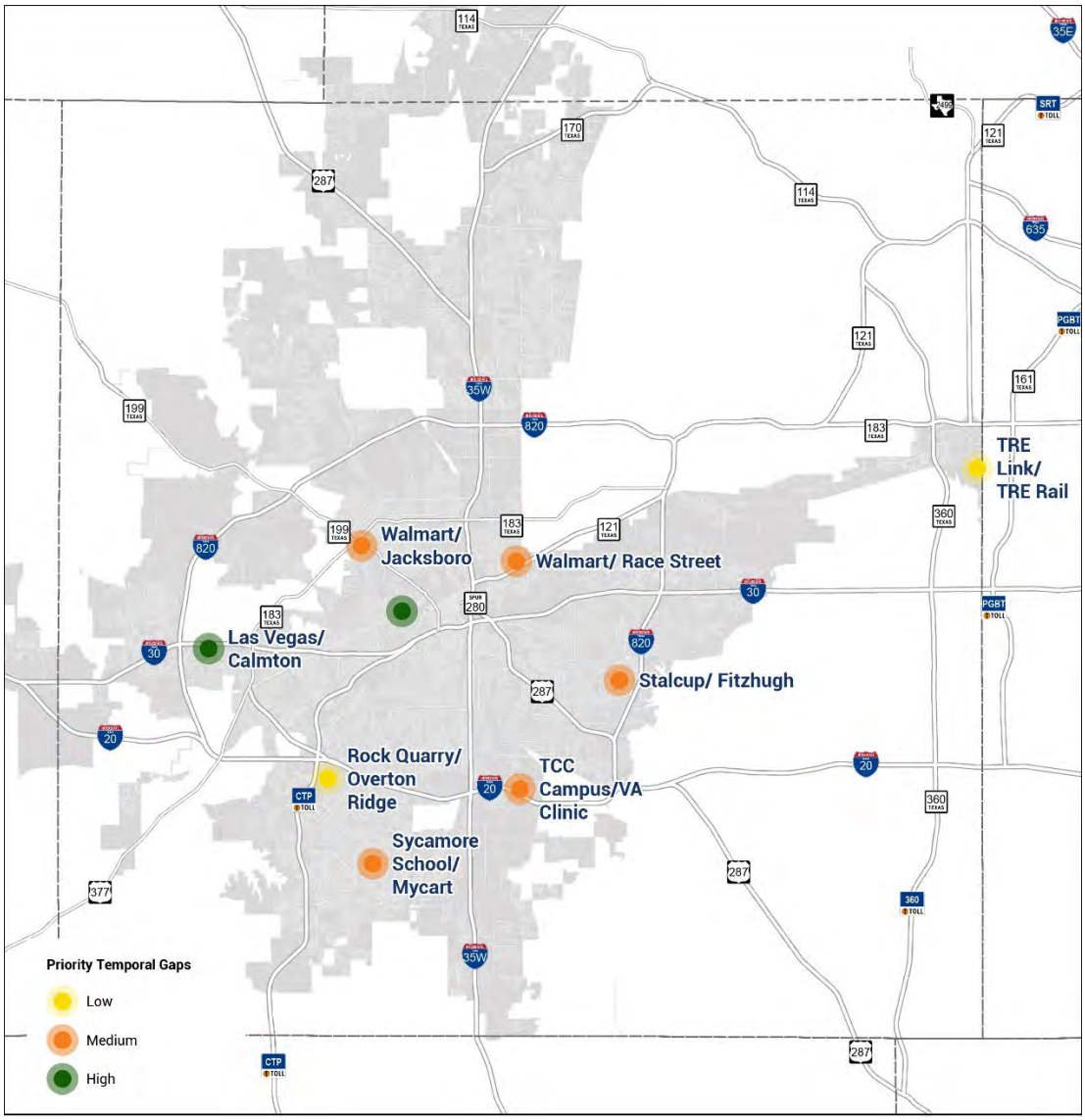
The map above illustrates the results of the prioritization analysis focused on areas within Fort Worth's existing service area that suffer from limited or inefficient connections between transit routes, key destinations, and neighborhoods. Unlike coverage gaps, which lie outside the transit network, connectivity gaps are within reach of service but lack effective circulation or access.

The highest-priority network connectivity gaps are located in the central-west and east portions of the city. A notable high-priority gap is in the Ridglea Hills and TCU area, which lies near major educational institutions and residential neighborhoods but lacks strong east-west route connection. Another high-priority zone is the Handley area in East Fort Worth, which borders existing service but remains disconnected from key destinations and transfer hubs. Medium-priority gaps are highlighted in the

Wedgwood area and parts of East Fort Worth near Meadowbrook. This analysis identifies areas where strengthening internal connectivity with service enhancements could yield the greatest improvements in transit accessibility and ridership potential.

3.5.3.4 Priority Temporal Gaps

Figure 29: Priority Temporal Gaps

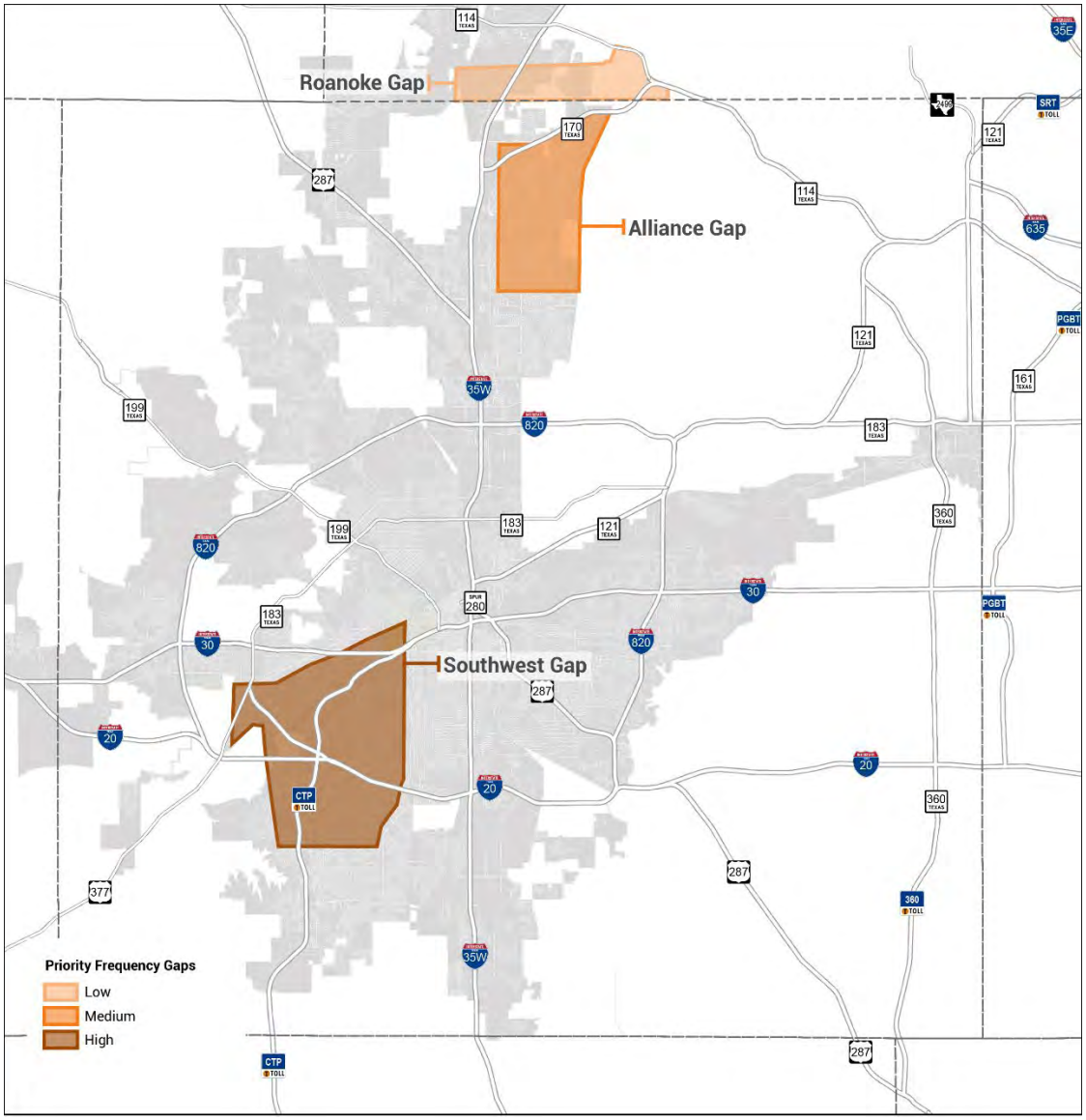


As shown in the map above (**Figure 29**), high-priority temporal gaps are concentrated in areas with major employers, educational institutions, and commercial centers. Examples include the Super Target and Walmart areas along I-20, as well as the Las Vegas Trail/Camp Bowie corridor in the west. These locations support significant late-shift employment and shopping activity, pointing to strong use cases for extended evening or weekend service.

Medium-priority gaps appear near Rock Quarry/Overton Ridge, Sycamore School Road, and the TCC Campus/Veterans Affairs Clinic. These are places where improved weekend or early morning service could increase transit accessibility for students, healthcare users, and workers. Low-priority temporal gaps, while less urgent, still represent opportunities to incrementally improve network equity and coverage.

3.5.3.5 Priority Frequency Gaps

Figure 30: Priority Frequency Gaps



The priority analysis above highlighted one dominant high-priority frequency gap located in the far south of the city. This zone has significant residential development and lies within reach of existing service corridors but lacks sufficient frequency. Medium and low-priority gaps appear in the far northeast, adjacent to the Alliance area and the northern boundary of Fort Worth, and represent parts of the network where frequency could be improved but may not currently justify investment ahead of other, higher-scoring areas.

3.5.3.6 Priority Accessibility Gaps

Transit access gaps were defined as areas adjacent to the existing transit network that lack adequate

first/last-mile connections. Specifically, block groups falling within the half-mile or 1-mile walksheds were flagged as potential transit gaps. Areas beyond the one-mile threshold were designated as "zero transit access" zones.

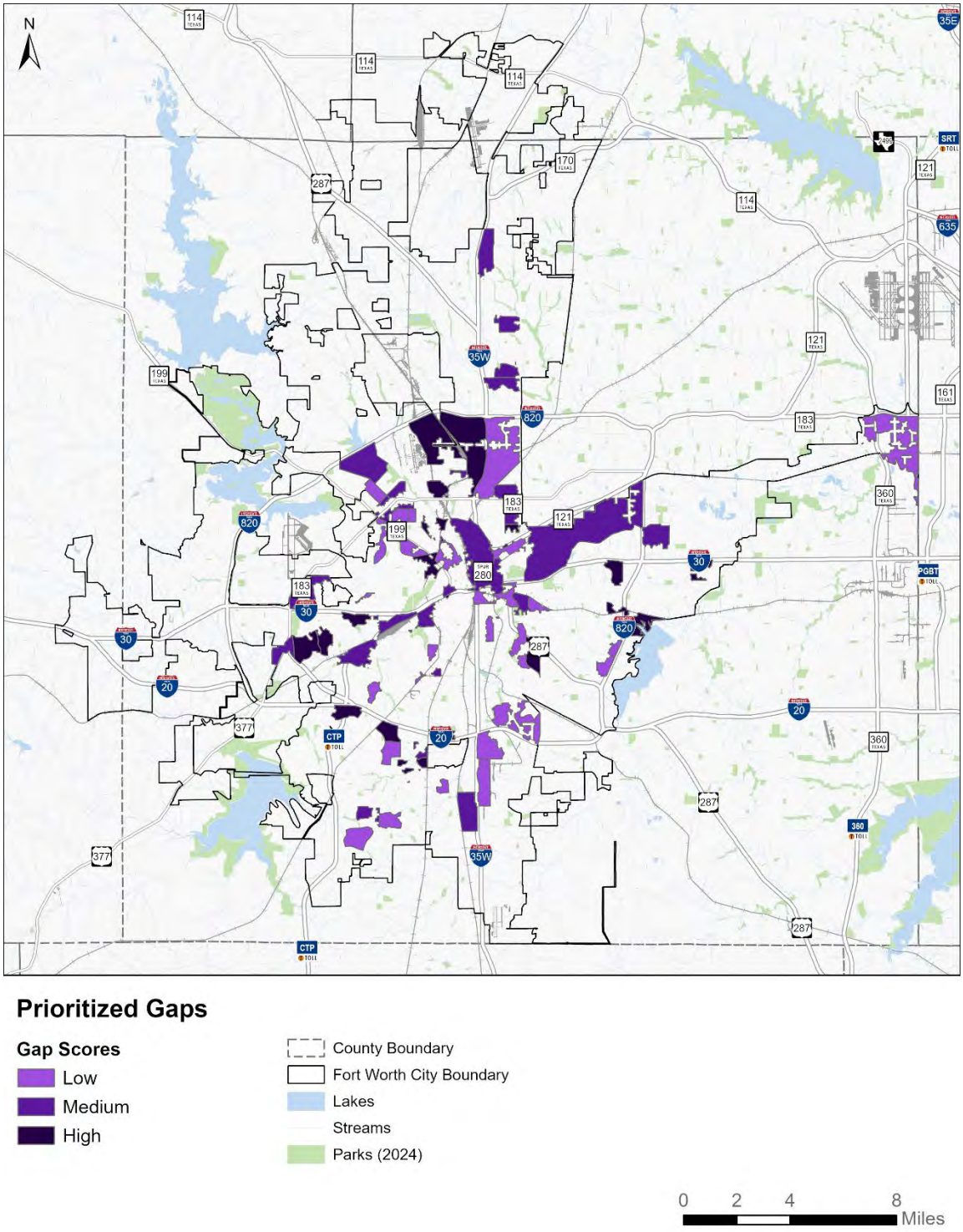
To refine the gap analysis, walkshed boundaries were clipped to block group geometries. The resulting gap areas were assessed based on the number of key destinations they contained. Each area received a base score equal to the number of destinations present, plus an additional point if the area was located within a transit-supportive block group. For example, a gap area with six destinations located in a high-density zone received a total score of seven.

Table 6. Accessibility Gap Score Classifications

Score	Priority
<=3	Low
4-5	Medim
6-11	High

Gap scores were then classified using a natural breaks method and categorized as low, medium, or high priority, as shown in **Table 6**. These classifications were used to identify and prioritize areas for potential transit service expansion or improvement.

Figure 31: Priority Accessibility to Key Destinations



As shown in **Figure 31** above, the transit gaps prioritized as per the accessibility to key destinations score. The following were some of the highest-scoring areas that lacked access to transit:

- Areas around the intersection of the I-20 and Granbury Rd
- Areas around routes US 377 and TX-183
- Areas around I-820, I-35W, and Fort Worth Meacham airport
- Areas around Alta Mesa Blvd and McCart Ave
- Around I-820 and TX-180
- Along the I-30 and the East Chase Parkway

3.5.4 Macro-Level Interventions

After identifying and prioritizing each gap type using a scoring framework based on the TSI, population and employment density, and transit propensity, a set of macro-level interventions were developed and tailored to each gap category. These macro-level interventions are aligned with the highest-scoring areas (areas with most impactful gaps on community) and are designed to expand access, improve service quality, and enhance network connectivity over time. By developing clear actionable strategies, supported by data-driven prioritization of gaps, this ensures that the proposed project investments are equitable and address the most critical needs.

3.5.4.1 Coverage Gap Interventions

Land use Coordination

Coordinate with land use plans to align new service with future development patterns.

Service Pilot

Pilot flexible or micro transit services in low-density, hard-to-serve areas where fixed routes may be inefficient.

3.5.4.2 Temporal Gap Interventions

Service Plan Review

As part of service change or new service plan review, consider increasing frequency on key routes, especially during midday, evenings, and weekends. Review feasibility of expanding service span on high-ridership corridors to cover early mornings and late nights.

Service Pilot

Pilot extended service in unserved areas or for major employers with off-peak shift schedules. Identify partnership or collaboration opportunities.

3.5.4.3 Performance Gap Interventions

Performance Monitoring

Enhance service quality and consistency on underperforming routes by developing an approach to performance monitoring using real-time monitoring, set performance goals and KPI's.

Bus Priority Treatments

Deploy bus priority treatments, such as bus-only lanes and traffic signal priority, in high-delay corridors to improve service reliability and consistency.

Service and Resource Alignment

Modify alignment or frequency of low-ridership routes, based on ridership trends and productivity metrics. Reallocate resources from underperforming segments to higher-demand corridors with better ridership potential.

3.5.4.4 Connectivity Gaps Interventions

Schedule Alignment

Improve transfers by aligning headways across intersecting routes to reduce transfer wait times. Introduce timed-transfer points at strategic locations.

Route and Facility Design

Add or realign routes to bridge disconnected areas or missing crosstown links. Consider connectivity in facility design to ensure both physical and schedule coordination between routes.

3.5.4.5 Accessibility to Key Destinations

First/Last-Mile Connectivity

Improve first/last-mile access with pedestrian and bike upgrades, and additional shuttle services, where appropriate.

Origin-Destination Pairs

Identify high-demand OD pairs where access to healthcare, education, or major employers is currently limited and with opportunity for improvement.

3.6 Active Transportation Gap Analysis

3.6.1 Purpose and Objective

The purpose of the active transportation gap analysis is to identify needs and opportunities to improve connectivity and coverage for people walking, bicycling, and rolling (active transportation) using GIS analysis.

The 2019 ATP provided a comprehensive, long-term plan for the Active Transportation Network, identifying infrastructure recommendations and priorities for trails, sidewalks, and on-street bikeways. The ATP performed extensive gap analyses emphasizing access to transit, schools, and trails, identifying areas of latent demand (short trip opportunities), highlighting gaps in the trail and bikeway networks, and emphasizing investment in areas with large populations of people of color and people with lower incomes.

The active transportation gap analysis builds upon the work performed for the 2019 ATP and outlines the steps used to identify remaining gaps in the Active Transportation Network. This analysis incorporates new active transportation infrastructure constructed since 2019 to refine and update gaps and other areas of need.

3.6.2 Spatial Gaps in the Active Transportation Network

3.6.2.1 Network Connectivity

Successful bicycle and pedestrian networks depend on connected comfortable infrastructure for users of all ages and abilities. High-stress segments and crossings where infrastructure is insufficient or missing, create gaps in the network.

3.6.2.1.1 Bicycle Level of Traffic Stress

The Bicycle Level of Traffic Stress (LTS) analysis estimates the amount of stress a person bicycling faces due to roadway and traffic conditions on a given street segment. LTS values range from 1 to 4, with LTS 1 representing the lowest stress and LTS 4 representing the highest stress.

- LTS 1: Minimal Stress
    - Greenways, separated bike lanes, and low-speed neighborhood streets
    - Comfortable for children and most cautious cyclists.
- LTS 2: Low Stress
    - Bike lanes on low-speed and low-volume streets
    - Comfortable for most adults
- LTS 3: Moderate Stress
    - Narrow, striped bike lanes or shoulders on higher-volume, higher-speed streets.
    - Comfortable for experienced, confident cyclists
- LTS 4: High Stress
    - High-volume, high,-speed streets with no bicycle facilities
    - Only used by the most confident and fearless cyclists

A segment's LTS is determined based on roadway speed, volume, number of lanes, and the presence of bicycle facilities. Specific scorings for each factor are outlined in the tables below. This analysis used the most up-to-date City of Fort Worth GIS data for roadway characteristics and on-street bicycle facilities. The City of Fort Worth data used for off-street trails included both existing and planned trails.

Table 7. LTS Criteria for Segments with No Bicycle Facilities

		Posted Speed Limit						
	ADT	≤ 20 mph	25 mph	30 mph	35 mph	40 mph	45 mph	50+mph
Unlaned 2-way street (no centerline)	0-750	LTS 1	LTS 1	LTS 2	LTS 2	LTS 3	LTS 3	LTS 3
	751-1,500	LTS 1	LTS 1	LTS 2	LTS 3	LTS 3	LTS 4	LTS 4

		Posted Speed Limit						
	ADT	≤ 20 mph	25 mph	30 mph	35 mph	40 mph	45 mph	50+mph
	1,501-3,000	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4
	3,000+	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4
1 thru lane per direction (1-way, 1-lane street or 2-way street with centerline)	0-750	LTS 1	LTS 1	LTS 2	LTS 2	LTS 3	LTS 3	LTS 3
	751-1,500	LTS 2	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4	LTS 4
	1,501-3,000	LTS 2	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4	LTS 4
	3,001-6,000	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4
	6,001-10,000	LTS 3	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4
	10,001+	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4
2 thru lanes per direction	0-6,000	LTS 3	LTS 3	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4
	6,001-12,000	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4
	12,001+	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4
3+ thru lanes per direction	Any ADT	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4

mph = miles per hour

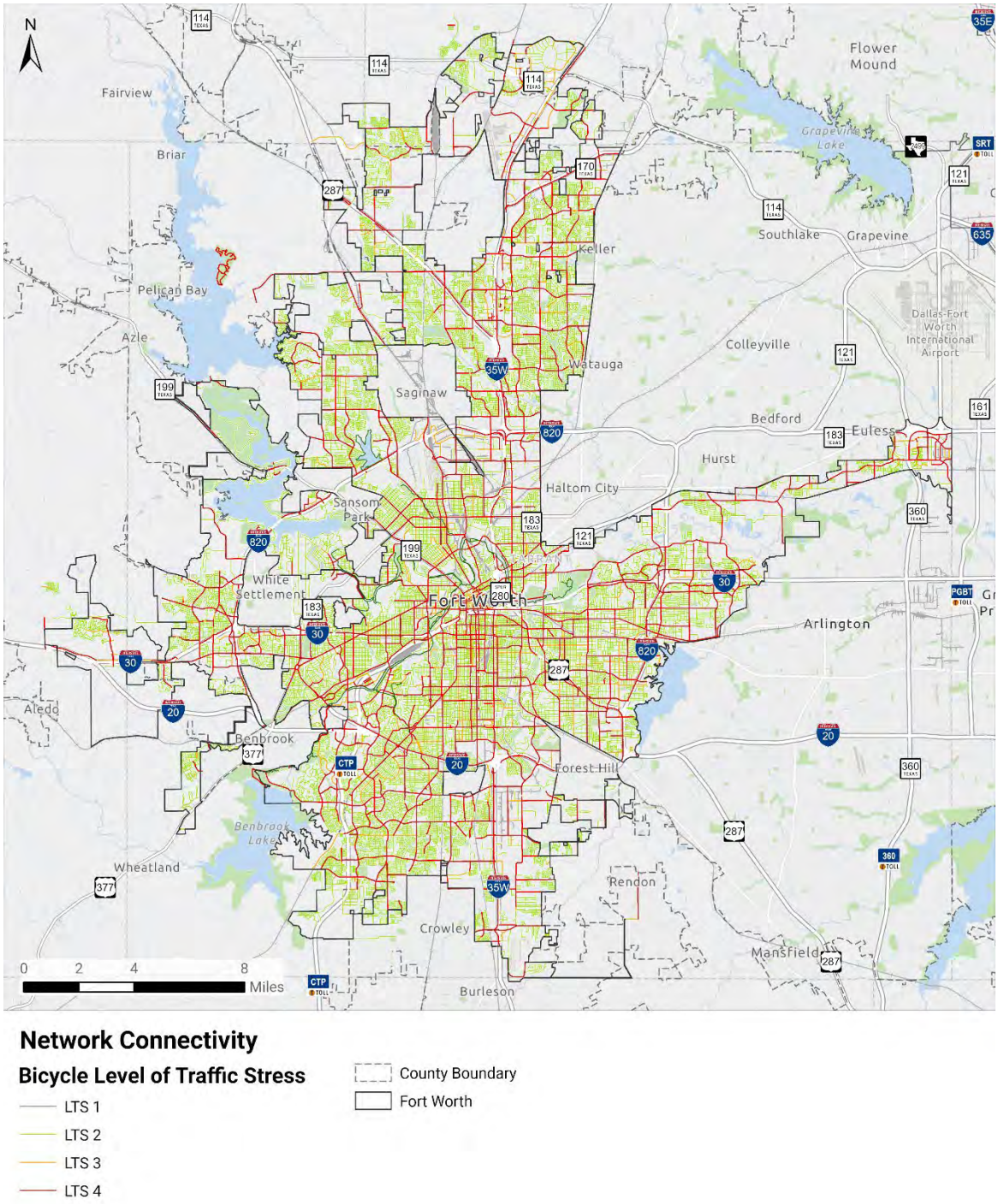
Table 8. LTS Criteria for Segments Not Adjacent to a Parking Lane

Number of lanes	Bike lane type	Posted Speed Limit					
		≤ 25 mph	30 mph	35 mph	40 mph	45 mph	50+ mph
1 Thru Lane Per Direction, or Unlaned	Buffered	LTS 1	LTS 1	LTS 2	LTS 3	LTS 3	LTS 4
	Not buffered	LTS 2	LTS 2	LTS 3	LTS 3	LTS 3	LTS 4
2 Thru Lanes Per Direction	Both	LTS 2	LTS 2	LTS 3	LTS 4	LTS 4	LTS 4
3+ Lanes Per Direction	Both	LTS 3	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4
Any	Protected lanes or shared use path	LTS 1	LTS 1	LTS 1	LTS 1	LTS 1	LTS 1

Table 9. LTS Criteria for Segments Alongside a Parking Lane

Number of lanes	Bike lane type	Posted Speed Limit				
		≤ 20 mph	25 mph	30 mph	35 mph	40+ mph
1 Lane Per Direction	Buffered	LTS 1	LTS 1	LTS 2	LTS 2/3*	LTS 4
	Not buffered	LTS 2	LTS 2/3*	LTS 2/3*	LTS 3	LTS 4
2 Lanes Per Direction (2-Way) or 2-3 Lanes Per Direction (1-Way)	Buffered	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4
	Not buffered	LTS 2/3*	LTS 2/3*	LTS 3	LTS 4	LTS 4
Other Multilane	Both	LTS 3	LTS 3	LTS 3	LTS 4	LTS 4
Any	Protected lanes or shared use path	LTS 1	LTS 1	LTS 1	LTS 1	LTS 1

Figure 32: Bicycle LTS



3.6.2.1.2 Pedestrian Crossing Level of Traffic Stress

The Pedestrian Crossing Level of Traffic Stress (PxLTS) assessed the comfort and safety of pedestrian

roadway crossings based on the most recent data available for roadway width, traffic volume and speed, signalization, and existing pedestrian infrastructure. Similar to Bicycle LTS, the analysis categorizes intersections and midblock crossings on a scale of 1 to 4 based on the stress a pedestrian would experience attempting to cross the street. PxLTS is especially useful for a city like Fort Worth where an extensive sidewalk network exists, but high-stress crossings fragment the overall pedestrian network. The PxLTS across the City of Fort Worth network is illustrated in **Figure 33**.

The PxLTS scale is defined as follows:

- PxLTS 1: Minimal Stress
    - Requires little attention to the traffic environment, comfortable for all users, including young children
- PxLTS 2: Low Stress
    - Comfortable crossings for most adults, may require more situational awareness than younger children can manage
- PxLTS 3: Moderate Stress
    - Uncomfortable to many pedestrians and demands a higher level of attentiveness
- PxLTS 4: High Stress
    - Typically only used by pedestrians with limited alternatives or high tolerance for traffic exposure

Crossing Gaps

The PxLTS analysis highlights the high-stress pedestrian crossings that exist across the City of Fort Worth. These crossings are important to recognize; however, in some areas they can be avoided where a nearby lower-stress crossing exists. The greatest challenges to pedestrian connectivity are corridors with extended distances between low-stress crossings. **Figure 34** highlights these long, linear barriers that often force people to make dangerous crossings because there are no other lower-stress alternatives nearby.

Figure 33: PxLTS

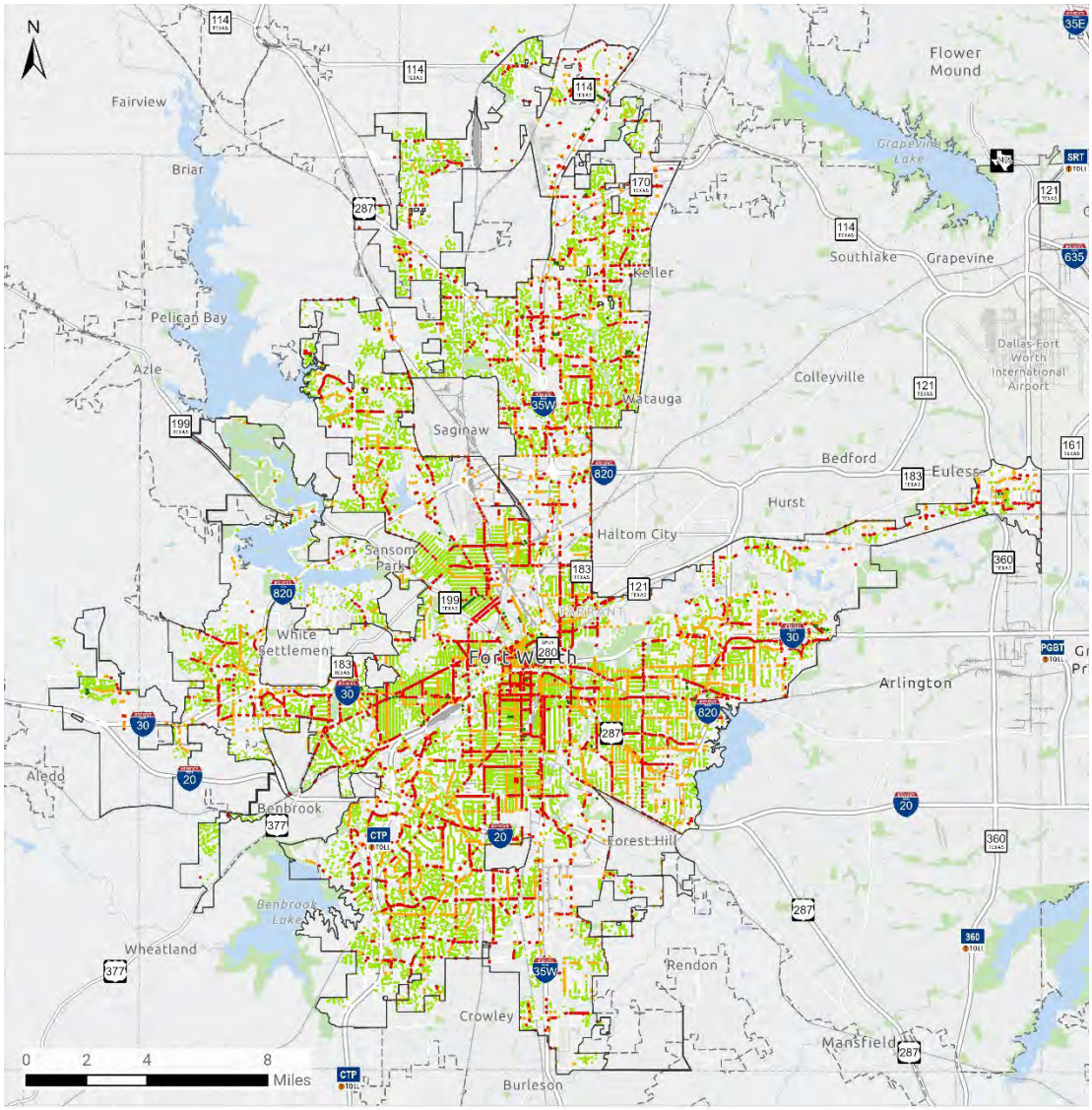
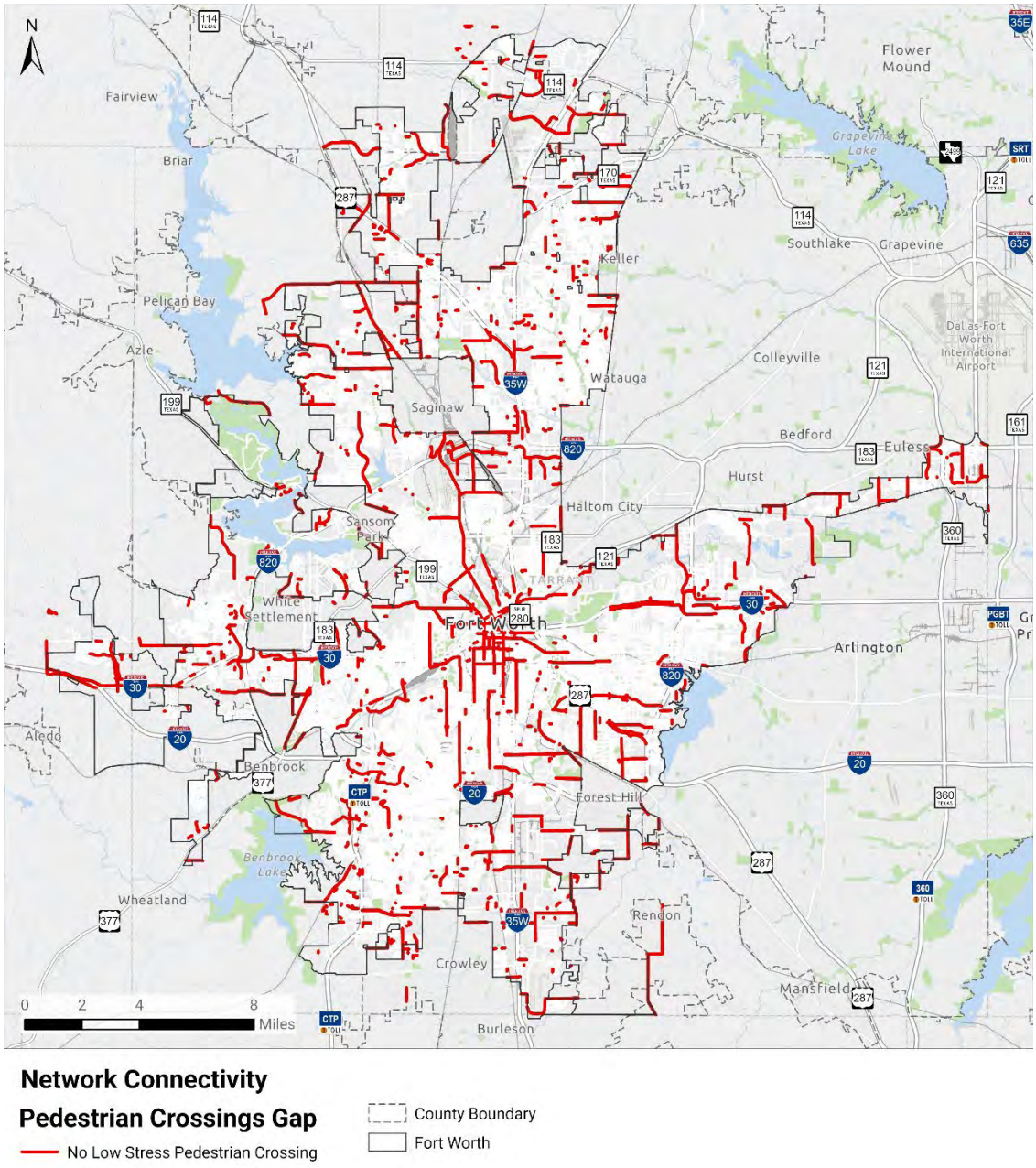


Figure 34: Gaps Between Low-Stress Crossings



3.6.2.1.3 Sidewalk Presence & Quality

In addition to crossing stress, the presence of sidewalks and the quality of existing sidewalks are also critical components of the overall pedestrian network. City of Fort Worth sidewalk data was mapped by

joining data from individual sidewalk segments to the city's roadway centerline layer. Centerline segments with no associated sidewalk data were then mapped be mapped as sidewalk gaps.

While missing sidewalk is the most obvious barrier to pedestrian connectivity, sidewalk quality also has a significant impact on people's walking experience, especially when paired with PxLTS. In Fort Worth, sidewalks are present on most streets in the central core; however they become less frequent and less connected to the surrounding areas. The following two figures (**Figure 35** and **Figure 36**) highlight existing sidewalk gaps and areas of poor sidewalk quality. Southern and western Forth Worth on either side of I-20 are areas with the least connected sidewalk networks. Where sidewalks do exist in these neighborhoods, they are often poor quality or only on one side of the street.

Figure 35: Existing Sidewalk Gaps

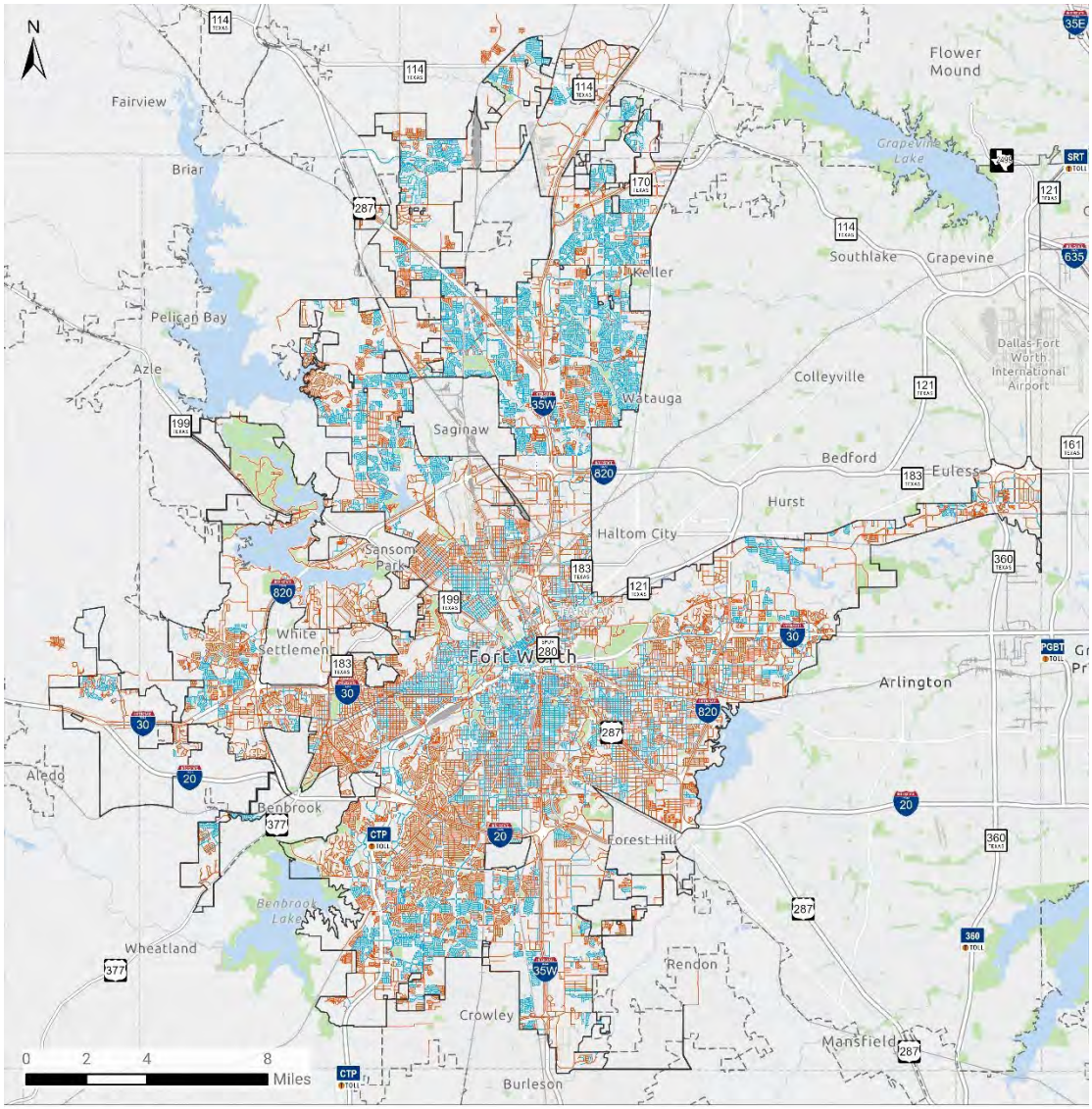
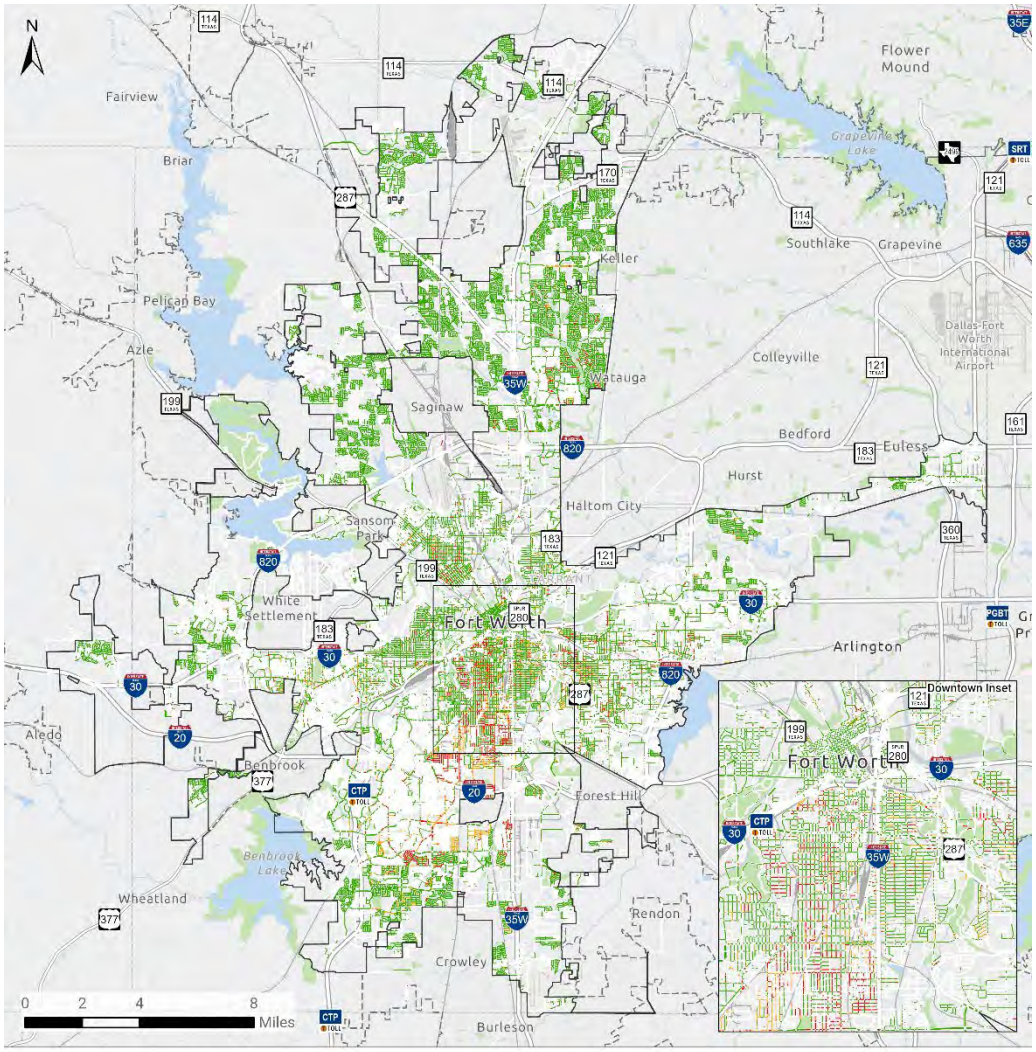


Figure 36: Sidewalk Condition



Network Connectivity

Sidewalk Condition

- Poor
- Fair
- Good

- County Boundary
- Fort Worth

3.6.2.2 Accessibility to Key Destinations

Bicycle and pedestrian networks serve Fort Worth by connecting people to the places where they need to go. While missing infrastructure anywhere in the network can disrupt travel, network gaps near community destinations have the greatest impact on people's ability to make everyday trips without a vehicle. Building on the Bicycle LTS and PxLTS, this analysis determined how well areas are connected to essential services, employment centers, and public facilities.

First, walk sheds and bike sheds were calculated for the destinations listed in **Table 10** below (mapped in **Figure 37**).

Table 10. Travel Shed Destinations (Distances in Miles)

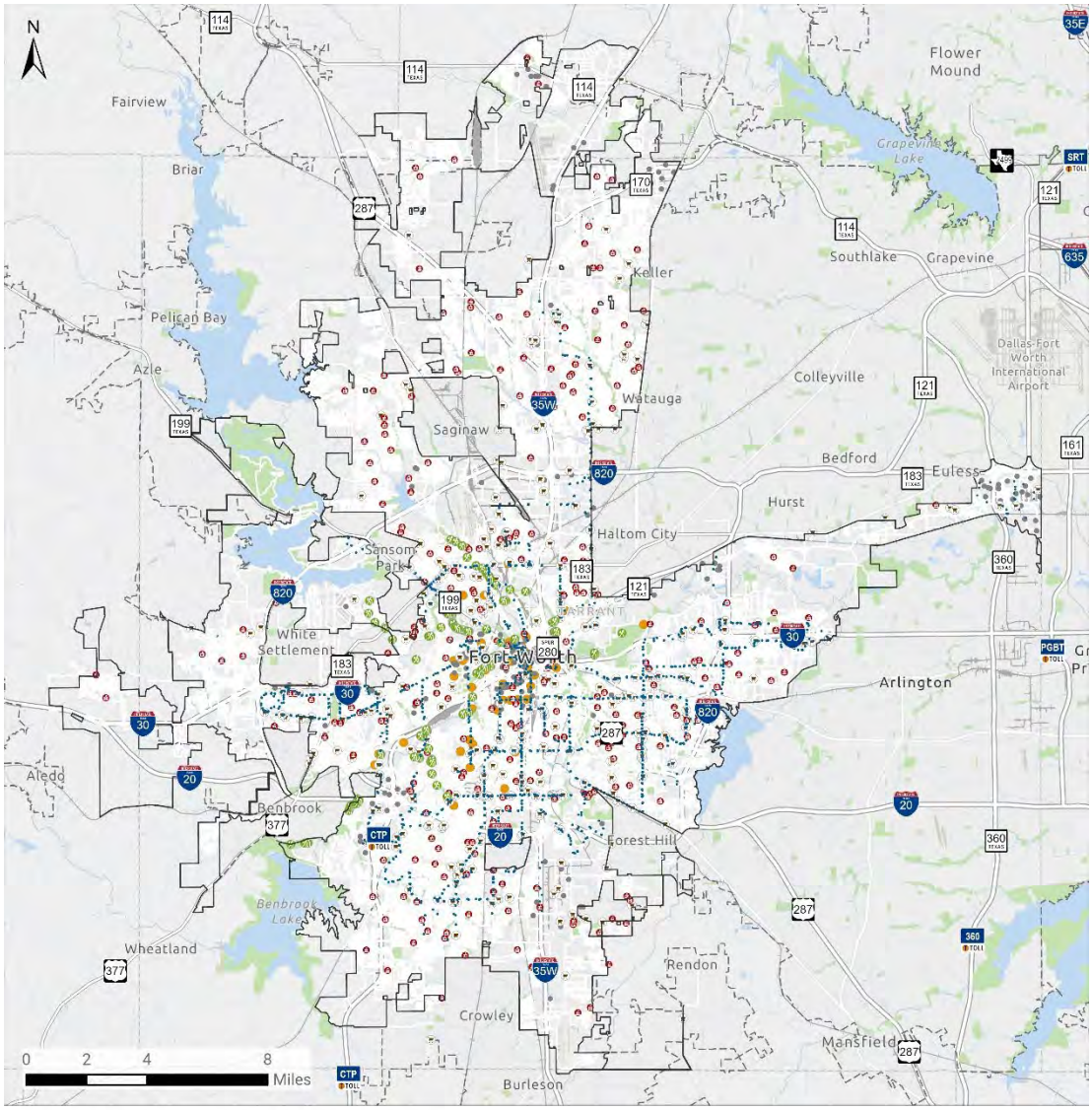
	Walk	**Bike**
Schools	0.25	0.50
Grocery stores	0.25	1.00
Transit stops	0.25	0.50
Employment centers	0.25	2.00
Bike-share stations	0.25	1.00
Trail access points	0.25	1.00

Once the travel shed networks were established, a 500-foot hexagon grid was laid over the travel sheds for each mode and destination. Then sidewalk and bicycle network accessibility were calculated within each hexagon cell:

- **Sidewalk Index:** Sidewalk accessibility within each hexagon cell was calculated as the ratio of complete sidewalk to overall sidewalk potential if sidewalks were fully present on both sides of the street. For example, 10 miles of walk shed roadway network in a hexagon would require 20 miles of sidewalks to represent complete sidewalks on both sides of the street and a resulting index score of 100 percent.
- **Bicycle Index**: Bicycle accessibility was based on the length of low-stress bikeways (LTS<=2) as a percentage of the total bike shed roadway network. For example, 10 miles of bike shed roadway in a hexagon with 5 miles of LTS 1 or 2 segments would result in a 50 percent index score.

Bicycle and pedestrian indices were created for each destination category. The overall bicycle and pedestrian indices (mapped in **Figure 38** and **Figure 39**) were calculated with weighted averages based on the amount of roadway that each destination's travel sheds covered. For example, if a hexagon included the travel sheds for a transit stop and a school, it would be the weighted average of the two coverage percentages. Having no overlap for other categories did not lower a cell's final value.

Figure 37: Key Destinations



Accessibility to Key Destinations

Destination Points

- Bike Share Station
- Employment Center
- Grocery Store
- School
- Trail Access Point
- Transit Stop

- County Boundary
- Fort Worth

Figure 38: Bicycle Travel Shed Index

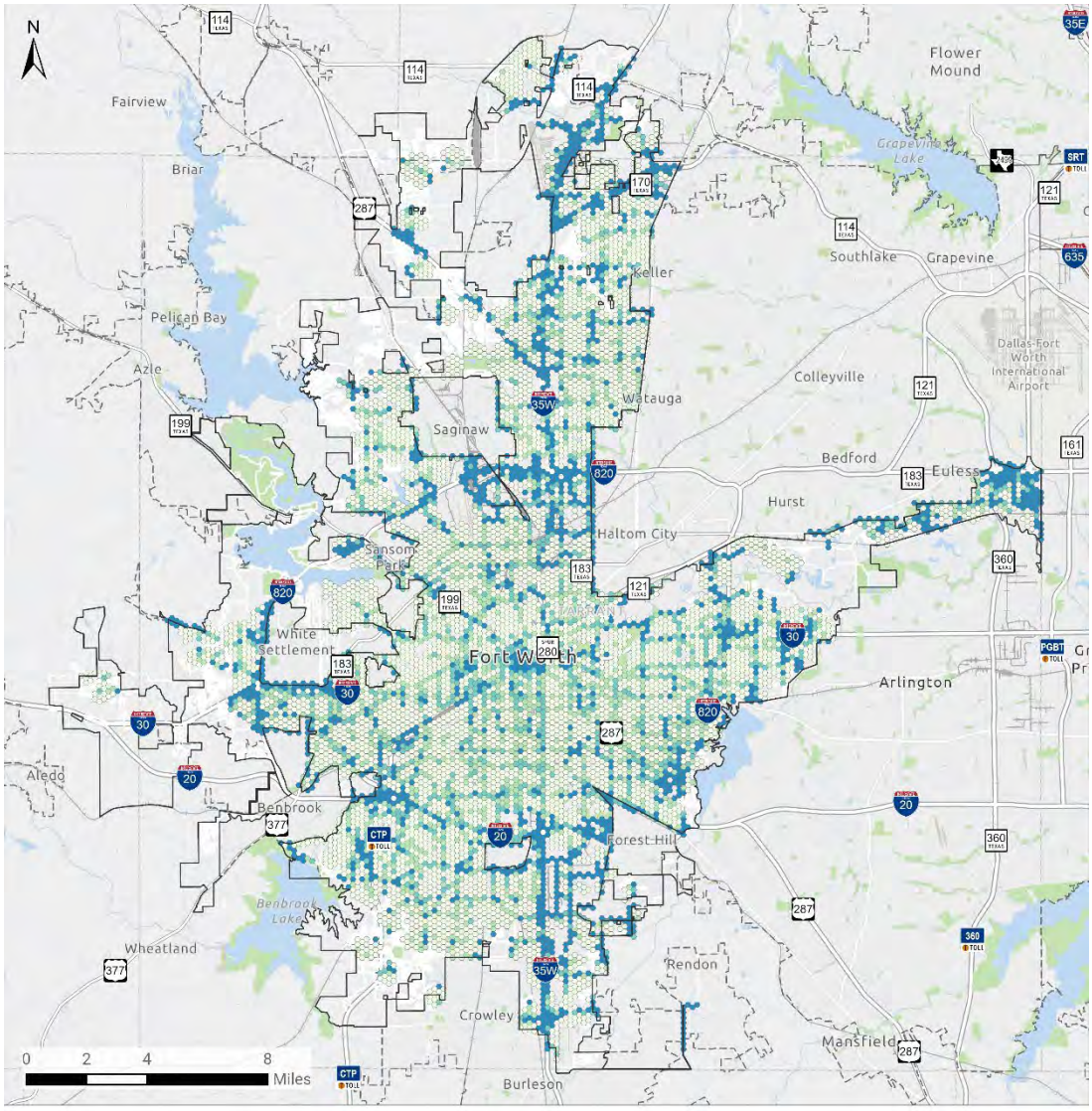
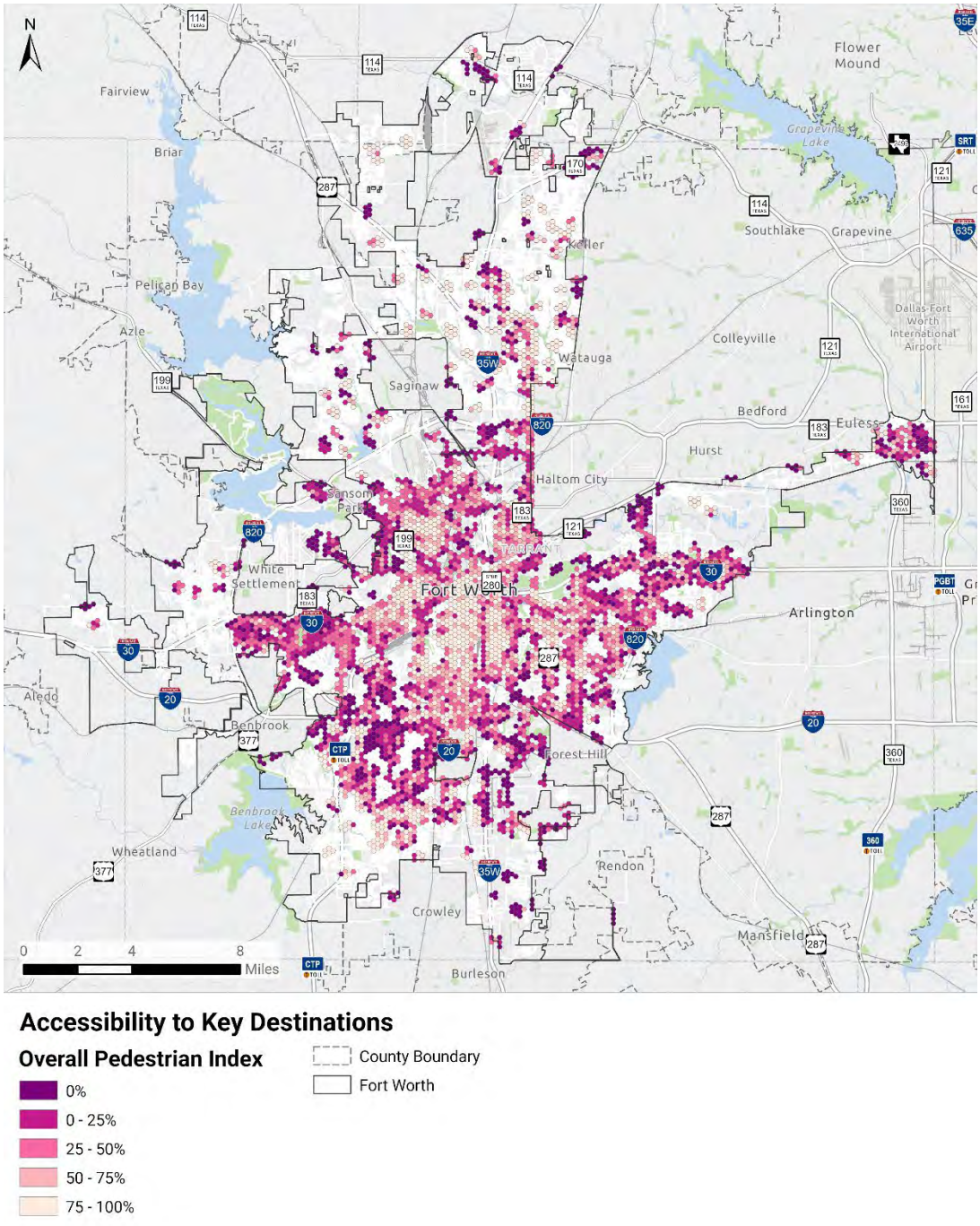


Figure 39: Pedestrian Travel Shed Index



3.6.2.2.1 Coverage of Pedestrian and Bicycle Networks

In addition to evaluating walking and bicycling accessibility to key destinations, the overall coverage of the pedestrian and bicycle networks was evaluated for the City of Fort Worth as a whole. Network coverage was assessed for sidewalks, existing bikeways, and low Bicycle LTS streets.

- **Sidewalks (Figure 40):** Sidewalk coverage was calculated based on the existing sidewalks identified in **Section 3.6.2** overlayed with a 500-foot hexagon grid. Like the Sidewalk Index above, the sidewalk coverage was calculated as the ratio of existing sidewalk to overall sidewalk potential (two times total roadway mileage) within each hexagon cell. Sidewalk coverage in Fort Worth is highest in the central core and northern residential areas. Periphery areas with the lowest sidewalk coverage include neighborhoods near the I-30/I-820 interchange in East Fort Worth and into the south near I-20 and the South Hulen Street corridor.
- **Existing Bicycle Infrastructure (Figure 41):** Coverage of the existing on-street and off-street bikeway networks was mapped based on an area's distance to an existing bicycle facility. Buffers were created around existing bikeway lines in 0.5-mile increments up to 3 miles. The majority of downtown and central Fort Worth core are within half a mile of an existing bikeway; however, significant portions of western, southeastern, and northern Fort Worth are more than 3 miles away from the closest bicycle facility.
- **Low-Stress Bikeways (Figure 42):** Like the Bicycle Index above, the bicycle network coverage was based on the length of low-stress bikeways (Bicycle LTS<=2) as a percentage of the total bike shed roadway distance.

Figure 40: Sidewalk Coverage

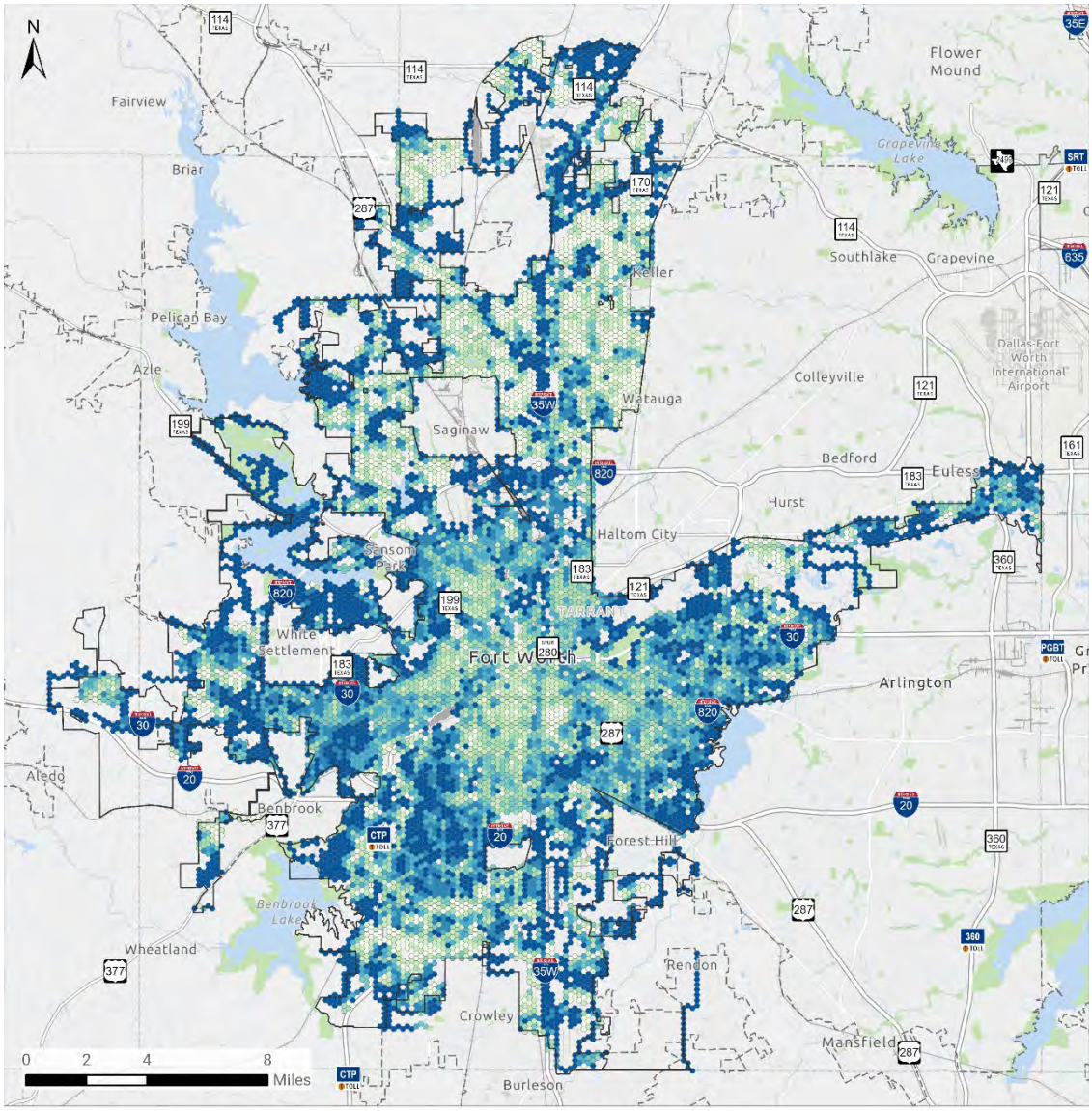


Figure 41: Existing Bikeways Coverage

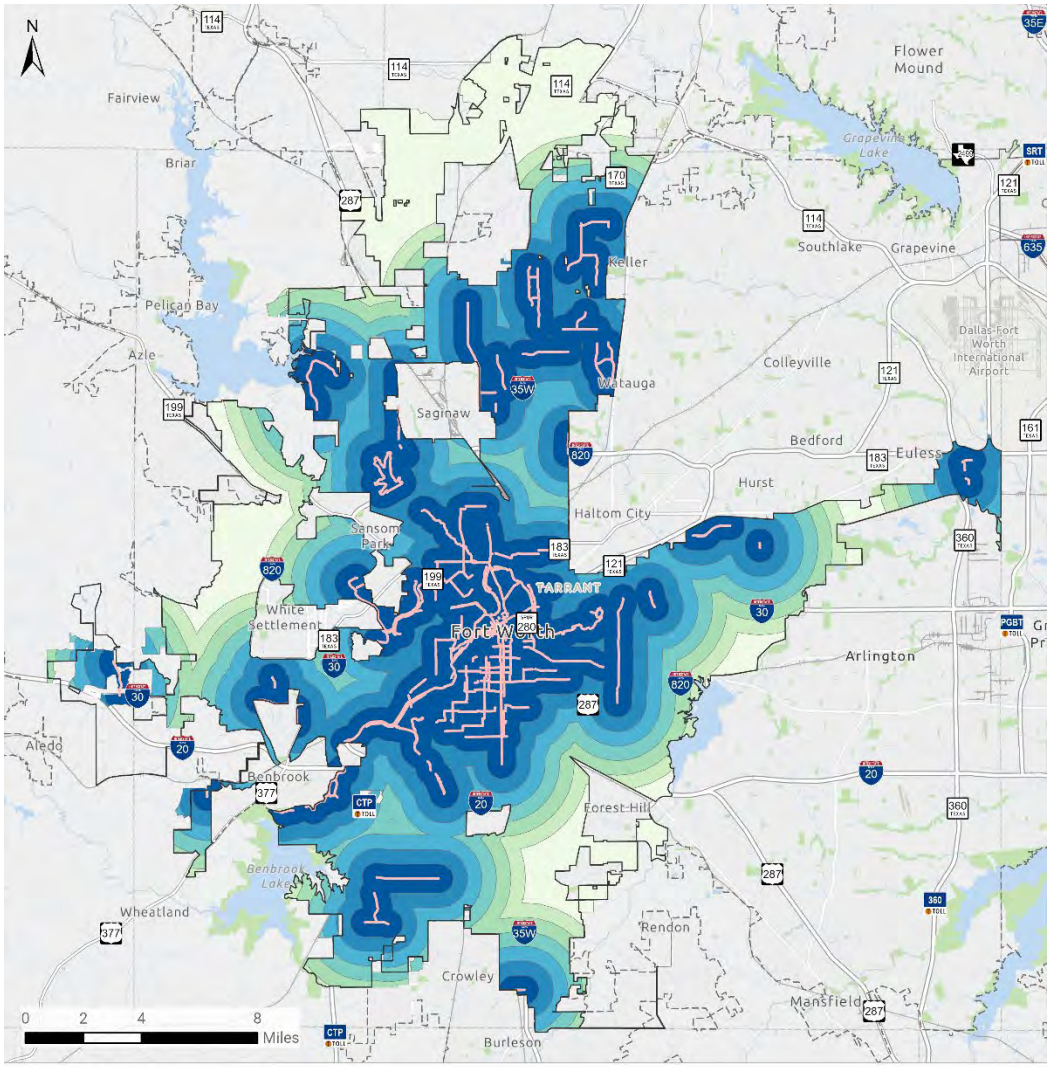
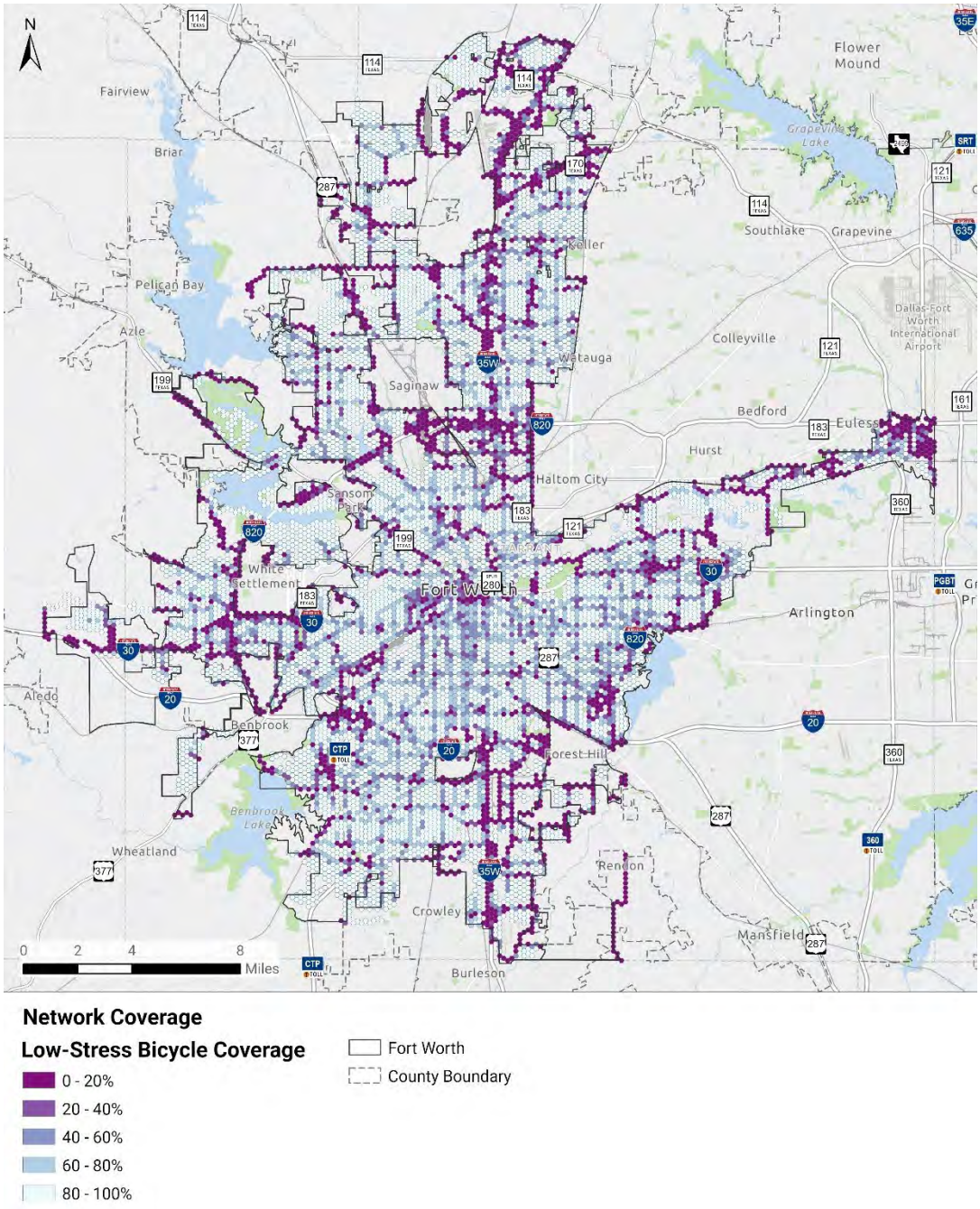


Figure 42: Low-Stress Bikeways Coverage

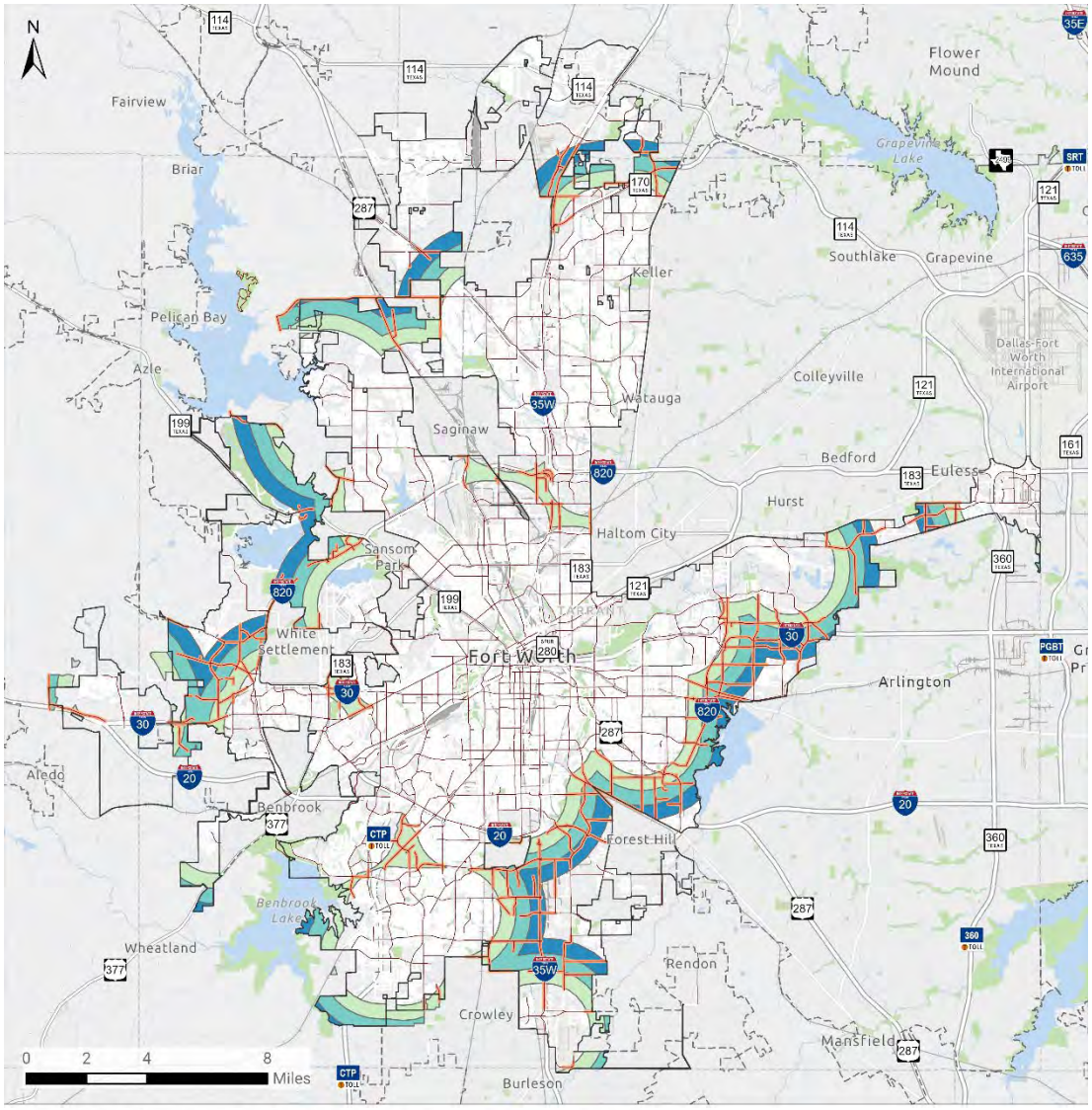


3.6.2.2.2 High-Stress / Low-Coverage Areas

Identifying high Bicycle LTS corridors in areas with low bicycle network coverage can be an important method for understanding where people may most need bicycle infrastructure in Fort Worth. **Figure 43** highlights corridors with LTS 4 in areas that are 2 miles or more from an existing bikeway. Key corridors include:

- Avondale Haslet Road in northwestern Fort Worth
- Eagle Parkway in northern Fort Worth
- Oak Grove Road in southeastern Fort Worth
- Cooks Lane in eastern Fort Worth
- Trinity Boulevard in eastern Fort Worth
- White Settlement Road in western Fort Worth

Figure 43: High-Stress / Low-Coverage Areas



3.6.3 Network Performance (Current and Future Projections)

3.6.3.1 Demand Analysis

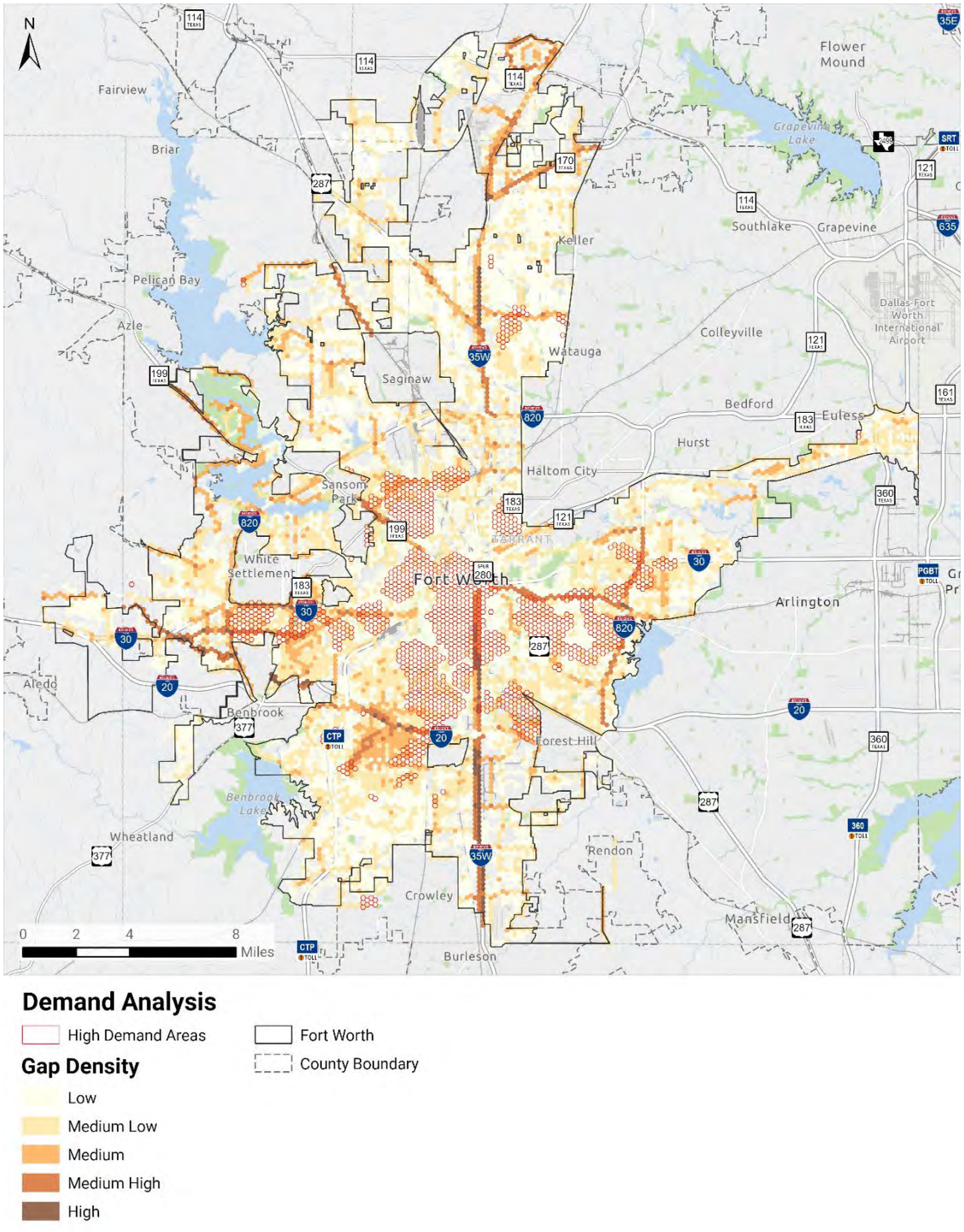
This analysis builds on the demand analysis from the 2019 ATP by overlapping it with the coverage gaps identified in the previous section, highlighting areas with low network coverage despite high demand for walking and bicycling.

First, a Gap Density score was created for each hexagon cell based on the combined mileage of gaps per cell for the following categories:

- **Sidewalk Gaps**: Includes any missing sidewalk segment identified in **Section 3.6.2.**
- **Crossing Gaps**: Includes any crossing gap identified in **Section 3.6.2** with more than 600 feet between a low-stress crossing.
- **Trail Gaps**: Includes any proposed trails or side paths from the 2019 ATP that have not yet been constructed.
- **On-Street Bikeway Gaps**: includes any proposed on-street bikeways from the 2019 ATP that are not yet constructed.

The Gap Density hexagons were then overlaid with the top 10 percent highest-scoring hexagons from the 2019 ATP Demand Analysis. **Figure 44** highlights areas in Fort Worth with the highest demand and greatest density of gaps for all modes combined.

Figure 44: Gap Density and Demand Analysis



3.6.3.1.1 Overlapping Areas of Needs

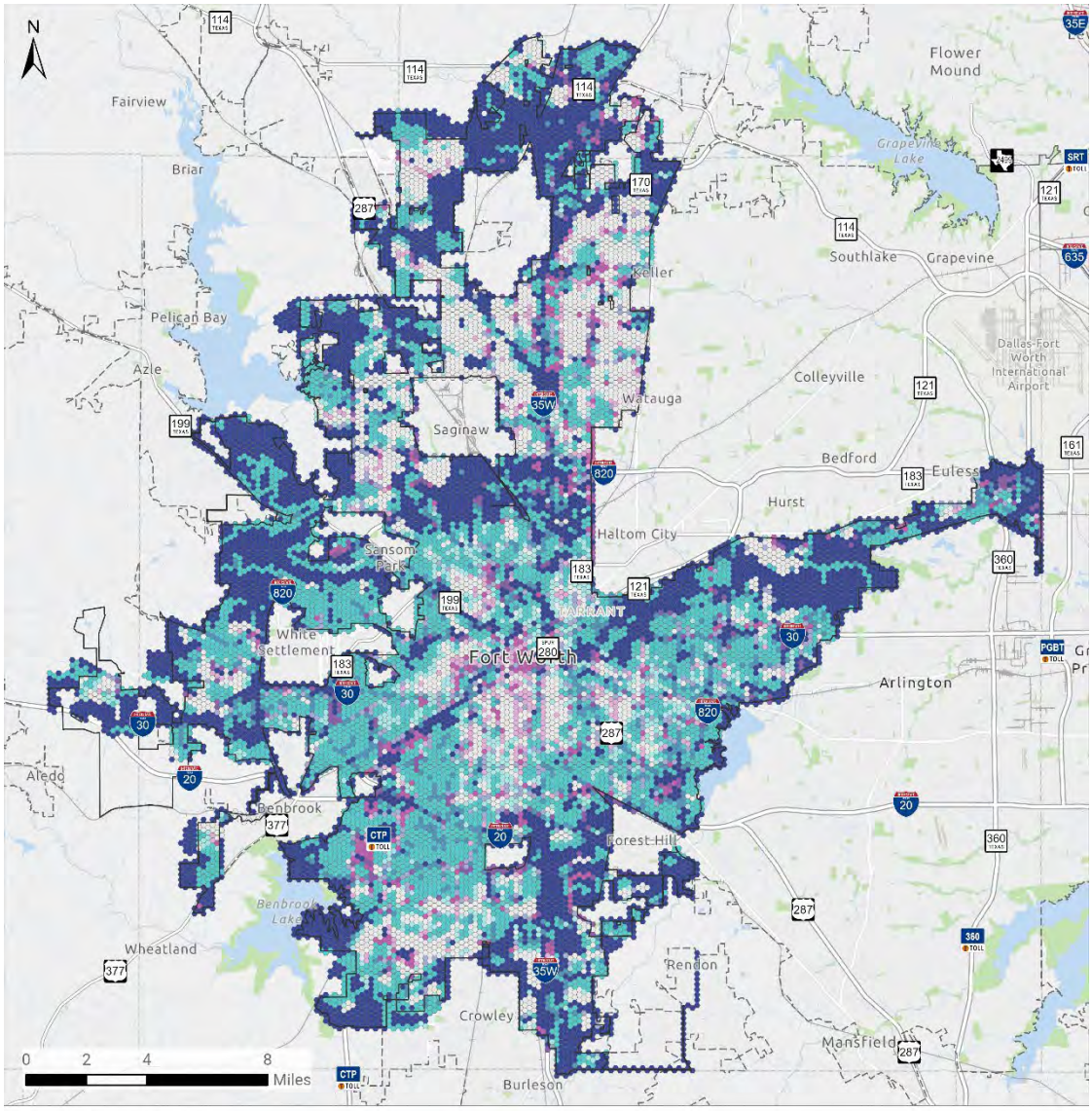
Significant demand also exists from the overlapping effect where bicycle and pedestrian coverage are

both low. The map and table below highlight areas of overlapping needs for both walking and bicycling. Using the coverage analysis from **Section 3.6.2**, sidewalk percentages were grouped into high, medium, and low categories of need. Low-stress bikeway coverage percentages were also grouped into high, medium, and low coverage needs. The bivariate table below (**Table 11**) was used to identify and map areas where overlapping pedestrian and bicycle need are the highest (**Figure 45**).

Table 11. Bivariate Overlapping Needs

Pedestrian Need	High			
	Medium			
	Low			
	Bicycle Need	Low	Medium	High

Figure 45: Overlapping Bicycle and Pedestrian Need



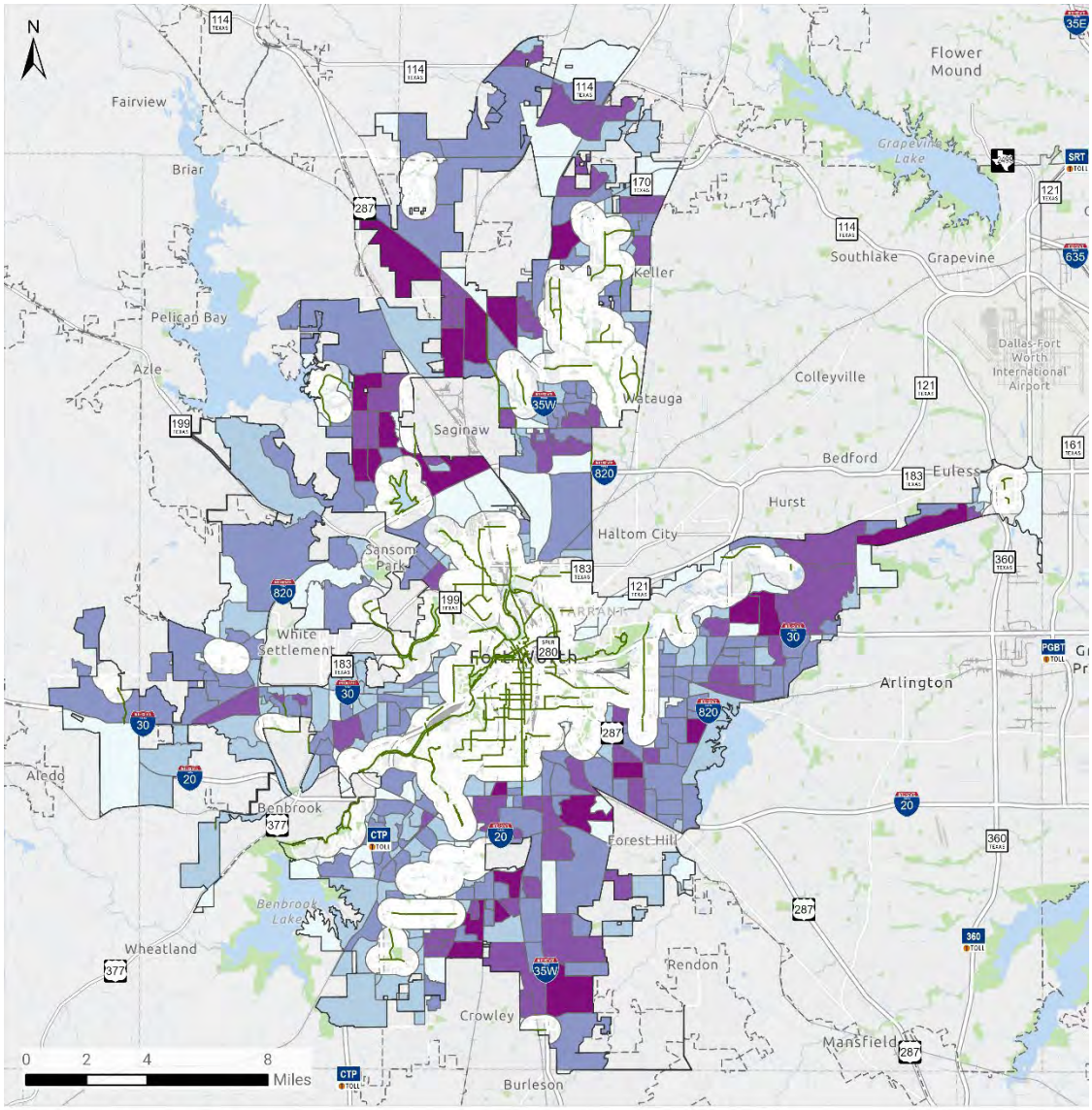
3.6.3.2 Performance Gaps

Gaps in the existing bikeway network do not affect the population evenly. **Figure 46** highlights the number of people living beyond 0.5 mile of an existing on-street or off-street bikeway. To calculate this number, existing bikeways were buffered and then overlapped with 2023 ACS block groups. The percentage overlap was calculated for each block group and then multiplied by the block group's total population to estimate the number of people in the block group living within or not within a half mile of a bikeway. For example, if 100 people lived in a certain block group and 20 percent of the block group overlapped with the bikeway half-mile buffer, 80 people would be estimated to live in a performance gap area.

Because Fort Worth's on-street and off-street bikeway networks are centralized around the downtown area, the greatest population performance gaps exist on the city's periphery. Key areas with the highest population performance gap densities include:

- Neighborhoods in Northwestern Fort Worth on either side of 287 Business
- North of I-820 near Marine Creek Lake
- Meadowcreek neighborhoods between Sycamore School Road and the southern city limits
- Sandybrook and Harmony Hills neighborhoods near I-30 and I-820 in northeast Fort Worth

Figure 46: Population Gaps for Existing Bikeways



3.7 Freight Gap Analysis

3.7.1 Approach Overview

The purpose of the freight gap analysis was to identify infrastructure and operational deficiencies that limit the efficiency, safety, and inter- and intra-regional freight movement connectivity. The methodology highlights intercity and regional gaps in network continuity, last-mile access to key freight generators, and performance constraints and safety challenges to guide targeted investment in high-priority freight corridors.

3.7.2 Methodology

To analyze freight network connectivity and gaps, the process focused the data collection effort to establish and understand existing freight conditions at a local, city, and regional basis. The analysis began by mapping the designated freight network, including:

- National Highway Freight Network
- Texas Department of Transportation-designated truck routes
- Federal Highway Administration intermodal connectors
- Intermodal and rail facilities (e.g., terminals, rail yards, transload centers)

Following the establishment of the existing conditions, the process began with evaluation of three core components of last-mile connectivity, inter-city and regional trips, and freight safety. Freight business clusters were identified through a preliminary top trip pair analysis and intermodal and rail facilities point data for last-mile connectivity analysis. With the use of Replica roadway freight trip data, travel sheds were created around clusters to identify locations where freight activity is concentrated but not well-served by existing infrastructure, highlighting underserved freight-generating areas or intermodal facilities with poor last-mile access or operational challenges, such as freight dispersion to local or collector roads. The freight clusters Replica trip volume data was collected along with O/D data to analyze routing patterns to and from U.S. Census Bureau Tracts in (local) and outside (regional) the City of Fort Worth. The combination of freight activity clusters and O/D Census Tract Pairs were used to identify roadway facilities and freight clusters with the greatest freight activity. The final confirmation to support this effort was the identification of the top industrial, manufacturing, and warehousing employers for their proximity to the freight activity.

Access to freight-generating businesses was then evaluated at an intercity and intra-regional and by assessing network access to major industrial areas, warehouses, ports, rail yards, and distribution hubs. With use of Replica freight trip and volume data, the team directly analyzed trips between freight clusters and freight corridors. The analysis identified freight O/D pairs at the census tract level and by routing paths and access efficiency based on quantifying real-world access times to identify spatial clusters with poor intercity and regional connectivity. Using the shortest route tool in Google Maps, the team then identified inefficiencies in primary and alternative routes, such as circuitous routes, reliance on local roads, or access limitations. Freight volume, LOS, and congestion patterns were used to assess truck volumes and projected freight demand on key corridors. The NCTCOG TDM and/or Replica

identified segments with high freight demand and poor LOS. This analysis found gaps that highlight which segments' augmentation would most benefit from greater freight connectivity and efficiency.

Interactions between commercial freight accidents, the high-injury network, and truck routes were used to identify freight safety hotspots. The CRIS dataset prepared by Toole Design was used to identify locations where freight movement contributes to serious safety concerns. The analysis focused on crashes involving commercial vehicles, particularly those resulting in death or serious injury. Toole's analysis found that trucks are disproportionately involved in KSI crashes. This dataset was used to identify and validate freight-related safety hotspots and the high-injury and freight network. A heat mapping analysis highlights the highest-risk segments, intersections, and access points that should be prioritized for crash reduction or freight restrictions. These include areas with tight geometry or frequent conflicts between freight and other users, especially in urban and industrial zones.

3.7.3 Identified Gaps

The freight gap analysis began with mapping the freight trips between areas (census tracts) of Fort Worth. **Figure 47** shows significant Fort Worth freight activity from the northern intermodal hub and Alliance industrial and commercial hub traveling to the city core and further south to the FedEx Ground distribution center at the junction of U.S. Highway 287 and I-820. The freight activity within census tracts or intra-tract trips was focused at Alliance, downtown, Saginaw, and FedEx Ground to the south. The Top 10 Trip pairs among the identified local trips were then identified to form the freight clusters, or the clusters of freight businesses exhibiting the greatest freight activity. The clusters with the most freight trips O/Ds and intra-tract tract trip densities are shown in **Figure 48.**

The shortest local paths, the routes most likely to be provided by Google and other platforms, for commercial truck drivers were then mapped with a shortest path and alternative routes (**Figure 49**). The 20 routes were then evaluated for consistency, or the future (2045) LOS available to the trucks, and availability of truck-designated routes and infrastructure to service the highest freight activity corridors. The resulting local gap recommendations for evaluation under the screening criteria are shown in **Figure 50**.

Figure 47: Freight Trips (Fort Worth to Tarrant County)

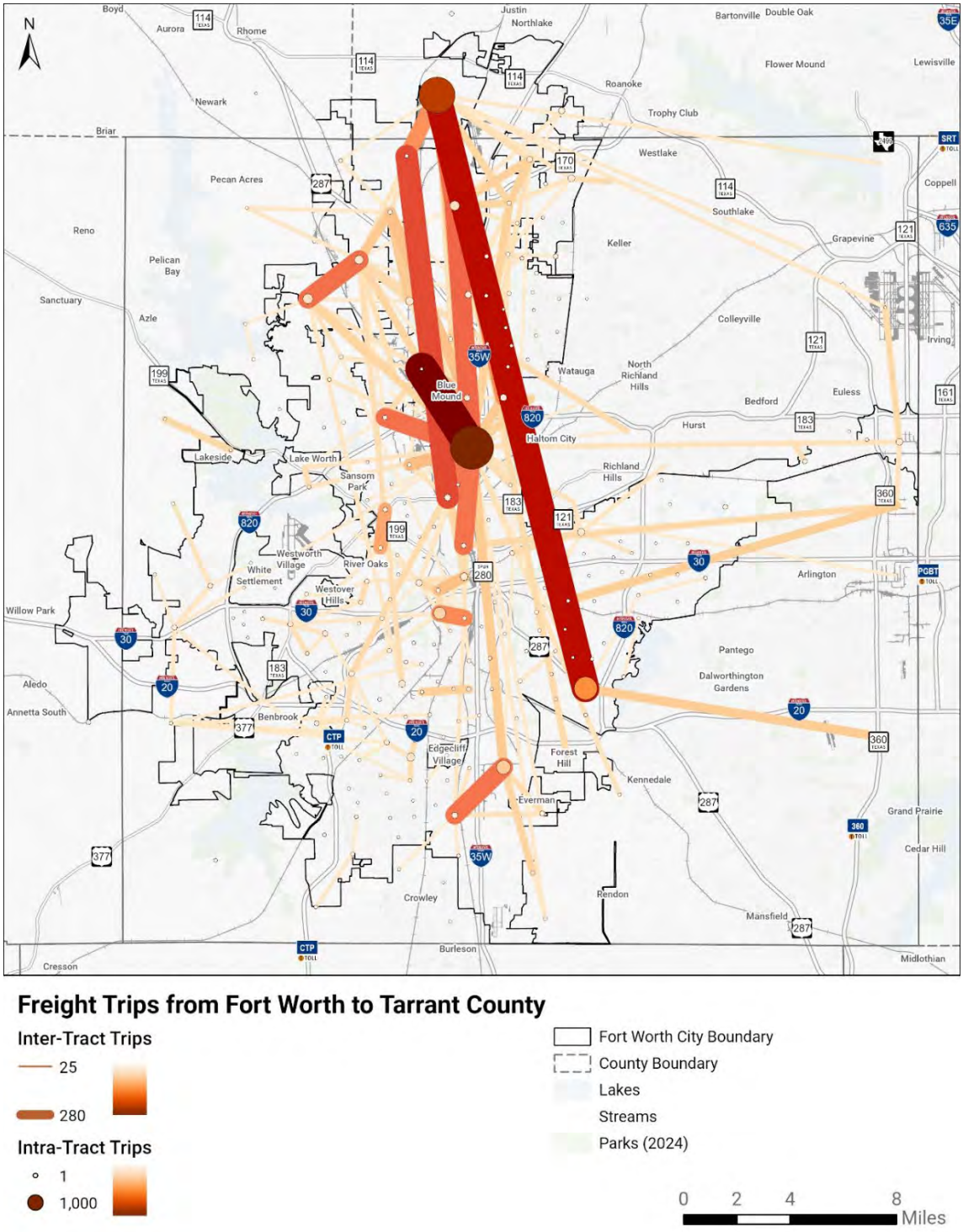


Figure 48: Top 10 Freight Trip Pairs

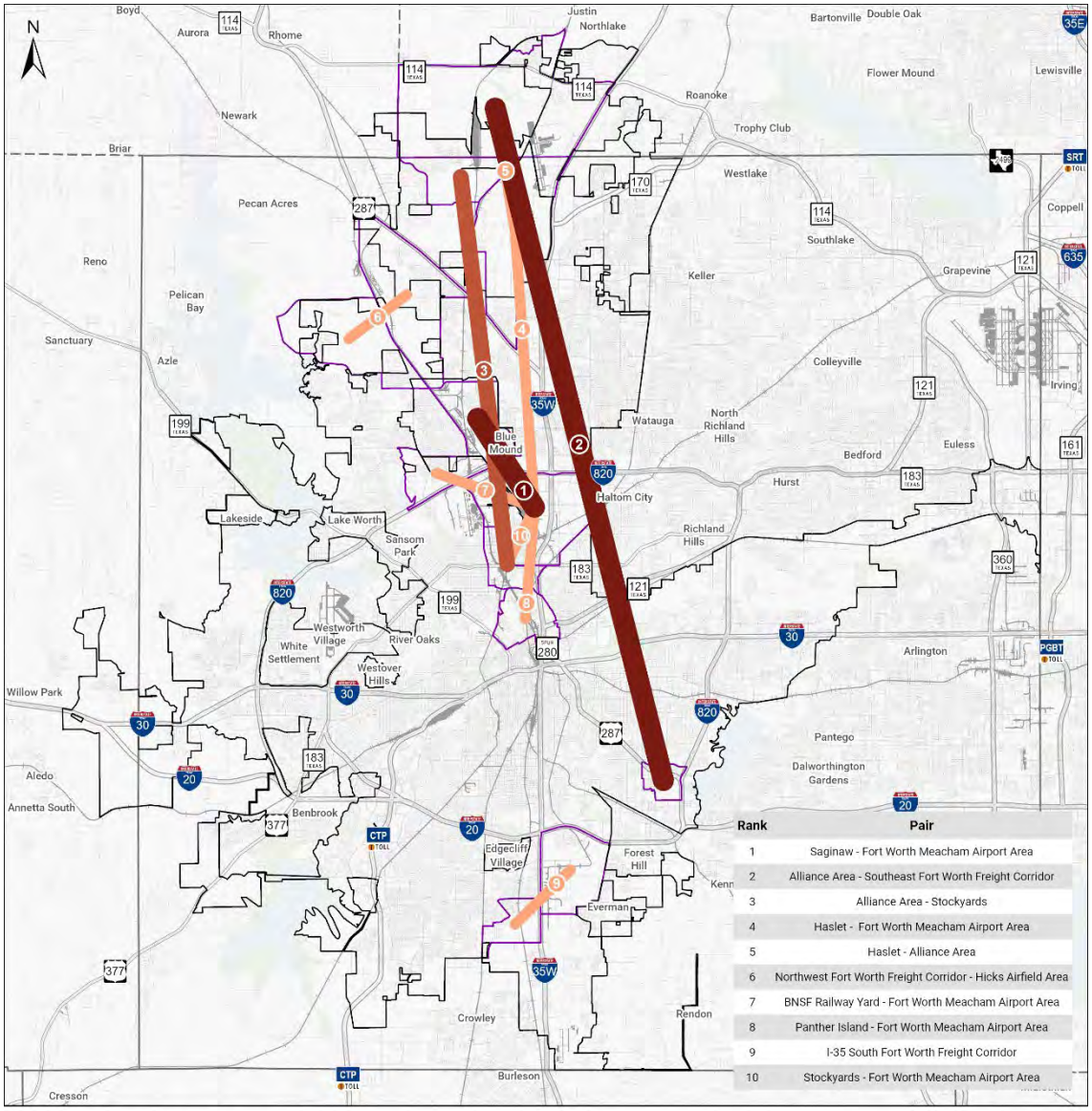


Figure 49: Shortest Path Between Freight Pairs

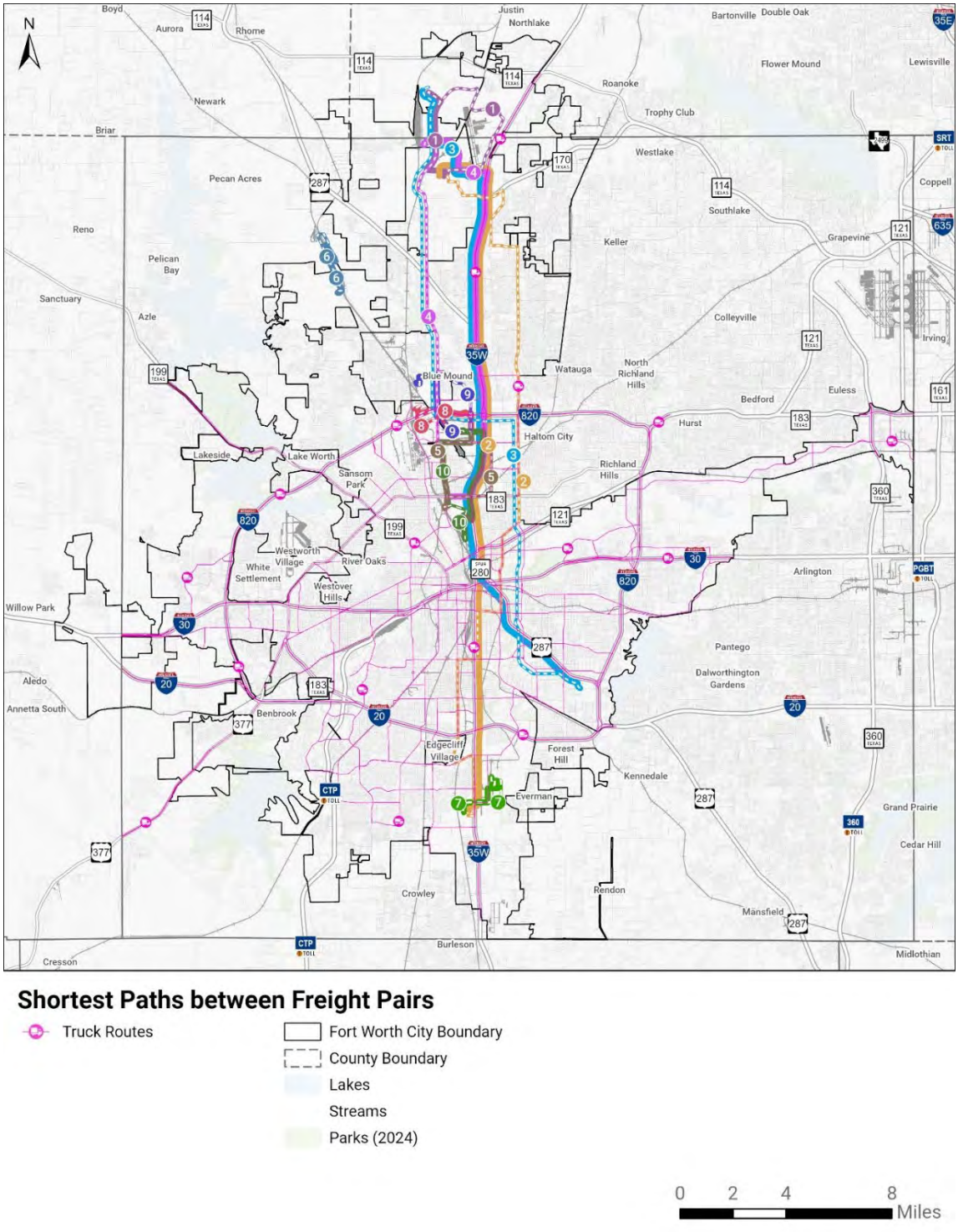
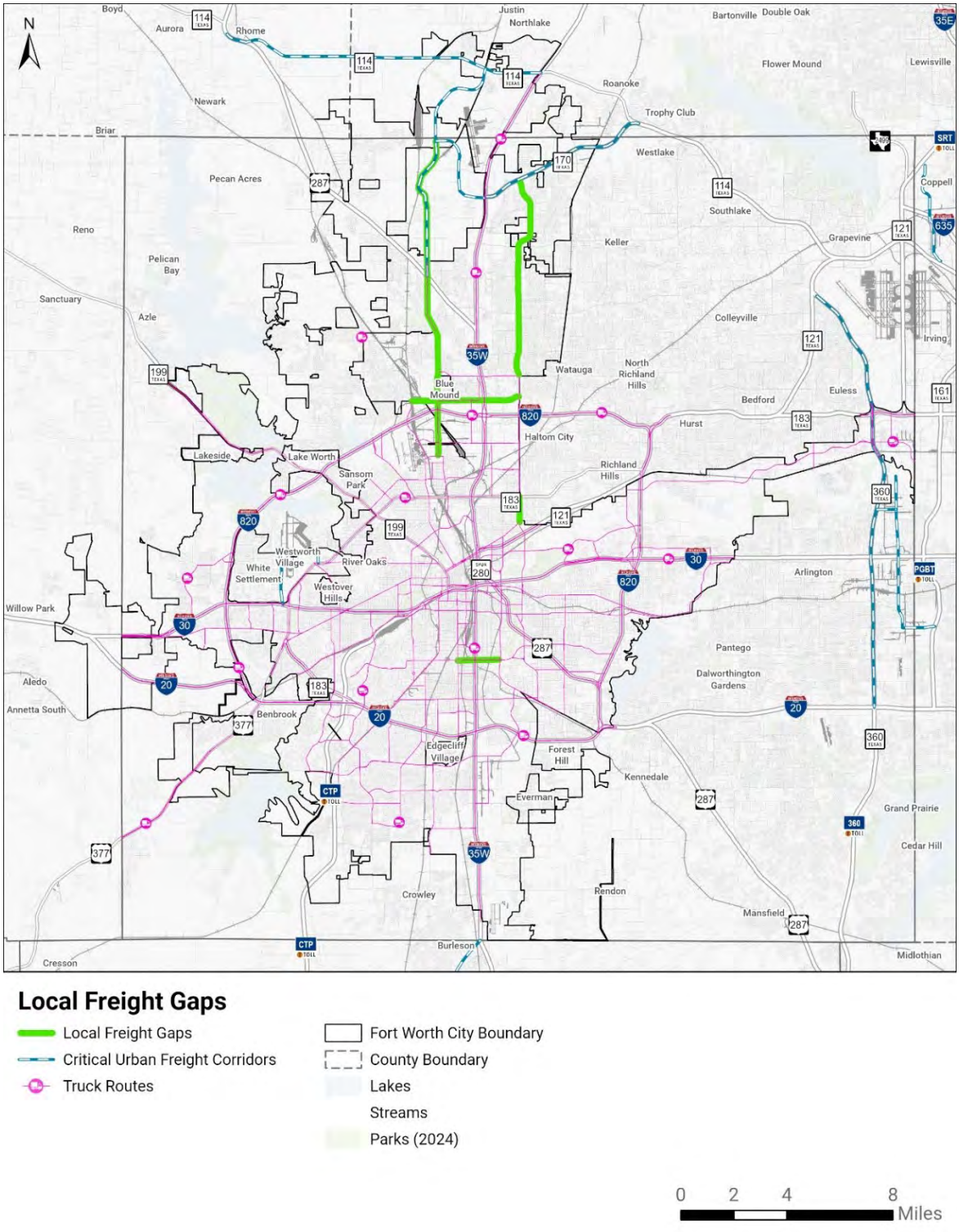


Figure 50: Local Freight Gaps



The local gap recommendations dually served to initiate the last-mile gap analysis. The freight clusters with the greatest intra-tract trips and local Fort Worth trips were the ideal locations to evaluate for the

compounding factors of freight activity. The data aggregation of previous steps included the overlay of freight volume data on roads below the arterial classification that are used to service the freight clusters along with the top commercial and industrial employers of the city (**Figure 51**). A crash pattern analysis was then drawn upon for further identification of last-mile connections and safety.

The primary locations of incidents for off-interstate crashes are along the top trip pairs previously identified, and the intersection of freight clusters and the interstates (**Figure 52**). These safety incidents' locations support the findings of the recommended gaps and are intended to be supplemental to crash activity downtown currently being remediated through the Connecting the Core plan. These highly industrial and freight-concentrated areas can be upgraded to increase circulation efficiency with the addition or an increased functional classification of the recommended freight gaps, as shown in **Figure 53**.

Figure 51: Top 10 Freight Clusters

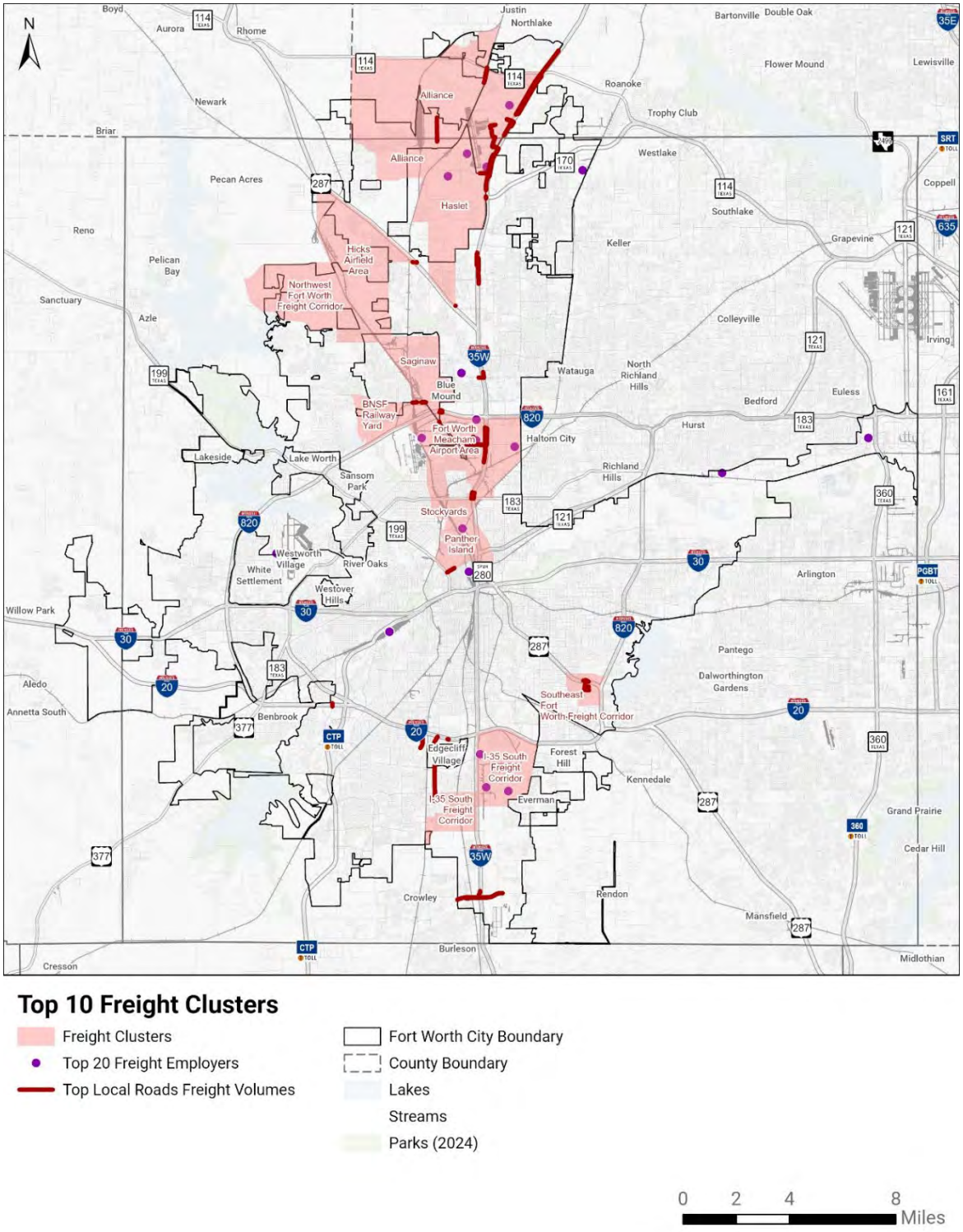


Figure 52: Freight Crash Density

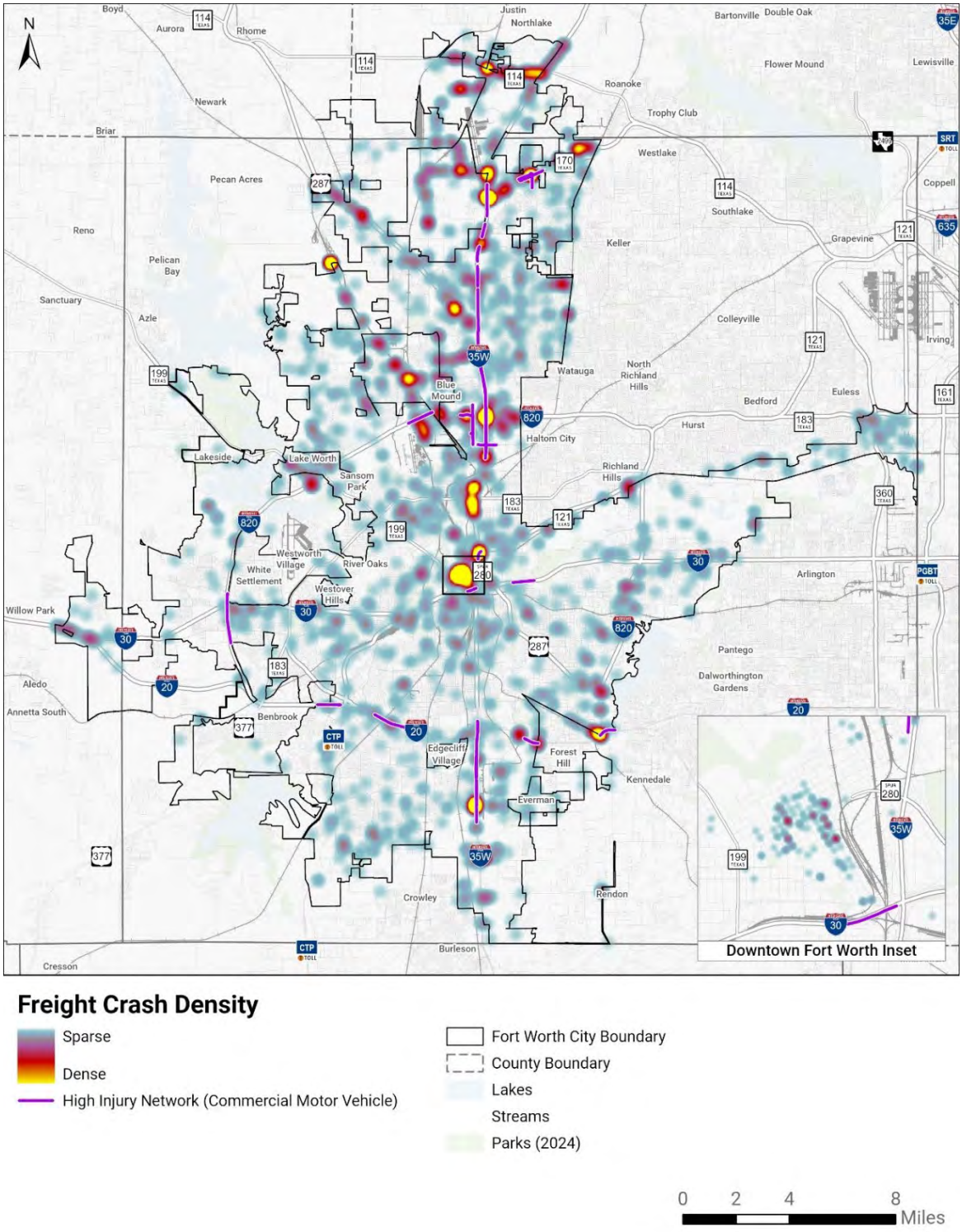
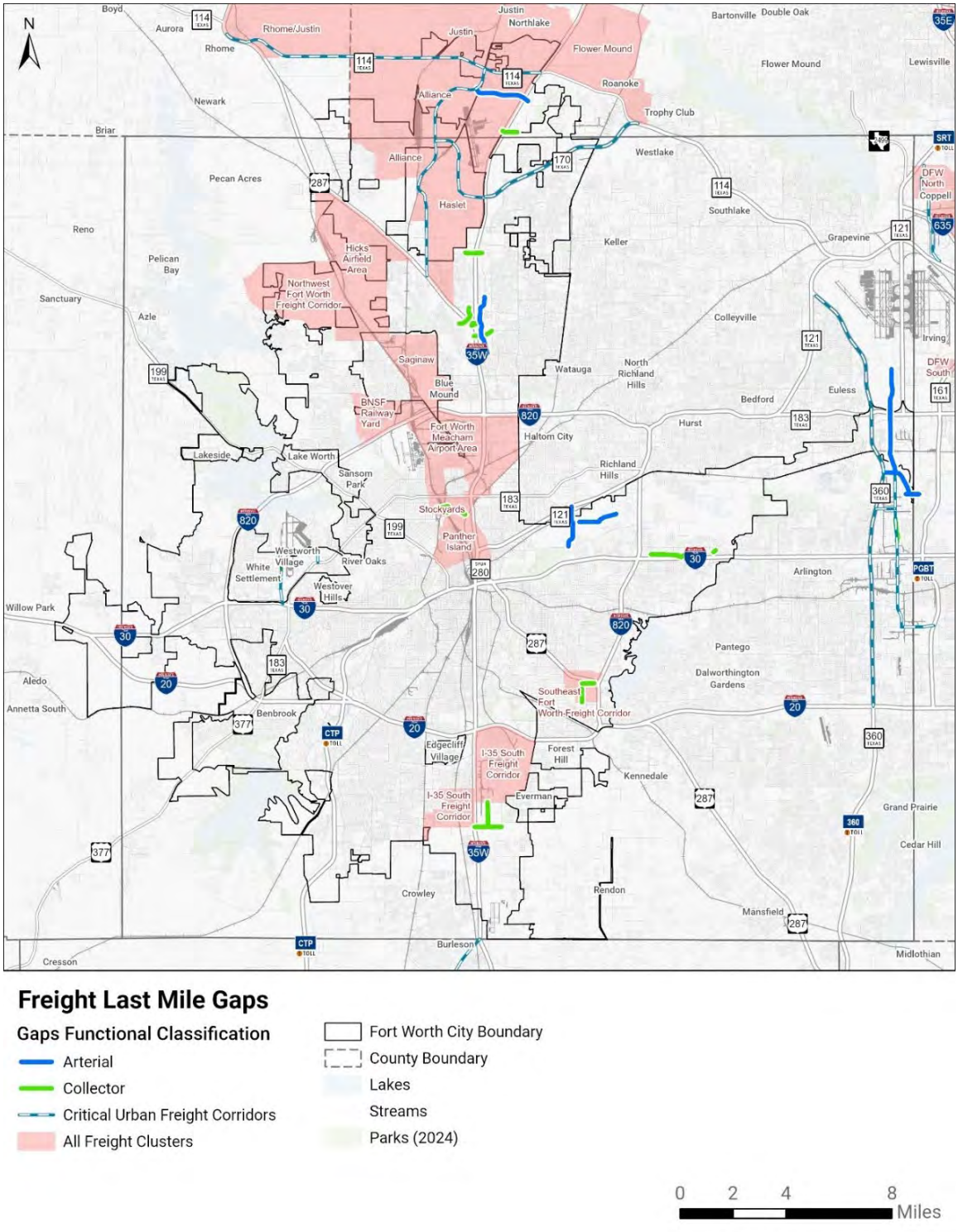


Figure 53: Freight Last-Mile Gaps



Upon completion of local and last-mile gaps, regional freight interactions between the city and its neighbors were analyzed to understand and prioritize connectivity across the Greater Fort Worth Area.

The analysis followed the same process as the local gaps analysis, beginning with identification of the top trip pairs between census tracts in the nine county Greater Fort Worth Area (**Figure 54**), followed by prioritizing the top five pairs across the region (**Figure 55**). The top five trip pairs were then mapped for the shortest path, again identifying the alternative routes per trip pair (**Figure 56**). The recommendations were identified with additional data, including freight volume and LOS projections into 2045 (**Figure 57**).

Figure 54: County-Level Fort Worth Trip Pairs

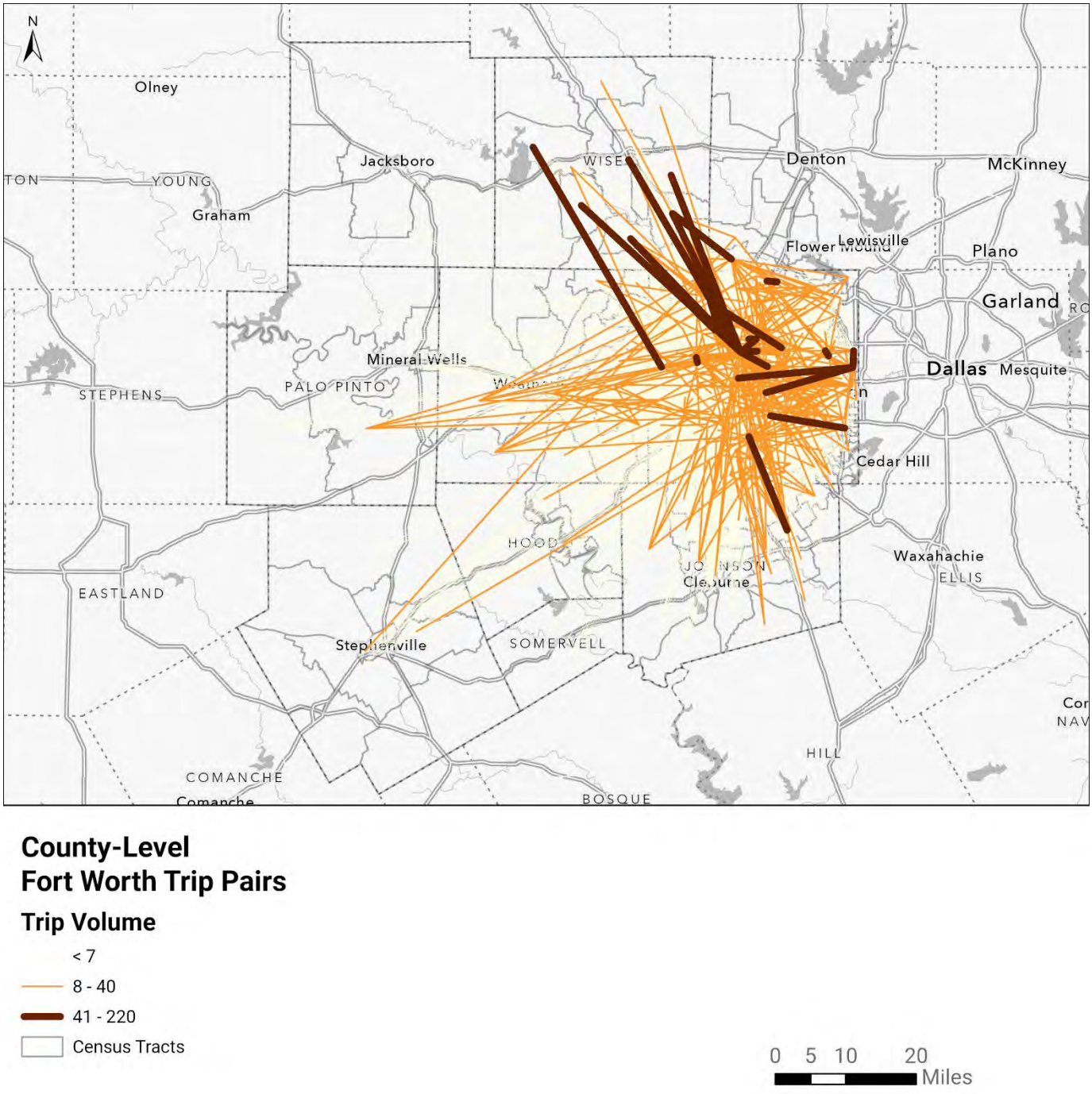


Figure 55: Top 5 Regional Freight Trip Pairs

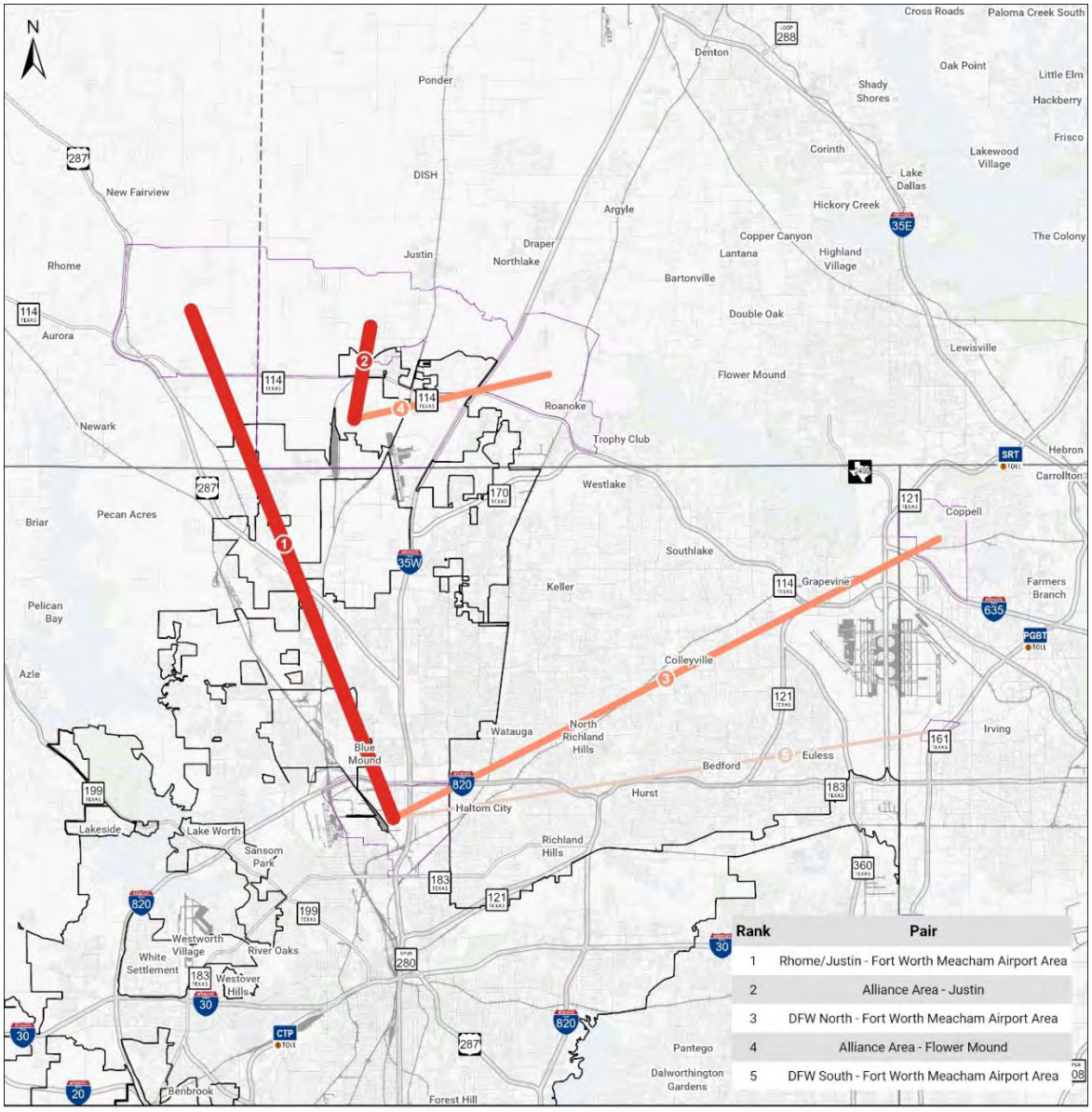


Figure 56: Shortest Paths Between Freight Pairs

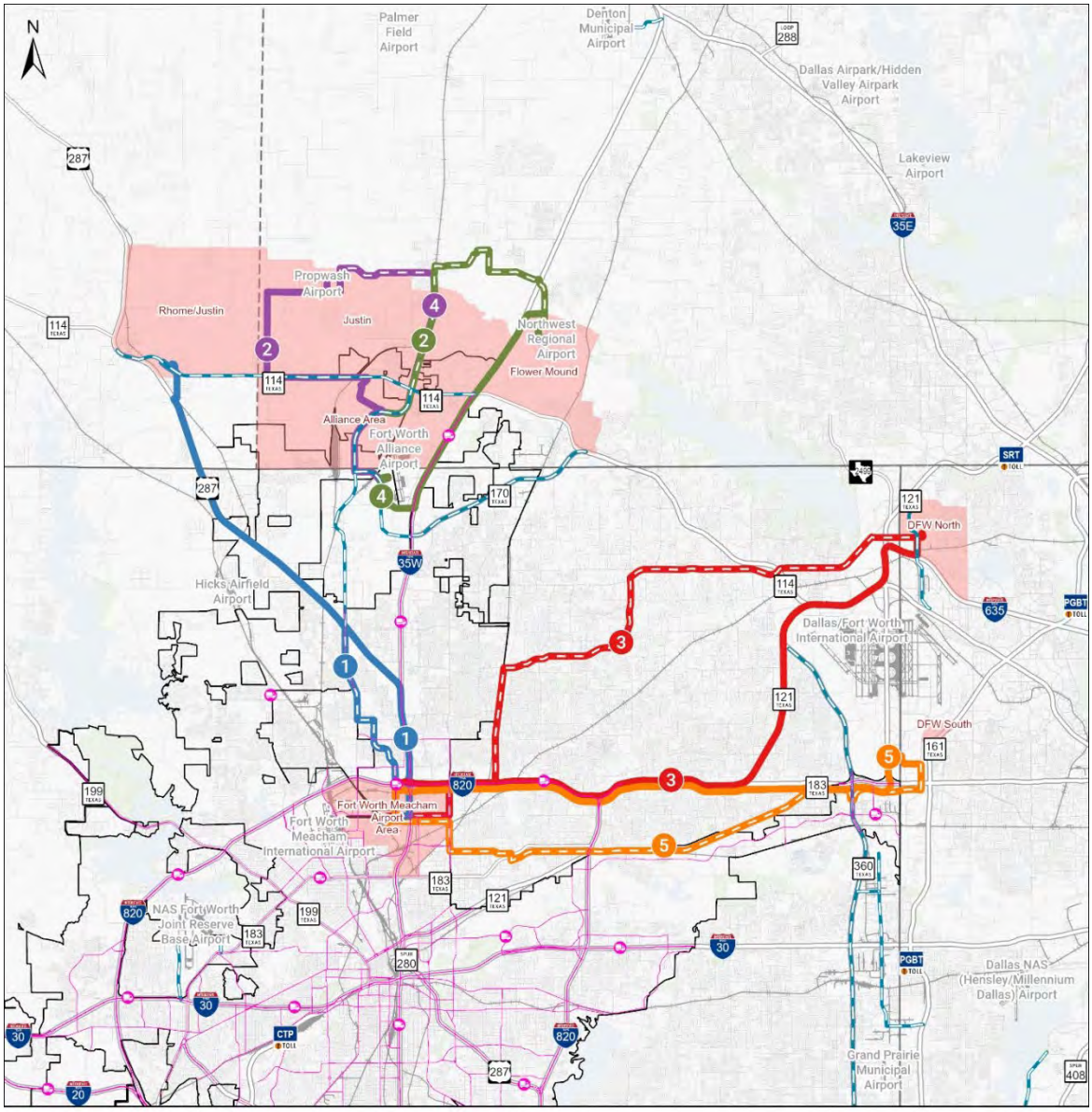
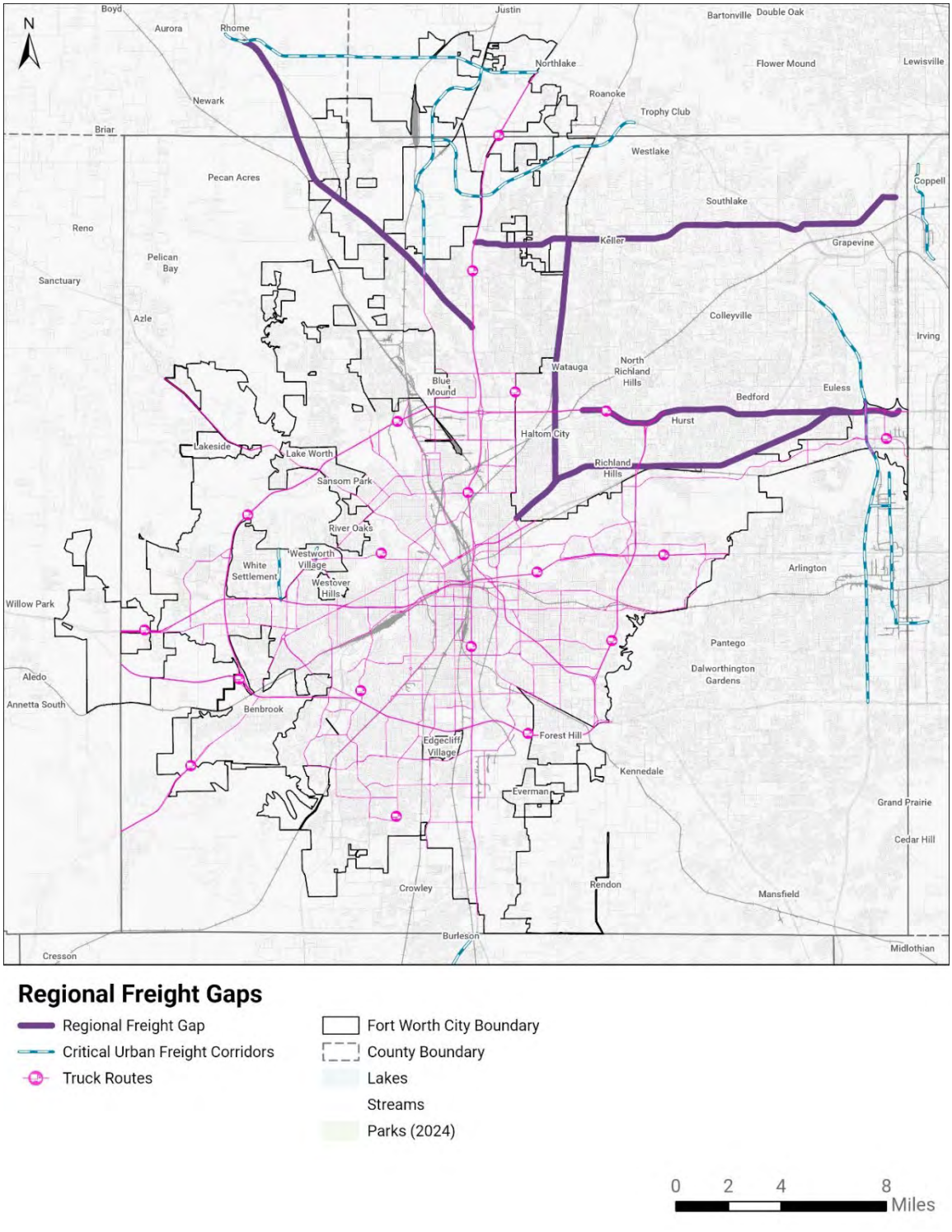


Figure 57: Regional Freight Gaps



4 Policy Gap Analysis

4.1 Approach Overview

The Policy Gap Analysis evaluated City of Fort Worth policies relevant to the M1M Plan, identifying gaps and opportunities for modifications or enhancement. Existing policies or policy areas identified as relevant to this effort include:

- Access Management Policy: Controls driveway spacing and intersection design to improve safety and traffic flow on major corridors.
- Transportation Demand Management: Encourages strategies like carpooling, telecommuting, and flexible work hours to reduce peak-hour congestion and improve system efficiency.
- Autonomous/Semi-Autonomous Ground or Aerial Vehicles for Passengers or Delivery: Regulates the safe integration of autonomous ground and aerial vehicles for passenger and delivery services in city infrastructure.
- Inclement Weather—Snow and Ice Plan: Outlines procedures for roadway treatment and emergency response during winter weather events.
- Special Events Management: Coordinates traffic control, transit, and public safety for large-scale events to minimize disruption.
- Truck delivery routes and requirements/restrictions: Designates specific truck routes and delivery time windows to minimize congestion and protect residential areas.
- Curbside Loading and Unloading, Parking Demand Management: Manages curb space for deliveries, ride-hailing, and short-term parking to balance access and reduce traffic disruptions.
- Parking (Off-Street) and On-Street Practices and Program Policy: Guides the development and regulation of public and private parking to support land use goals and reduce vehicle dependency.
- Internet Access and Fiber Connectivity: Supports broadband expansion and smart city infrastructure to enhance digital equity and transportation technology.
- Network Climate Resilience (Air, Land, Water): Builds infrastructure resilience to climate impacts like flooding, extreme heat, and severe weather events.
- TOD: Promotes dense, walkable development near transit stations, often guided by form-based codes.
- Transit Priority: Implements measures like bus lanes and signal priority to improve transit speed and reliability.
- Vision Zero: Commits to eliminating traffic fatalities and serious injuries through safe street design and policy.

- Complete Streets Policy: Requires streets to be designed for all users—pedestrians, cyclists, transit riders, and drivers—regardless of age or ability.
- Transportation Impact Fee: Charges developers a fee to fund transportation infrastructure needed to support new growth.
- Subdivision Ordinance: Sets standards for street layout, connectivity, and infrastructure in new residential developments.
- Tax Increment Financing Districts: Uses future tax revenue increases to fund infrastructure improvements in designated areas.
- Neighborhood Traffic Calming: Implements measures like speed humps and roundabouts to reduce speeding and improve safety in residential areas.
- Safe Routes to School / Safe Routes to Transit: Improves pedestrian and bike access to schools and transit stops to promote safe, active travel.
- Railroad Safety Program: Enhances safety at rail crossings and coordinates with rail operators to reduce conflicts with other modes.

4.2 Methodology

This review provides a systematic evaluation of the strengths, weaknesses, and gaps in Fort Worth's current policies by comparing them to those in peer communities. These peers include cities identified in the previous task—Denver, Austin, and Seattle—as well as other cities in the North Texas region and those recognized for best practices in specific policy areas. **Table 12** presents this comparative analysis, benchmarking them against established best practices. The findings highlight key gaps and opportunities for improvement to help Fort Worth achieve its M1M objectives.

Table 12. City of Fort Worth Policy Gap Analysis

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
Access Management	• Coordinates site, corridor, and network-level access management. • Integrates multimodal priorities. • Guides retrofit transitions. • Aligns access strategies with regional freight, transit, and technology initiatives.	• Policy focuses on site-level standards; limited multimodal coordination. • No strategies for transitioning non-conforming access.	• Add corridor/network-level strategies. • Align access with multimodal priorities; provide transition strategies for retrofits. • Align access planning with regional freight and transit priorities.
Autonomous/Semi-Autonomous Ground or Aerial Vehicles for Passengers or Delivery, etc.	• Encourages shared use of autonomous vehicles (AVs) to reduce congestion, emissions, and VMT. This includes integrating AVs with public transit systems. Municipalities should retain authority over public infrastructure and land use to adapt to AV impacts and reclaim underused infrastructure for public benefit. • Creates adaptable local ordinances and advocates for enabling state legislation that supports sustainable land use and equitable AV deployment. • Collaboratively develops standards for AV interoperability, safety, and data sharing. • Aims to identify road space used by private vehicles and repurpose it for wider sidewalks, bike lanes, and green spaces as AVs reduce the need for parking. Pair with a reduction in parking requirements to encourage alternative transportation modes and reduce urban sprawl. • Ensures AV deployment aligns with climate goals by prioritizing electric AVs. • Ensures AV services are accessible to all, regardless of income, location, or digital literacy. This includes subsidized fares and inclusive design. • Implements rigorous safety standards and cybersecurity protocols to protect passengers and infrastructure. • Establishes transparent data governance policies that protect privacy while enabling informed decision-making and system optimization.	• With no formal policy currently at the regional level, NCTCOG's AV initiative provides a regional framework for planning AV deployment, including guidance on interoperability, safety, and emerging technologies. • The region is actively preparing for connected and automated vehicle technologies, including vehicle-to-infrastructure and vehicle-to-everything communications. • NCTCOG's planning includes safety standards and data-sharing protocols, aligning with best practices for cybersecurity and informed decision-making.	• Adopt Fort Worth-specific policies or local ordinances.
Complete Streets Policy	• Establishes a clear vision and commitment. • Prioritizes equity. • Applies to all projects and phases of projects (i.e., new construction, reconstruction, maintenance, and operations). • Defines specific, limited exceptions with a transparent approval process and public notice.	• Aims to provide a safe, connected, comfortable, and community-oriented transportation system that supports mobility, health, and economic benefits. • Applies to all development and redevelopment in Fort Worth and its extraterritorial jurisdiction.	• Lacks three criteria as specified by CityHealth/Smart Growth America. • Policy explicitly prioritizes vulnerable users. • Policy references the development of an inclusive community engagement plan.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
	• Requires collaboration among transportation, planning, public works, and private developers. • Uses up-to-date, context-sensitive design standards. • Aligns transportation planning with land use, zoning, and development goals. • Establishes clear performance measures (i.e., safety improvements, mode share, and access to destinations). • Uses transparent, equity-focused selection criteria to prioritize projects. • Outlines how the policy will be put into practice, including timelines, funding, and accountability.	• Covers all five transportation project phases: planning, design, construction, operation, and major maintenance. • Emphasizes connected networks and context-sensitive design. • Requires city review of external projects for policy compliance. • Encourages partnerships with regional and state agencies. • Exceptions must be reviewed and approved by designated departments with public documentation. Allowed for legal restrictions, excessive cost (over 20 percent of project budget), or safety concerns. Periodic evaluation of exception decisions is required. • Commits to using up-to-date design standards (e.g., Americans with Disabilities Act [ADA], American Association of State Highway and Transportation Officials [AASHTO], National Association of City Transportation Officials [NACTO], Institute of Transportation Engineers) but allows flexibility to consider other standards if safety is maintained. • Performance measures include injury/fatality reductions, emergency response times, alternative mode usage, and economic impacts documented through annual reports. • Complete Streets is integrated into all city planning and regulatory documents. Projects that support complete streets are prioritized.	• Policy establishes a timeline for the review and improvements to project selection criteria. **Recommendations:** • Use strong, enforceable language. • Emphasize prioritizing vulnerable users and active transportation modes (walking, biking, transit). • Clearly state that all transportation projects and phases (including maintenance and temporary construction impacts) must comply unless explicitly exempted. • Adopt a specific, up-to-date set of guidelines (e.g., NACTO, AASHTO) and include a timeline for implementation. Ensure these guidelines prioritize safety and accessibility over vehicle speed. • Update general performance measures to include specific, measurable indicators (e.g., miles of bike lanes, crash data by mode and demographic, access to transit). • Establish a dedicated Complete Streets committee with representatives from key departments and community stakeholders. • Add a section requiring robust, inclusive engagement—especially with underserved communities. • Outline specific strategies to overcome barriers like language, time, and trust. • Include a commitment to review and revise project selection criteria regularly to prioritize Complete Streets principles. • Clearly state how private developers will be required or incentivized to comply with the policy. • Include mechanisms like development review processes or funding conditions.
Connectivity	• Requires collector connectivity and index standards. • Minimizes waivers. • Embeds network-level access strategies. • Ensures connectivity plans link to regional on-system routes to enhance multimodal network cohesion.	• Connectivity index can be waived. • Collector placement not coordinated across developments. • Access management policy lacks network-level strategies.	• Strengthen connectivity index enforcement. • Require collector continuity planning. • Introduce network-level access strategies into policy. • Coordinate connectivity plans with on-system facilities.
Cross Sections	• Provides flexible, context-sensitive cross sections. • Allows phased build-out. • Integrates active transportation comprehensively.	• Cross sections tied rigidly to functional class. • Minimal provisions for interim sections. • Active transportation focused on side paths.	• Develop context-sensitive, flexible cross sections. • Provide interim cross-section guidance. • Enhance integration of active transportation. • Plan for technology-ready cross sections.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
	• Incorporates cross-section design that supports future technology integration (e.g., connected vehicle lanes, freight automation).		
Curbside Loading and Unloading, Parking Demand Management	• Uses real-time data and digital tools (like the curb data specification) to adjust curb use based on time of day, demand, and land use. • Implements flexible zones that can switch between loading, parking, or bike lanes depending on need. • Clearly marks and enforces commercial and passenger loading zones. • Uses geofencing and signage to guide Transportation Network Companies (TNCs) (e.g., Uber, Lyft) and delivery services to designated areas. • Allows loading/unloading during off-peak hours to reduce congestion. • Uses peak-hour restrictions to prioritize transit or high-occupancy vehicles. • Ensures curb access for people with disabilities, paratransit, and community services. Includes multilingual signage and accessible curb ramps. • Uses sensors, cameras, or mobile apps to monitor curb use and enforce compliance. • Pilots smart loading zones with reservation systems or dynamic pricing. • Adjusts parking rates based on occupancy to maintain 85 percent utilization (i.e., 1 to 2 open spaces per block). • Uses demand-responsive pricing to reduce cruising for parking. Allocates curb space for short-term parking in commercial areas. • Encourages long-term parking in off-street facilities. • Dedicates curb space to bike/scooter parking, transit stops, and parklets. • In alignment with the TDM policy, offers incentives for carpooling, transit use, or biking. • Implements permit systems to manage spillover in residential areas. • Uses digital permits and guest pass systems for flexibility. Requires regular collection and analysis of curb and parking data to inform policy updates.	• Fort Worth has designated commercial loading zones and regulations that prohibit their use for anything other than active loading/ unloading. • The city has a structured system for parking meters, including enforcement mechanisms and fines for violations, which supports demand management. • The city requires permits for commercial loading, which helps manage curb space use and enforce compliance.	• Implement real-time curb data tools (like the Curb Data specification) or dynamic digital platforms to adjust curb use based on demand or time of day. • Develop flexible curb zones that can switch between uses (e.g., loading, parking, bike lanes) depending on time or demand. • Use geofencing or digital signage to guide TNCs like Uber or Lyft to designated pick-up/drop-off areas. • Implement smart loading zones with reservation systems or dynamic pricing models to manage demand. • Use occupancy-based pricing strategies to maintain optimal parking availability (e.g., 85 percent utilization). • Require multilingual signage or enhanced accessibility features like curb ramps for people with disabilities. • Mandate regular data collection or analysis to inform updates to curb or parking policies. • Integrate with Transportation Demand Management (TDM) strategies such as incentives for carpooling, biking, or transit use.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
Functional Classification	• Includes map collectors as part of thoroughfare plans. • Aligns functional classes with federal standards. • Designates transit and freight priority corridors. • Includes on-system facilities in thoroughfare plans to align with federal/state funding eligibility and ensure coordinated planning.	• MTP does not map collectors. • Functional classifications do not align with federal system. • No transit/freight designations; limited flexibility for refinements.	• Recommend mapping collectors. • Align classifications with federal standards. • Introduce transit/freight functional classes. • Include on-system facilities in the MTP to support funding eligibility and multimodal goals.
Greenfield Development in ETJ	• Some peer cities have pursued interlocal agreements with counties to jointly regulate development in the ETJ and adopted policies requiring infrastructure cost-sharing or voluntary annexation in exchange for utility access.	• In Fort Worth, developers in the ETJ often gain access to municipal utilities without being subject to zoning or full city taxation. • There is no formal incentive program, but developers benefit from reduced regulatory burdens, limited county oversight, and future annexation leverage.	• While no formal ETJ incentive programs exist, the regulatory environment enables developers to benefit from low-cost greenfield development. This includes access to city water/sewer without zoning or design standards, weak county oversight, and limited long-term accountability. • Fort Worth should consider: 1) establishing service-matching requirements for any infrastructure extensions; 2) leveraging voluntary annexation agreements tied to infrastructure commitments; 3) collaborating with counties to raise minimum development standards in unincorporated area; and 4) implementing incentive programs for infill development within the core, such as expedited permitting, reduced fees, infrastructure grants, or density bonuses to help rebalance the cost differential between core and fringe development.
Inclement Weather—Snow and Ice Plan	• Establishes weather severity levels (e.g., advisory, watch, warning) with corresponding actions. • Includes thresholds for activating emergency protocols (e.g., road closures, shelter openings). • Requires multiple channels of communication (text alerts, social media, city website, local news outlets) for timely updates. • Designates city spokespersons and ensures consistent messaging across departments. • Outlines expectations for essential and nonessential personnel. • Uses asset management software or other systems to track maintenance and identify vulnerable areas. • Dictates coordination with local emergency management agencies and weather services. • Plans for drills and tabletop exercises to test readiness. Identifies emergency shelters, especially for vulnerable populations. • Provides transportation options for those needing assistance. Requires reassessment of the policy annually or after major	• Clearly assign responsibility to the Street Operations Division under Transportation and Public Works. • Provide for coordination with the Joint Emergency Operations Center (JEOC), which includes police, fire, and MedStar. • Define activation procedures based on storm severity, including JEOC activation and 24-hour emergency shift rotations. • Establish a centralized Operations Command Center and North and South Service Centers with defined roles and minimum staffing. • Include mandatory annual training for sanding and loading procedures. • Maintain a detailed equipment inventory and annual inspection/calibration schedule. • Prioritize treatment by criticality (bridges, hospital entrances, hills, arterials). • Use sand-salt mix and brine (new in 2024) for ice control, with clear application guidelines. • Conduct after-action reviews involving multiple departments to assess performance and restock materials.	• Define weather severity levels (e.g., advisory, watch, warning) or link them to specific actions. • Define explicit thresholds for activating emergency protocols like road closures or shelter openings. • Detail public communication channels (e.g., text alerts, social media, website updates). • Mention designated city spokespersons or a strategy for consistent messaging across departments. • Clearly distinguish between essential vs. nonessential personnel expectations. • Address emergency shelters, transportation for vulnerable populations, or coordination with social services. • Include a public education component on how residents should prepare or where to find information. • Include a formal annual review process or incorporation of lessons learned.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
	weather events, incorporating lessons learned to update contact lists and procedures. • Establishes training for applicable city staff on their roles during weather emergencies. • Educates the public on how to respond and where to find information. • Complies with labor laws, Occupational Safety and Health Administration standards, and local ordinances. • Considers liability protections and insurance considerations.	• Use AVL Geotab software for real-time vehicle tracking and Asset Management team for post-event asset verification.	
Internet Access and Fiber Connectivity	• Ensures equitable access by identifying underserved areas and populations. • Involves residents, businesses, schools, and healthcare providers to align goals and build support. • Assesses demand, infrastructure readiness, and financial models before launching. Policy is based on the most appropriate business model such as a passive infrastructure model, a wholesale access model, or a fully integrated model. • Leverages public-private partnerships (PPPs). • Provides for a streamlined permitting process, simplifying and expediting access to public ROWs and utility poles to reduce deployment delays. • Ensures fair and non-discriminatory access to municipal infrastructure. • Encourages competition and affordability by allowing multiple internet service providers to use the same infrastructure. • Taps into programs like Broadband Equity, Access, and Deployment for funding. • Plans for long-term maintenance. • Encourages local investment by offering incentives or co-investment opportunities for local businesses and cooperatives. • Sets clear performance metrics to track speed, reliability, affordability, and adoption rates. • Ensures progress and financials are regularly reported to the public. Policy is regularly updated based on technological advances and community needs.	• Fort Worth entered a 34-year, $7.5 million agreement with Sprocket Networks, Inc. to build a fiber backbone. • The city secured $4.5 million from the American Rescue Plan Act and $3 million from the Surface Transportation Block Grant for broadband improvements. • The city's planned 300-mile fiber network will significantly enhance connectivity across the city, indicating a serious commitment to infrastructure readiness. • The 34-year term with renewal options and annual operational funding up to $3.6 million suggests a long-term vision for maintenance and sustainability.	• Detail how the city is identifying and prioritizing underserved or marginalized communities for access. • Provide evidence that residents, schools, healthcare providers, or local businesses were actively involved in shaping the broadband strategy. • Develop a streamlined permitting processes or policies to ensure non-discriminatory access to municipal infrastructure for multiple internet service providers. • Create a publicly available framework for tracking speed, reliability, affordability, or adoption rates, or a commitment to regular public reporting on progress and financials.
Neighborhood Traffic Calming	• Clearly defines the traffic issues (e.g., speeding, cut-through traffic), quantifying the problem using traffic studies, speed data, and crash reports.	• The city uses speed studies and crash data to determine eligibility for traffic-calming measures. For example, to qualify for speed cushions, 85 percent of vehicles must exceed the speed limit by at least 5 mph.	• Systematically evaluate the equity impacts of traffic calming measures. • Address gaps in coordination between transportation, planning, and public works departments.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
	• Designs solutions tailored to specific issues and neighborhood context. • Uses a tiered system to match the severity of the problem with appropriate interventions. • Implements calming measures such as speed humps and cushions, chicanes and curb extensions, raised crosswalks and intersections, mini roundabouts, road diets (lane reductions), and enhanced pedestrian crossings. Ensures that traffic-calming measures do not disproportionately impact certain groups and that they improve accessibility for all users, including pedestrians, cyclists, and people with disabilities. • Pilots projects or temporary installations to help test solutions before permanent changes are made. • Ensures collaboration between transportation, public works, law enforcement, and planning departments to check that traffic calming measures are feasible, enforceable, and aligned with broader city goals.	• Fort Worth has reinstated its Neighborhood Traffic Calming Program for low-volume residential streets, focusing on appropriate interventions like speed cushions and lane narrowing. • The city has implemented striping changes and other low-cost, reversible interventions (e.g., narrowing lanes on Park Vista Boulevard) to test their effectiveness before committing to permanent infrastructure. • Residents must show two-thirds support from property owners on the block to qualify for calming devices, ensuring community buy-in.	• Expand beyond low-volume residential streets to include arterial roads or areas with significant pedestrian activity that also need calming. Despite adopting a Vision Zero goal, some of the most dangerous streets identified years ago remain hazardous, indicating a lag in implementation and enforcement.
Network Climate Resilience (Air, Land, Water)	• Identifies climate hazards relevant to the region. • Maps vulnerable assets such as bridges, tunnels, and transit hubs. • Uses tools like GIS and climate modeling to assess exposure and sensitivity. • Sets resilience goals and identifies adaptation strategies. Integrates resilience into capital planning. • Monitors performance and climate impacts. • Updates infrastructure design and maintenance design standards to account for future climate conditions. • Uses nature-based solutions (e.g., green infrastructure) to manage stormwater and heat. • Prioritizes maintenance and retrofitting of critical infrastructure. • Embeds climate resilience in transportation master plans and zoning codes. • Establishes interagency coordination to align transportation, emergency management, and environmental planning. • Incorporates climate equity metrics into project evaluation. • Uses real-time data and smart infrastructure to monitor conditions and respond to disruptions. • Invests in resilient energy systems. • Ensures redundancy in critical routes and services.	• Fort Worth has made strides in urban forestry and green space expansion, including a tree protection ordinance and a 30 percent urban canopy goal. These efforts help manage stormwater and mitigate urban heat. • The city has adopted the Vision Zero strategy, aiming to eliminate traffic fatalities and improve equitable mobility through systemic changes in roadway design, speed management, and policy. • Fort Worth's 2019 Environmental Master Plan includes strategies to improve air and water quality and reduce litter, laying a foundation for broader environmental resilience.	• Develop a formal climate action or resilience plan to systematically address climate hazards, emissions, and long-term adaptation. • Use GIS or climate modeling to assess transportation asset exposure to climate risks like flooding or extreme heat. • Update the city's infrastructure design or maintenance standards to reflect future climate conditions. • Use real-time data or smart systems to monitor transportation conditions or respond dynamically to disruptions. • Embed formalized climate equity metrics in transportation project evaluations. • Coordinate between transportation, emergency management, and environmental planning agencies.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
Parking (Off-Street) and On-Street Practices and Program Policy	• Removes or limits mandatory minimums for parking in new developments to reduce oversupply and encourage more efficient land use. • Sets upper limits on the number of parking spaces to prevent excessive car-centric development. • Encourages or requires shared parking between businesses with different peak hours (i.e., office and entertainment venues). • Separates the cost of parking from rent or property purchase to allow residents to opt out of paying for parking they do not use. • Allows developers to pay a fee instead of building required parking, with funds used for public parking or transit improvements. • Adjusts parking rates based on demand to ensure availability (targeting 70 to 85 percent occupancy). • Uses sensors and apps to show real-time availability and guide drivers to open spots. • Reinvests parking revenue into the local area for streetscape improvements, transit, or bike infrastructure. • Ensures accessible parking for people with disabilities and considers equity impacts of pricing and enforcement policies.	• Fort Worth enforces clear rules for on-street parking, including prohibitions on storing vehicles on public streets for more than 5 days and restrictions on parking in front and side yards unless on approved surfaces. • Residents can report parking violations using the MyFW app, which supports community enforcement and responsiveness.	• Reduce minimum parking requirements. • Determine maximum parking caps to prevent overbuilding of parking. • Include provisions that encourage or require shared parking between businesses with complementary peak hours. • Require the separation of parking costs from housing or commercial leases. • Offer a fee-in-lieu option for developers to contribute to public parking or transit infrastructure instead of building on-site parking. • Use dynamic pricing strategies (e.g., adjusting rates to maintain 70 to 85 percent occupancy), which are effective in managing demand and improving turnover. • Use real-time parking availability tools such as sensors or apps to guide drivers to open spaces. • Require that parking revenue be reinvested into local infrastructure improvements like streetscapes, transit, or bike lanes. • Explicitly address equity impacts of pricing or enforcement policies.
Railroad Safety Program	• Includes hazard identification and risk assessment processes. • Outlines emergency response procedures. • Prioritizes inspections based on risk and past incidents, including track, signal systems, and rolling stock. • Documents findings and follows up on corrective actions. • Trains all staff on safety protocols, hazard recognition, and emergency procedures. • Ensures contractors and third parties meet the same safety standards. • Educates the public on rail safety (e.g., grade crossing awareness). • Collaborates with local emergency services for coordinated response plans. • Uses signage, campaigns, and school programs to raise awareness. • Uses Positive Train Control (PTC), automated inspection tools, and real-time monitoring systems. • Implements data analytics to predict and prevent incidents. • Encourages a non-punitive reporting culture.	• Fort Worth is incorporating rail safety into its broader Vision Zero Safety Action Plan, which aims to eliminate traffic-related fatalities and serious injuries. This plan shows a systemic approach to safety, including collaboration with the public and other stakeholders. • The city is working on establishing quiet zones, which often involve safety upgrades at crossings. • Public engagement efforts, such as inviting feedback on safety plans, also reflect a proactive safety culture.	• Use formalized risk assessment tools or data analytics to prioritize inspections or predict incidents. • Include detailed documentation on coordinated rail-specific emergency response procedures. • Prioritize inspections based on risk profiles or past incidents. • Provide standardized training on rail safety protocols and emergency procedures. • Implement public education campaigns, such as school programs or signage, specifically targeting rail safety awareness, in addition to quiet zones. • Implement PTC, automated inspection tools, or real-time monitoring systems at the municipal level. • Develop a formal rail hazard identification and risk assessment framework. • Enhance transparency around emergency response plans and inspection protocols. • Launch public education campaigns focused on rail safety, especially in schools and high-risk neighborhoods.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
	• Investigates all incidents thoroughly to identify root causes. • Shares lessons learned across departments.		• Collaborate with rail operators to integrate advanced technologies like PTC and real-time monitoring. • Establish a non-punitive safety reporting system and ensure all incidents are thoroughly investigated with shared learnings.
Safe Routes to School / Safe Routes to Transit	• Develops data-driven plans for each school, identifying barriers and proposing solutions. • Involves parents, students, school staff, and local residents in planning and feedback. • Prioritizes underserved communities and schools with higher safety risks. • Ensures continuous, ADA-compliant sidewalks and high-visibility crosswalks. • Uses speed humps, curb extensions, and raised intersections to slow traffic near schools. • Installs protected bike lanes and secure bike parking. • Implements pedestrian and bicycle safety education in schools. • Promotes walking and biking through events like Walk to School Day and bike rodeos. • Partners with local law enforcement for school zone speed enforcement and crossing guard programs. • Encourages school siting and neighborhood design that supports walkability. • Coordinates between city planning, transportation, public health, and school districts to align goals and resources.	• Fort Worth conducted a comprehensive assessment of pedestrian infrastructure around 26 schools using GIS mapping and field observations. The city used this data to apply for and secure nearly $3 million in federal funding for infrastructure improvements. • Implemented ADA-compliant curb ramps, pedestrian bulb-outs, revised driveways, and drainage improvements. • Added nearly 10 miles of new sidewalks, enhancing walkability and safety. • Focused on traffic calming through design features like bulb-outs and intersection improvements.	• Prioritize underserved communities or high-risk schools in the selection of the schools. • Include protected bike lanes or secure bike parking. • Include details on pedestrian and bicycle safety education, or on events like Walk to School Day or bike rodeos. • Address long-term planning for school siting or neighborhood design that supports walkability.
Special Events Policy	• Defines what constitutes a “special event” (e.g., parades, festivals, races). • Establishes a centralized permitting process with clear timelines and requirements. • Promotes interagency coordination (i.e., with representation from police, fire, EMS, transportation/public works, parks and recreation, emergency management). • Requires event-specific safety and emergency response plans. • Requires notification of affected residents and businesses in advance. • Provides opportunities for public input, especially for recurring or large-scale events. • Ensures events are inclusive and ADA-compliant. Includes waste management, noise control, and sustainability guidelines.	• Clear permit triggers. • Community notice must be sent both within 5 days of application and again 30 days before the event. • Use multiple delivery methods as allowed (e.g., mail, email, newspaper, signage, hand delivery). • Comprehensive documentation is required. • A pre-event meeting is mandatory for all large events to coordinate logistics and finalize plans. • Include a deposit refund policy. • The city has a centralized permitting process managed by the outdoor events manager, with application forms and timelines specified. • Fort Worth mandates that applicants notify nearby residents, businesses, and institutions within a quarter-mile radius, with specific instructions for different types of buildings.	• Implement a formal interagency review process to improve traffic flow and safety. • Require comprehensive Traffic Management Plans, including detours, signage, and transit rerouting. • Coordinate with Trinity Metro to adjust routes or increase service during large events. • Specify requirements for accessible transportation routes, drop-off zones, or parking for individuals with disabilities. • Document accommodations or restrictions for bike lanes, scooters, or pedestrian pathways.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
	• Requires plans for set-up, teardown, and restoration of public spaces. • Establishes transparent fee schedules for permits, city services, and security. • Offers waivers or subsidies for nonprofit or community events. • Uses online portals for applications, tracking, and public calendars. • Publishes guidelines, deadlines, and contact information clearly. • Requires debrief reports for large events and collects feedback from city departments, organizers, and the public. • Provides training for city staff and event organizers on policy compliance and best practices.	• Events and meetings are posted on the city's designated webpage 20 to 30 days in advance. • Special provisions exist for areas like the Near Southside and Stockyards Outdoor Events districts, including noise mitigation, trash disposal, and parking plans. • The ordinance references coordination with police and fire departments, especially for events requiring street closures.	
Subdivision Ordinance	• Supports a variety of transportation modes including walking, biking, transit, and driving, including requiring sidewalks and bike lanes, making transit stops accessible and integrated into neighborhood design, and encouraging compact, walkable block sizes. • Promotes a grid or modified grid street pattern to enhance connectivity. • Limits cul-de-sacs unless necessary and requires pedestrian/bike connections where cul-de-sacs are used. • Requires multiple access points to reduce congestion and improve emergency access. • Requires developers to conduct Traffic Impact Analyses to assess the impact of new subdivisions on existing transportation infrastructure. • Incorporates Complete Streets principles into subdivision regulations to check that streets are designed for all users, not just vehicles. • Includes design standards for lane widths, crosswalks, curb extensions, and traffic-calming features. • Clearly defines ROW widths for different street types. • Requires dedication of land for future transportation improvements or trails. • Mandates the inclusion of bike lanes, shared use paths, and pedestrian crossings in new developments. • Ensures connectivity to nearby trails, parks, schools, and commercial areas.	• Requires that subdivisions provide adequate public facilities, including transportation infrastructure, to serve the development. This requirement includes off-site improvements when necessary. • Allows the city to require developers to construct or contribute to off-site transportation facilities if the development impacts surrounding infrastructure, supporting the principle of mitigating development impacts. • Outlines a structured process for reviewing subdivision plats and construction plans, ensuring that transportation considerations are evaluated during development review.	• Require sidewalks or bike lanes, transit stop integration, pedestrian or bicycle connectivity in cul-de-sacs. • Require a grid or modified grid street pattern, limit cul-de-sacs, and mandate pedestrian cut-throughs. • Incorporate Complete Streets principles. • Address block length or size, which is important for creating walkable neighborhoods. • Require connections to trails, parks, schools, or commercial areas. • Promote higher densities or mixed-use development near transit corridors. • Reduce parking minimums or encouraging shared parking.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
	• Allows higher densities and mixed-use zoning near transit corridors. • Reduces parking requirements and encourages shared parking. • Establishes clear guidelines for when and how developers must contribute to off-site transportation improvements.		
Tax Increment Financing (TIF) Districts	• Ensures that the development would not occur but for the TIF assistance. This should be supported by independent third-party financial analysis. • Conducts comprehensive studies to assess the financial viability and projected increment generation of the proposed TIF district. • Provides accessible information to the public about the purpose, scope, and expected outcomes of the TIF district. • TIF districts should support broader municipal goals such as affordable housing, infrastructure upgrades, or downtown revitalization. • Prioritizes areas where private investment is unlikely without public support. • Limits the total equalized value of all TIF districts to a percentage (e.g., 12 percent) of the municipality's total property value to avoid overreliance. • Sets clear expiration dates and regularly reviews the district's performance. • Considers sharing a portion of the increment with overlapping taxing jurisdictions. • Requires detailed annual reports on financial performance, project progress, and public benefits. • Includes mechanisms to recover funds if developers fail to meet agreed-upon benchmarks (e.g., job creation, investment levels). • Allows for incremental development to match revenue generation and reduce risk. • Establishes clear guidelines for modifying TIF plans as conditions change.	• Fort Worth's TIFs, especially Downtown TIF #3, are clearly aligned with broader goals such as infrastructure improvements, transit enhancements, tourism and convention support, and downtown revitalization. • The Downtown TIF is a collaborative effort involving multiple public entities, which helps ensure diverse oversight and alignment with regional goals. • The city has a strategy to redirect funds from expiring TIFs (e.g., TIFs 3, 4, and 8) into an Economic Development Incentive Fund, which shows forward-thinking fiscal planning. • TIF #3 has a defined expiration date (December 31, 2025) and a lifetime cap of $100 million, aligning with best practices for limiting duration and financial exposure.	• Apply a rigorous "but for" test supported by third-party financial analysis to justify TIF assistance. • Offer more comprehensive, easily accessible public reports detailing financial performance, project progress, and public benefits delivered. • Require detailed annual reports that track performance against benchmarks like job creation or investment levels. • Document if increment revenue is shared with overlapping taxing entities or how equitably those funds are distributed. • Include clawback provisions or mechanisms to recover funds if developers fail to meet agreed-upon benchmarks. • Explicitly tie development phases to actual revenue generation to reduce financial risk.
TOD	• Prioritizes pedestrian-friendly environments with safe, shaded, and accessible sidewalks. • Provides for safe cycling infrastructure. • Ensures a street network that connects people to transit and destinations. • Maximizes access to high-quality public transit.	• No formal policy.	• Adopt form-based codes or TOD-specific overlay zones to guide development near transit. • Feature affordable housing mandates or incentives in TOD planning. • Target investments in underserved communities.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
	• Encourages mixed land uses to reduce the need for long commutes. • Promotes higher densities near transit to support ridership. • Avoids urban sprawl by focusing development within existing urban areas. • Reduces car dependency by promoting sustainable transport modes. • Develops station area TOD plans customized to reflect local market conditions, community needs, and environmental constraints. • Uses form-based codes or overlay zones to encourage TOD-compatible development. • Allows for density bonuses and reduced parking requirements near transit. • Includes affordable housing mandates or incentives to prevent displacement. • Ensures universal accessibility and prioritizes investments in underserved communities. • Uses participatory planning tools to co-create visions with residents. • Coordinates TOD with stormwater, utilities, and green infrastructure planning. • Ensures transit stations are well-integrated with bike-share, pedestrian paths, and micromobility options. • Leverages PPPs and value capture financing (e.g., tax increment financing).		• Implement a robust community co-creation process in TOD station area planning. • Integrate bike-share, scooters, and pedestrian paths with transit station.
Transit Priority	• Prioritizes transit over private vehicles in planning and operations. • Sets measurable goals such as reducing transit travel time, improving reliability, and increasing ridership. • Allocates exclusive lanes for buses to bypass congestion, allowing buses to bypass traffic at intersections using short, dedicated lanes and signal priority. • Positions transit stops after intersections to reduce delays from red lights. • Extends the sidewalk at bus stops to allow buses to stop in the travel lane, reducing merge delays. • Separates bus stops from bike lanes to improve safety and boarding efficiency.	• Updates to the Fort Worth District Design Guide include provisions for signal, illumination, and Intelligent Transportation Systems (ITS), laying the groundwork for future TSP implementation.	• Implement exclusive bus lanes or queue jump lanes at intersections. • There is no public indication that Fort Worth is using GPS/AVL systems to dynamically adjust bus schedules or routes based on real-time performance data. • The city has not clearly addressed separation of bike lanes from bus stops, which is important for safety and operational efficiency. • Expand TSP deployment, beginning with high-ridership corridors and integrate with existing ITS infrastructure. • Invest in bus priority lanes, especially at congested intersections to improve travel time and reliability. • Position stops after intersections and use sidewalk extensions where feasible.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
	• Implements transit signal priority (TSP). • Modifies schedules and routes based on performance data and rider needs. • Uses GPS and AVL systems to track performance and adjust operations dynamically. • Encourages pilot projects and scales up based on results. Promotes collaboration with regional transit agencies, traffic departments, and emergency services.		• Use AVL and GPS data to inform dynamic scheduling and route optimization. Design bus stops and bike lanes to minimize conflicts and improve accessibility.
Transportation Demand Management	• Establishes clear policy goals such as reducing single-occupancy vehicle trips, improving air quality and reducing greenhouse gas emissions, enhancing access to transit, biking, and walking options, and promoting equity in transportation access. • Integrates TDM into land use and development by requiring plans for new developments, especially those near transit corridors or in high-density zones. • Curates development requirements based on project size, use type, and location. • Provides a TDM toolkit, offering a flexible menu of strategies such as transit subsidies, carpool/vanpool programs, secure bike parking and showers, teleworking and flexible schedules, or real-time transit displays. Strategies would ideally be assigned point values or tiers to ensure meaningful implementation. • Prioritizes strategies that benefit low-income and underserved communities. • Requires multilingual outreach and ADA-compliant infrastructure. • Requires monitoring and reporting (annual or biennial) on TDM outcomes using performance metrics like mode share, VMT, and parking utilization. • Offers development incentives such as reduced parking minimums or expedited permitting for strong TDM plans. • Encourages pilot programs and data-sharing partnerships. • Aligns TDM efforts with regional transportation plans, climate action goals, and public health initiatives. • Establishes interdepartmental teams for implementation and enforcement. • Leverages technology to promote alternatives and track usage.	• While there is no formally defined TDM policy, the city has articulated goals around improving multimodal transportation, reducing reliance on single-occupancy vehicles, and promoting equity in access to transportation. • Fort Worth has made efforts to align transportation planning with land use, particularly in areas of high growth and near transit corridors. • Equity is a stated priority, with an emphasis on improving transportation access for underserved communities. • The city uses digital tools and data platforms to support transportation planning and public engagement. • Fort Worth has shown interest in adapting to trends like micromobility and remote work, with some flexibility built into its transportation planning processes.	• Require developers to submit TDM plans, especially for projects near transit or in high-density areas. Make a standardized toolkit offering a menu of TDM strategies with point values or tiers publicly available. • Require regular (annual or biennial) reporting on TDM outcomes using metrics like mode share, VMT, or parking utilization. • Outline incentives such as reduced parking minimums or expedited permitting for developments with strong TDM plans. • Mandate multilingual outreach or ADA-compliant infrastructure in TDM implementation. • Develop programs targeting major employers, schools, or hospitals to implement commute trip reduction strategies. • Offer formal technical assistance or recognition programs for TDM leaders or innovators. • Integrate MaaS platforms to support multimodal trip planning and fare payment.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
	• Integrates with mobility-as-a-service (MaaS) platforms where available. • Engages major employers, schools, and hospitals to implement commute trip reduction programs. • Provides technical assistance and recognition programs. • Plans for long-term adaptability based on emerging trends (e.g., micromobility, remote work) and build flexibility into ordinances to accommodate future innovations.		
Transportation Impact Fee	• Ensures statutory authority. • Adopts clear enabling ordinances to codify the purpose, scope, and methodology of impact fees in local ordinances. • Establishes a clear nexus between the new development and the need for transportation improvements. • Maintains proportionality between the fee and impact of the development. • Uses transparent methodology including standardized calculation methods and documented assumptions and data sources. • Limits using fees for new or expanded infrastructure, not operations or maintenance. • Allows for fee reductions or waivers for developments that generate less traffic (e.g., affordable housing or TOD). • Encourages infill development by adjusting fees based on location and existing infrastructure capacity. • Tracks fee collection and expenditures. • Refunds unused fees if not spent within a defined period. Involves developers and the public early to help build trust and reduce resistance. • Offers developers tools or calculators to estimate fees in advance.	• Fort Worth's TIF policy is grounded in Chapter 395 of the Texas Local Government Code. • The city conducts a comprehensive engineering study every 5 years, including land use assumptions, capital improvement plans, and credit calculations to ensure proportionality between fees and development impact. The methodology includes standardized calculations and public documentation, such as the 2022 Transportation Impact Fee Study. • Fees are used only for new or expanded infrastructure, not for maintenance or operations, in compliance with state law. • The City of Fort Worth has 27 service areas, with no-fee zones in the central city to encourage infill development. • The city also offers discounts for projects with adequate public facilities, land use/transportation connections, and extraordinary investments. Exemptions exist for public schools and neighborhood empowerment zones. • The city involves stakeholders like the Real Estate Council of Greater Fort Worth in the review and feedback process.	• Provide online calculators or tools for developers to estimate fees in advance. Increase public-facing data on fee collection and expenditures. • Document whether Fort Worth refunds unused fees if not spent within a defined period. • Describe how Fort Worth systematically reduces fees for affordable housing or TODs beyond general exemptions.
Truck delivery routes and requirements/restrictions	• Clearly defines the goals of the truck route policy, including things such as enhancing safety for all road users, reducing congestion and emissions, protecting infrastructure, and supporting local economic activity. • Uses data-driven planning for route designation. Designate primary routes for through-traffic and secondary for local deliveries. • Keeps trucks away from schools, parks, residential zones, and historic districts when possible.	• The City of Fort Worth clearly defines truck routes and commercial delivery routes through local ordinances (§22-111, §22-112), establishing a legal basis for enforcement. • The city distinguishes between truck routes for through-traffic and commercial delivery routes, aligning with the best practice of primary vs. secondary route designation. • The code includes provisions to keep trucks off non-designated streets, which helps limit truck traffic in residential and sensitive	• Use traffic data, safety statistics, or freight movement analytics to inform route designation or updates. • Ensure roads are structurally capable of supporting truck weights, turning radii, or clearance needs. • Permit deliveries outside designated hours or zones to help manage congestion and noise in sensitive areas. • Utilize GPS-compatible maps, apps, or digital tools to guide drivers along approved routes.

Policy Area	Notable Best Practices	Current Practices or Policy	Gap Areas and Recommendations
	• Ensures adequate infrastructure to support truck weight, truck turning radius, and clearance needs. • Establishes a regulatory framework through local ordinances, defining routes, restrictions, and violation penalties. • Requires permits for deliveries outside designated hours or zones. • Provides for coordination with state and federal agencies for routes involving interstates or state highways. • Follows Manual on Uniform Traffic Control Devices guidelines for visibility and clarity. • Establishes GPS-compatible route maps and apps to guide drivers. • Utilizes cameras or sensors to monitor compliance. • Tracks traffic flow, safety incidents, and community feedback to evaluate effectiveness. • Updates routes and policies based on growth, infrastructure changes, or new data.	zones, though it could be more explicit about schools, parks, and historic districts. • Violations of truck route regulations are subject to penalties, supporting compliance through enforcement. • The city references coordination with state transportation codes, suggesting some level of integration with state and federal route planning.	• Use cameras or sensors to monitor compliance or gather real-time data. • Outline a process for tracking traffic flow, safety incidents, or community feedback to evaluate the effectiveness of truck route policies. • Update routes based on growth or infrastructure changes.
Vision Zero	• Secures a public commitment from top leadership (mayor, city council). • Sets a target year for zero traffic deaths and serious injuries, including interim benchmarks to track progress. • Establishes a Vision Zero task force with representatives from transportation, public health, police, planning, and community organizations. • Allocates dedicated, sustainable funding for infrastructure, education, and enforcement initiatives. • Uses crash data to identify and prioritize dangerous corridors and intersections. • Requires regularly publishing crash data and progress reports to maintain accountability. • Implements safe street design, speed management, safe mobility for all, and community engagement strategies. • Uses performance metrics to evaluate effectiveness.	• Fort Worth has made a formal commitment to Vision Zero, with city leadership endorsing the initiative. This includes public statements and inclusion in city planning documents. • The city uses crash data to identify high-injury networks and prioritize dangerous corridors and intersections for safety improvements. • The policy emphasizes engineering solutions such as road diets, pedestrian infrastructure, and speed reduction strategies. • Fort Worth includes community input through surveys, public meetings, and outreach efforts to ensure the policy reflects local needs.	• Clearly define a target year for achieving zero deaths or interim benchmarks to track progress. • Mention a long-term funding for Vision Zero initiatives. • Establish a formal task force with cross-sector representation (e.g., public health, police, planning, community organizations). • Commit to regularly publishing progress reports or performance metrics to maintain public accountability. • Develop a robust framework for evaluating effectiveness using clear, measurable performance indicators.

5 Project Selection Criteria for Capital Investments

The City of Fort Worth will invest in projects that reflect the goals, public process, and performance measures established in M1M to ensure that transportation investments align with the city's long-term vision and values. The selection and prioritization of transportation improvements will be driven by a transparent, data-driven framework anchored in clearly defined project selection criteria. This framework is designed to leverage other major infrastructure capital projects internally and externally to develop strategic and cost-effective improvements.

Project selection criteria developed to meet these objectives include system efficiency, cost effectiveness, multimodal opportunities, safety and Vision Zero, economic development, and alignment with adopted plans. Each criterion is structured to enable an objective scoring process that accommodates a wide range of project scopes and characteristics and aligns with Fort Worth's evolving transportation needs. **Table 13** outlines the project selection criteria and scoring criteria in further detail.

Table 13. Project Selection and Scoring Criteria (Detailed)

Criteria	Weight (%)	Description	Scoring Rubric		
System Efficiency	30	Improves travel times, reduces congestion, increases throughput	**Score**	**Road and Freight Criteria**	**Transit Criteria**
			30	Proximity (0.5 mile) to a parallel congested (LOS below D, E, F) corridor **AND** in area of heavy congestion.	High score in the Transit Propensity Index (Jenks natural breaks).
			24	Proximity (0.5 mile) to a parallel congested corridor **AND** in area of sparser congestion.	Medium-High score in the Transit Propensity Index (Jenks natural breaks).
			18	Proximity (0.5 mile) to a parallel congested corridor **BUT** not in area of heavy congestion.	Medium score in the Transit Propensity Index (Jenks natural breaks).
			12	Located in an area of heavy congestion **BUT NOT** in proximity to congested corridor.	Medium-Low score in the Transit Propensity Index (Jenks natural breaks).
			6	Located in an area of sparser congestion **BUT NOT** in proximity to congested corridor.	Low score in the Transit Propensity Index (Jenks natural breaks).
			0	**NOT** located in proximity to a congested corridor nor in an area of congestion.	**NOT** in the Transit Propensity Index.
Safety and Vision Zero	20	Improves safety for vulnerable users; prevents crashes through proactive design	**Score**	**Criteria**	
			20	Project is on the high-injury network **AND** will implement corridor-wide or location-specific countermeasures identified in the Safety Action Plan.	
			10	Project is **NOT** on the high-injury network **BUT** it will implement corridor-wide or location-specific countermeasures identified in the Safety Action Plan.	
			10	Project is on the high-injury network **AND** will implement other evidence-based countermeasures **NOT** identified in the Safety Action Plan.	
			0	No evidence provided demonstrating the project will result in potential crash reduction or improvements to safety.	
Cost Effectiveness	10	Yields high return on investment, is feasible for near-term delivery	**Score**	**Criteria**	
			10	Project has identified match or local funds in near term (5 years) **AND** project planned in existing ROW **AND** current design status greater than or equal to 10 percent **AND** project does not require structures.	
			7	Project planned in existing ROW **AND** current design status greater than or equal to 10 percent **AND** project does not require structures.	
			5	Project current design status greater than or equal to 10 percent **AND** project does not require structures.	
			3	Project does not require structures.	
			0	Project requires structures **OR** does not meet any criteria above.	
Travel Choice	10	Expands walking, biking, and transit options; reduces access disparities; improves mobility for underserved communities	**Score**	**Criteria**	
			10	Project connects walking and biking facilities (length of connectivity High score by Jenks Natural Breaks) **OR** a transit route in a high transit propensity area.	
			7	Project connects walking and biking facilities (length of connectivity Medium-High score by Jenks Natural Breaks) **OR** a transit route in medium-high transit propensity area.	
			5	Project connects walking and biking facilities (length of connectivity Medium score by Jenks Natural Breaks) **OR** a transit route in medium transit propensity area.	

Criteria	Weight (%)	Description	Scoring Rubric	
			3	Project connects walking and biking facilities (length of connectivity Medium-Low score by Jenks Natural Breaks) **OR** a transit route in medium-low transit propensity area.
			0	Project directly **DOES NOT** connect or provide walking or biking connection opportunity or a transit connection.
Economic Development	10	Improves access to employment, education, and freight networks; supports growth areas	**Score**	**Criteria**
			10	Project provides direct connection to major employers, comp plan-defined growth areas or TSI, or companies in Fort Worth's target sectors **AND** improves freight travel time reliability.
			5	Project provides direct connection to major employers, comp plan-defined growth areas or TSI, or companies in Fort Worth's target sectors **OR** improves freight travel time reliability.
			0	Project does **NOT** provide a connection to major employers, comp plan-defined growth areas or TSI, or companies in Fort Worth's target sectors, nor does it improve freight travel time reliability.
Adopted Infrastructure Plan + M1M Survey Alignment	20	Aligns with existing local or regional plans	**Score**	**Criteria**
			20	Project is programmed or referenced in existing regional or local plans AND aligns with public input from community or stakeholder surveys.
			10	Project is NOT specifically referenced in an existing regional or local plan BUT is consistent with overarching plan goals, has documented support from NCTCOG or other regional partners, AND aligns with public input from community or stakeholder surveys.
			0	Project is NOT specifically referenced in an existing regional or local plan, does NOT have explicit support from NCTCOG or other regional partners, AND lacks alignment with public input from community or stakeholder surveys.

APPENDIX E

TECHNICAL MEMO 5: FINANCE & FISCAL FORECAST

FORT WORTH®

Master Transportation Plan

Finance and Fiscal Forecast

Technical Memorandum

JANUARY 22, 2026

AECOM

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Acronyms

AHUR	Arizona Highway User Revenue
ARPA	American Rescue Plan Act
ATD	Advanced Transportation District
CATS	Charlotte Area Transit System
CIP	Capital Improvement Program
CO	Certificate of Obligation
COP	Certificate of Participation
FAA	Federal Aviation Administration
FY	Fiscal Year
FTA	Federal Transit Administration
ITSA	Income Tax Set-Aside
MPO	Metropolitan Planning Organization
NCDOT	North Carolina Department of Transportation
PAYGO	Pay-As-You-Go
RAISE	Rebuilding American Infrastructure with Sustainability and Equity
SIB	State Infrastructure Bank
SS4A	Safe Streets for All
STIG	Synthetic Tax Increment Grant
TASA	Transportation Alternatives Set-Aside

1 Introduction

This technical memorandum provides the methodology for development of the revenue forecast. The revenues are primarily directed toward major roadway projects identified for the planning horizon, with focus on the period covering the next several City of Fort Worth bond cycles slated for 2030 and 2034. Two main types of revenue sources providing sustained funding for the transportation program are discussed in the forecast. These sources include proceeds from city debt issuance and other transportation sources received by the city from development growth, intergovernmental, and state and federal transportation funds.

2 Methodology

2.1 Debt Issuance

A core source of transportation funding is from the city's bond program. Every 4 years, the city considers a bond election to maintain and enhance existing infrastructure while promoting fairness and providing mobility and city services to areas experiencing growth. The expenditure authorized in the bond election is funded by General Obligation (GO) Bonds, which are repaid from property tax revenue. City staff develop a list of recommended projects to include in the bond election propositions, and the project list is refined based on feedback from the community and city council.

For the financial forecast, city finance department staff provided debt capacity model figures estimating the available property tax revenue for debt service. The model accounts for remaining outstanding bonds issued from past cycles as well as an assumed rate of bond interest and forecasted growth in property tax revenue.[1] The model provided estimates for bond issues for the 2026, 2030, and 2034 bond cycles. Each 4-year bond cycle is comprised of annual debt issuances of varying amounts.

The estimated revenue per bond cycles is as follows:

- 2026 bond program: $845 million
- 2030 bond program: $498.3 million
- 2034 bond program: $566 million
- Total: $1.909 billion

These amounts are distributed among six categories prioritized by the community and the council, one of which is for Streets and Mobility Infrastructure Improvements. Of the bond revenue distribution, the Streets and Mobility Infrastructure Improvements category has typically received the majority share, though this share may differ with each bond cycle. Historically, the share for this category ranged

[1] The city's debt capacity model is fluid, and updates are undertaken regularly by the Finance Department as economic conditions change. The figures in this section represent a point in time in the model. For this analysis, bond interest assumed are 6.00%, and property tax revenue is assumed to increase 3.00% annually through 2038, then remain flat.

between 65 and 75 percent. The bond revenue share estimated by the city for streets and mobility for the 2026 bond program is 60.9 percent, which is the rate applied to each of the bond cycles. The distributed revenue per bond cycle for Streets and Mobility Infrastructure is as follows:

- 2026 bond program, Streets and Mobility: $514.6 million
- 2030 bond program, Streets and Mobility: $303.5 million
- 2034 bond program, Streets and Mobility: $344.7 million
- Total: $1.163 billion for Streets and Mobility Infrastructure Improvements

Annual bond revenues from these three cycles for Streets and Mobility Infrastructure are shown below in **Table 1**.

Table 1: Debt Issuance Share for Streets and Mobility Infrastructure Improvements

2026 Debt Issue Share		2030 Debt Issue Share		2034 Debt Issue Share		Total Debt Issue Share	
2027	$137,025,000	2027		2027		2027	$137,025,000
2028	$121,800,000	2028		2028		2028	$121,800,000
2029	$121,800,000	2029		2029		2029	$121,800,000
2030	$60,900,000	2030		2030		2030	$60,900,000
2031	$73,080,000	2031	$52,983,000	2031		2031	$126,063,000
2032		2032	$85,564,500	2032		2032	$85,564,500
2033		2033	$57,855,000	2033		2033	$57,855,000
2034		2034	$60,900,000	2034		2034	$60,900,000
2035		2035	$46,162,200	2035	$27,405,000	2035	$73,567,200
2036		2036		2036	$91,350,000	2036	$91,350,000
2037		2037		2037	$73,384,500	2037	$73,384,500
2038		2038		2038	$88,914,000	2038	$88,914,000
2039		2039		2039	$63,640,500	2039	$63,640,500
Total	$514,605,000	Total	$303,464,700	Total	$344,694,000	Total	$1,162,763,700

Note: Debt issuance is 1 year following the year of city council approval of the bond program.
Source: City of Fort Worth; AECOM

For Streets and Mobility Infrastructure Improvements, the bond program divides the funds among categories of improvements, including bridges, major roadways, mobility (intersections, traffic signals, and streetlights), neighborhood streets, railroad, and the Vision Zero Program (Vision Zero). The 2026 bond program provides for the estimated breakdown of revenues for these improvements, as shown in **Table 2**.

Table 2: Bond Categories for Streets and Mobility Infrastructure Improvements

Category	% Revenue
Bridges	7.98%
Major Roadways	38.92%
Mobility	17.71%

Category	% Revenue
Neighborhood Streets	26.24%
Railroad	1.17%
Vision Zero	7.98%
Total	100.00%

Source: City of Fort Worth; AECOM

From these percentages, the revenues for the 2030 and 2034 bond programs are assumed to follow the same splits. The following tables show the detailed breakdown for each bond program and overall total.

Table 3: 2026 Bond Program

Category	2027	2028	2029	2030	2031	Total
Bridges	$10,929,853	$9,715,425	$9,715,425	$4,857,713	$5,829,255	$41,047,672
Major Roadways	$53,336,613	$47,410,323	$47,410,323	$23,705,161	$28,446,194	$200,308,613
Mobility	$24,270,704	$21,573,959	$21,573,959	$10,786,979	$12,944,375	$91,149,977
Neighborhood Streets	$35,950,645	$31,956,129	$31,956,129	$15,978,065	$19,173,677	$135,014,645
Railroad	$1,607,331	$1,428,739	$1,428,739	$714,370	$857,243	$6,036,422
Vision Zero	$10,929,853	$9,715,425	$9,715,425	$4,857,713	$5,829,255	$41,047,672
Total	$137,025,000	$121,800,000	$121,800,000	$60,900,000	$73,080,000	$514,605,000

Table 4: 2030 Bond Program

Category	2031	2032	2033	2034	2035	Total
Bridges	$4,226,210	$6,825,086	$4,614,827	$4,857,713	$3,682,146	$24,205,982
Major Roadways	$20,623,490	$33,305,752	$22,519,903	$23,705,161	$17,968,512	$118,122,819
Mobility	$9,384,672	$15,155,706	$10,247,630	$10,786,979	$8,176,530	$53,751,519
Neighborhood Streets	$13,900,916	$22,449,181	$15,179,161	$15,978,065	$12,111,373	$79,618,695
Railroad	$621,501	$1,003,689	$678,651	$714,370	$541,492	$3,559,703
Vision Zero	$4,226,210	$6,825,086	$4,614,827	$4,857,713	$3,682,146	$24,205,982
Total	$52,983,000	$85,564,500	$57,855,000	$60,900,000	$46,162,200	$303,464,700

Table 5: 2034 Bond Program

Category	2035	2036	2037	2038	2039	Total
Bridges	$2,185,971	$7,286,569	$5,853,544	$7,092,260	$5,076,310	$27,494,653
Major Roadways	$10,667,323	$35,557,742	$28,564,719	$34,609,535	$24,771,894	$134,171,213
Mobility	$4,854,141	$16,180,469	$12,998,310	$15,748,990	$11,272,394	$61,054,304
Neighborhood Streets	$7,190,129	$23,967,097	$19,253,568	$23,327,974	$16,697,077	$90,435,845
Railroad	$321,466	$1,071,554	$860,815	$1,042,979	$746,516	$4,043,331
Vision Zero	$2,185,971	$7,286,569	$5,853,544	$7,092,260	$5,076,310	$27,494,653
Total	$27,405,000	$91,350,000	$73,384,500	$88,914,000	$63,640,500	$344,694,000

Source: AECOM

Table 6: Total 2026-2034 Bond Programs

Category	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
Bridges	$10,929,853	$9,715,425	$9,715,425	$4,857,713	$10,055,465	$6,825,086	$4,614,827	$4,857,713	$5,868,117	$7,286,569	$5,853,544	$7,092,260	$5,076,310	$92,748,307
Major Roadways	$53,336,613	$47,410,323	$47,410,323	$23,705,161	$49,069,684	$33,305,752	$22,519,903	$23,705,161	$28,635,835	$35,557,742	$28,564,719	$34,609,535	$24,771,894	$452,602,645
Mobility	$24,270,704	$21,573,959	$21,573,959	$10,786,979	$22,329,048	$15,155,706	$10,247,630	$10,786,979	$13,030,671	$16,180,469	$12,998,310	$15,748,990	$11,272,394	$205,955,799
Neighborhood Streets	$35,950,645	$31,956,129	$31,956,129	$15,978,065	$33,074,594	$22,449,181	$15,179,161	$15,978,065	$19,301,502	$23,967,097	$19,253,568	$23,327,974	$16,697,077	$305,069,186
Railroad	$1,607,331	$1,428,739	$1,428,739	$714,370	$1,478,745	$1,003,689	$678,651	$714,370	$862,958	$1,071,554	$860,815	$1,042,979	$746,516	$13,639,457
Vision Zero	$10,929,853	$9,715,425	$9,715,425	$4,857,713	$10,055,465	$6,825,086	$4,614,827	$4,857,713	$5,868,117	$7,286,569	$5,853,544	$7,092,260	$5,076,310	$92,748,307
Total	$137,025,000	$121,800,000	$121,800,000	$60,900,000	$126,063,000	$85,564,500	$57,855,000	$60,900,000	$73,567,200	$91,350,000	$73,384,500	$88,914,000	$63,640,500	$1,162,763,700

Source: AECOM

Table 7: Category Totals by Bond Program Timeframe

	2026 Bond	2030 Bond	2034 Bond	
Category	FYs 2027-2031	FYs 2031-2035	FYs 2035-2039	Total
Bridges	$41,047,672	$24,205,982	$27,494,653	$92,748,307
Major Roadways	$200,308,613	$118,122,819	$134,171,213	$452,602,645
Mobility	$91,149,977	$53,751,519	$61,054,304	$205,955,799
Neighborhood Streets	$135,014,645	$79,618,695	$90,435,845	$305,069,186
Railroad	$6,036,422	$3,559,703	$4,043,331	$13,639,457
Vision Zero	$41,047,672	$24,205,982	$27,494,653	$92,748,307
Total	$514,605,000	$303,464,700	$344,694,000	$1,162,763,700

Source: AECOM

2.2 Other Transportation Sources

City Public Works provided transportation project expenditures and their revenue sources from other transportation improvement funds. The forecast of these revenues is based on project expenditure datasets, which include budgetary information, funding categories, project descriptions, and associated implementation timelines.

The following revenue sources were identified[2]:

- General Capital Projects (Pay-As-You-Go [PAYGO])
- Intergovernmental Contribution (primarily Tarrant County bonds)
- Grants Capital Projects, Federal (federal grant revenue)
- Transportation Impact Fee Capital (new development contributions)
- Grants Capital Projects, State (state grant revenue)
- Developer Contribution (including Tax Increment and other developer contributions)
- Transportation Impact Fee Capital Legacy (new development contributions)
- General Gas Lease Capital (city gas-related revenue)

Historic project funding amounts varied over different time spans covering the last 6- to 11-year period. The following table shows the average annual revenue from the analysis of historic expenditure from these revenue sources. The average annual revenues served as the baseline figures for the forecast. To account for cost increases in capital projects over time, the historic expenditures are adjusted by inflation for those years to bring the expenditures to current year dollars.

[2] It is noted that the proposed Street Maintenance Fee revenue, should the fee be implemented, would supplement existing PAYGO revenues for roadway maintenance. Therefore, no shift of revenues is assumed from maintenance to capital projects due to the new fee revenue.

Table 8: Average Annual Revenue

Fund Description	Funding Years	Historical Project Expenditure	Average Annual Revenue
General Capital Projects	7 years (2019–2025)	$404,446,055	$44,938,451
Intergovernmental Contribution	8 years (2018–2025)	$131,881,368	$8,242,585*
Grants Capital Projects, Federal	8 years (2018–2025)	$137,510,287	$17,188,786
Transportation Impact Fee Cap	7 years (2019–2025)	$99,035,814	$14,147,973
Grants Capital Projects, State	8 years (2018–2025)	$44,149,559	$6,881,949
Developer Contribution	6 years (2020–2025)	$41,377,821	$6,896,304
Transportation Impact Fee Capital Legacy	11 years (2015–2025)	$35,999,699	$3,272,700
General Gas Lease Capital	10 years (2016 – 2025)	$3,769,341	$376,934
Total		$898,169,944	$101,945,682

Note: Intergovernmental revenues for transportation were derived in large part by receipt of Tarrant County transportation bonds, according to City Public Works. Given the uncertain timing of these bonds due to an observed gap between the last few county bond programs (2006 and 2021), for forecast purposes the annual average revenue assumes a 50 percent reduction from historical amounts to account for the potential decline in this funding source relative to recent receipts.
Source: City of Fort Worth for historic expenditure by fund; AECOM

Given that the historic revenues generally ebbed and flowed year by year, in applying a conservative assumption, the funding average included years that did not show any revenue. This average was the case, as examples, for federal grants, impact fees, and developer contribution over their respective time frames.

The revenue forecast runs through 2039 to match the 2034 bond cycle. An assumption of alternating annual escalation of 3.5 percent and 4.5 percent for the revenue is made for the period from 2026 through 2039. The amounts are summarized by the following 4-year or 5-year groupings, which keep with the general increments coinciding with each bond cycle, and reduce double counting in those years of overlapping bond program issues.

The forecast for other transportation revenues totals $1.9 billion, as shown in the table below.

Table 9: Other Transportation Revenue Projection by Bond Cycle

Fund Description	FYs* 2026–2030 (5 years)	FYs 2031–2035 (5 years)	FYs 2036–2039 (4 years)	Total Forecasted (2026–2039)
General Capital Projects	$252,399,380	$307,361,000	$293,040,078	$852,800,458
Intergovernmental Contribution	$46,294,953	$56,375,983	$53,749,247	$156,420,183
Grants Capital Projects, Federal	$96,541,800	$117,564,410	$112,086,712	$326,192,922
Transportation Impact Fee Cap	$79,462,903	$96,766,471	$92,257,814	$268,487,188
Grants Capital Projects, State	$38,652,859	$47,069,772	$44,876,642	$130,599,273
Developer Contribution	$38,733,484	$47,167,954	$44,970,249	$130,871,687
Transportation Impact Fee Capital Legacy	$18,381,306	$22,383,956	$21,341,017	$62,106,280
General Gas Lease Capital	$2,117,072	$2,578,078	$2,457,957	$7,153,107
Total	$572,583,756	$697,267,624	$664,779,717	$1,934,631,098

*Fiscal Year (FY)
Source: AECOM

As past transportation projects and revenues were city wide and spread among the districts, an objective for the forecast was to align the associated revenues and past project types with the Streets and Mobility Infrastructure Improvements categories. The categorization of funding was undertaken using the same 2026 bond program categories of Bridges, Major Roadways, Mobility, Neighborhood Streets, Railroad, and Vision Zero.

The categories consolidate the 2022 bond categories as defined in the following table.

Table 10: 2022 and 2026 Bond Program Categories for Streets and Mobility Infrastructure Improvements

Previous Category (2022 Bond)	Current Category (2026 Bond)	Consolidation Logic / Notes
Arterials	Major Roadways	Previously limited to arterials; now expanded to also include major collectors, hence the broader “Major Roadways” title.
Intersections	Mobility	Consolidated under “Mobility,” which now includes intersections, signals, streetlights, and traffic operations.
Streetlights	Mobility	Merged into “Mobility” for integrated corridor and safety improvements.

Previous Category (2022 Bond)	Current Category (2026 Bond)	Consolidation Logic / Notes
Traffic Signals	Mobility	Folded into "Mobility" to centralize all signal and operational upgrades.
Railroad	Railroad	Unchanged; remains focused on grade separations, quiet zones, and crossing safety.
Bridges	Bridges	Unchanged; continues to include recapitalization and new bridge locations.
Vision Zero	Vision Zero	Expanded to include pedestrian, bicycle, and traffic/school safety projects, absorbing both Sidewalks and School/Neighborhood Safety.
Sidewalks	Vision Zero	Folded into Vision Zero under Pedestrian Safety.
School/Neighborhood Safety	Vision Zero	Consolidated into Vision Zero under Traffic and School Safety.
Minor Roadways	Neighborhood Streets	Retitled for clarity and plain-language alignment with community priorities.

Source: City of Fort Worth

For this process, each past project's description was interpreted based on keywords and defined characteristics. For example, a project description containing terms like "safe routes" indicated Vision Zero, while "intersection" or "signal" suggested Mobility. These project descriptions and their revenue sources were then matched to the most relevant category using the definitions outlined in **Table 10**. The matching was conducted through use of pivot tables. The end result was the aggregation of past projects and tally of revenues by bond category. For example, all past project funding that fell under the Vision Zero category was summed by year. This analysis was conducted for each category.

Gas Lease Revenues did not have past transportation projects listed by the city. For consistency with the city's Gas-Related Revenue and Expense Expenditure Policy, which provides expenditure criteria including that gas-related revenues could be used to provide matching grant funds to leverage funds for capital projects, the allocation of gas lease revenues was assumed to have been made to the Major Roadways and Mobility categories. The allocation reflected the proportion of revenue from these two categories, or a split of 68 percent for Major Roadways and 32 percent for Mobility.

Using the same forecast period through 2039 and a growth escalator of 3 percent, the revenue amounts are summarized by the Streets and Mobility Infrastructure Improvements categories by revenue source as well as in 4- or 5-year groupings to keep with the general increments coinciding with each bond cycle.

Table 11: Other Transportation Revenue Projection by Category by Bond Cycle

Program Category	FYs 2026–2030 (5 years)	FYs 2031–2035 (5 years)	FYs 2036–2039 (4 years)	Total Forecasted (2026–2039)
Bridges	$19,741,631	$24,040,500	$22,920,377	$66,702,508
Major Roadways	$245,719,541	$299,226,582	$285,284,668	$830,230,791
Mobility	$87,858,871	$106,990,717	$102,005,680	$296,855,268
Neighborhood Streets	$164,836,789	$200,731,080	$191,378,383	$556,946,252
Railroad	$18,579,760	$22,625,624	$21,571,425	$62,776,808
Vision Zero	$35,847,166	$43,653,121	$41,619,184	$121,119,471
Grand Total	$572,583,756	$697,267,624	$664,779,717	$1,934,631,098

Source: AECOM

2.3 Forecast Summary

The following tables show the combined annual revenues between FYs 2026 and 2039 for the bond programs and other transportation revenues, as well as their groupings in 4- to 5-year bond program increments. In sum, total forecasted transportation revenues for Streets and Mobility Infrastructure Improvements during this time period are close to $3.1 billion.

Table 12: Financial Forecast, by Revenue Source

Fund Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
Debt Issuance	$0	$137,025,000	$121,800,000	$121,800,000	$60,900,000	$126,063,000	$85,564,500	$57,855,000	$60,900,000	$73,567,200	$91,350,000	$73,384,500	$88,914,000	$63,640,500	$1,162,763,700
Other Transportation Sources															
General Capital Projects	$46,511,296	$48,604,305	$50,305,455	$52,569,201	$54,409,123	$56,857,533	$58,847,547	$61,495,687	$63,648,036	$66,512,197	$68,840,124	$71,937,930	$74,455,757	$77,806,266	$852,800,458
Intergovernmental Contribution	$8,531,076	$8,914,974	$9,226,999	$9,642,213	$9,979,691	$10,428,777	$10,793,784	$11,279,504	$11,674,287	$12,199,630	$12,626,617	$13,194,815	$13,656,633	$14,271,182	$156,420,183
Grants Capital Projects, Federal	$17,790,393	$18,590,961	$19,241,645	$20,107,519	$20,811,282	$21,747,790	$22,508,962	$23,521,866	$24,345,131	$25,440,662	$26,331,085	$27,515,984	$28,479,043	$29,760,600	$326,192,922
Transportation Impact Fee Cap	$14,643,152	$15,302,094	$15,837,668	$16,550,363	$17,129,625	$17,900,459	$18,526,975	$19,360,688	$20,038,313	$20,940,037	$21,672,938	$22,648,220	$23,440,908	$24,495,749	$268,487,188
Grants Capital Projects, State	$7,122,817	$7,443,344	$7,703,861	$8,050,534	$8,332,303	$8,707,257	$9,012,011	$9,417,551	$9,747,165	$10,185,788	$10,542,291	$11,016,694	$11,402,278	$11,915,380	$130,599,273
Developer Contribution	$7,137,674	$7,458,870	$7,719,930	$8,067,327	$8,349,683	$8,725,419	$9,030,809	$9,437,195	$9,767,497	$10,207,034	$10,564,280	$11,039,673	$11,426,062	$11,940,234	$130,871,687
Transportation Impact Fee Capital Legacy	$3,387,244	$3,539,670	$3,663,559	$3,828,419	$3,962,414	$4,140,722	$4,285,648	$4,478,502	$4,635,249	$4,843,836	$5,013,370	$5,238,971	$5,422,335	$5,666,340	$62,106,280
General Gas Lease Capital	$390,127	$407,682	$421,951	$440,939	$456,372	$476,909	$493,601	$515,813	$533,866	$557,890	$577,416	$603,400	$624,519	$652,622	$7,153,107
Subtotal	$105,513,779	$110,261,900	$114,121,068	$119,256,515	$123,430,493	$128,984,866	$133,499,337	$139,506,806	$144,389,544	$150,887,074	$156,168,121	$163,195,687	$168,907,535	$176,508,373	$1,934,631,098
Total	**$105,513,780**	**$247,286,901**	**$235,921,067**	**$241,056,515**	**$184,330,493**	**$255,047,865**	**$219,063,836**	**$197,361,806**	**$205,289,544**	**$224,454,273**	**$247,518,121**	**$236,580,186**	**$257,821,535**	**$240,148,875**	**$3,097,394,798**

Source: City of Fort Worth; AECOM

Table 13: Financial Forecast by Revenue Source by Bond Program Time Frame

Fund Description	FYs 2026–2030 (5 years)	FYs 2031–2035 (5 years)	FYs 2036–2039 (4 years)	Total Forecasted (2026–2039)
Debt Issuance	$441,525,000	$403,949,700	$317,289,000	$1,162,763,700
Other Transportation Sources				
General Capital Projects	$252,399,380	$307,361,000	$293,040,078	$852,800,458
Intergovernmental Contribution	$46,294,953	$56,375,983	$53,749,247	$156,420,183
Grants Capital Projects, Federal	$96,541,800	$117,564,410	$112,086,712	$326,192,922
Transportation Impact Fee Cap	$79,462,903	$96,766,471	$92,257,814	$268,487,188
Grants Capital Projects, State	$38,652,859	$47,069,772	$44,876,642	$130,599,273
Developer Contribution	$38,733,484	$47,167,954	$44,970,249	$130,871,687
Transportation Impact Fee Capital Legacy	$18,381,306	$22,383,956	$21,341,017	$62,106,280
General Gas Lease Capital	$2,117,072	$2,578,078	$2,457,957	$7,153,107
Subtotal	$572,583,756	$697,267,624	$664,779,717	$1,934,631,098
Total	$1,014,108,756	$1,101,217,324	$982,068,717	$3,097,394,798

Table 14: Financial Forecast, by Streets and Mobility Infrastructure Improvements Category

Program Category	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
Bridges	$3,637,920	$14,731,480	$13,650,109	$13,827,170	$9,113,368	$14,502,625	$11,427,897	$9,424,764	$9,835,997	$11,070,425	$12,670,957	$11,480,230	$12,915,880	$11,161,992	$159,450,815
Major Roadways	$45,280,358	$100,654,587	$96,384,426	$98,588,261	$76,674,327	$104,422,462	$90,595,877	$82,388,085	$85,668,729	$93,387,763	$102,575,988	$98,598,786	$107,094,795	$100,518,989	$1,282,833,435
Mobility	$16,190,333	$41,189,602	$39,085,018	$39,873,016	$29,726,503	$42,120,850	$35,640,222	$31,653,949	$32,942,520	$36,183,211	$40,143,347	$38,039,518	$41,666,640	$38,356,338	$502,811,067
Neighborhood Streets	$30,375,561	$67,693,106	$64,809,576	$66,287,981	$51,511,532	$70,207,067	$60,881,290	$55,340,716	$57,545,274	$62,739,235	$68,925,151	$66,234,734	$71,953,482	$67,510,733	$862,015,438
Railroad	$3,423,815	$5,185,218	$5,131,851	$5,298,491	$4,719,563	$5,664,172	$5,335,607	$5,205,505	$5,399,663	$5,759,090	$6,139,051	$6,156,349	$6,523,857	$6,474,033	$76,416,265
Vision Zero	$6,605,793	$17,832,907	$16,860,086	$17,181,596	$12,585,199	$18,130,689	$15,182,943	$13,348,787	$13,897,361	$15,314,550	$17,063,627	$16,070,569	$17,666,882	$16,126,789	$213,867,777
Total	$105,513,780	$247,286,901	$235,921,067	$241,056,515	$184,330,493	$255,047,865	$219,063,836	$197,361,806	$205,289,544	$224,454,273	$247,518,121	$236,580,186	$257,821,535	$240,148,875	$3,097,394,798

Table 15: Financial Forecast, Streets and Mobility Infrastructure Improvements Category, by Bond Program Time Frame

Program Category	2026 Bond FYs 2026–2030	2030 Bond FYs 2031–2035	2034 Bond FYs 2036–2039	Total
Bridges	$54,960,047	$56,261,708	$48,229,060	$159,450,815
Major Roadways	$417,581,960	$456,462,917	$408,788,558	$1,282,833,435
Mobility	$166,064,472	$178,540,751	$158,205,843	$502,811,067
Neighborhood Streets	$280,677,756	$306,713,582	$274,624,100	$862,015,438
Railroad	$23,758,939	$27,364,037	$25,293,290	$76,416,265
Vision Zero	$71,065,582	$75,874,329	$66,927,867	$213,867,777
Total	$1,014,108,756	$1,101,217,324	$982,068,717	$3,097,394,798

3 Other Jurisdiction Funding for Transportation

A review was conducted of transportation revenue sources for other jurisdictions to identify revenue streams and funding tools. The jurisdictions included the cities of Phoenix, Arizona; Austin, Texas; Columbus, Ohio; San Antonio, Texas; and Charlotte, North Carolina. An in-depth description of the review by sample city is contained in **Appendix I** of this memo.

3.1 Summary of Findings on Revenue Sources

The following table outlines the primary trends and commonalities in transportation funding for each of the cities reviewed. The table highlights how the cities leverage a mix of local, regional, state, and federal sources, along with financing tools, to support both day-to-day operations and capital projects. The funding mechanisms range from dedicated taxes and user fees to competitive grants, formula allocations, and debt issuance. The City of Fort Worth applies comparable funding mechanisms such as bonds and PAYGO as the other jurisdictions, although Phoenix implements a voter-approved, dedicated, long-term transportation sales tax and receives a share of state gas tax for local use, both comprising a relatively large portion of the city's transportation fund. The sampled cities in Texas (Austin and San Antonio) use Certificates of Obligation (COs) that do not require voter approval. Discretionary grant funding secured by the other cities also provides capital improvement revenues. Further, some loan programs such as a state infrastructure bank (SIB) for Columbus are available for developing transportation facilities and infrastructure.

Table 16: Trends in Transportation Funding Among Cities Reviewed

Funding Source	Funding Mechanism	Funding Source/ Financial Tools	Trends and Commonalities
Local Revenue	Dedicated taxes, fees, and direct budget allocations	Sales taxes, property taxes, user fees, PAYGO	Local sources mostly provide baseline funding independent of state/federal cycles
Local Debt Financing	Bond issuance and other debt instruments	GO bonds, COs, Certificates of Participation (COPs), revenue bonds	Mostly used for capital projects with long-term repayment
State Funding	Formula allocations, competitive grants, and low-interest loans	Fuel tax distributions (Highway User Revenue), state grants, and loan programs	Formula-based often supports maintenance rather than major projects
Federal Funding	Competitive grants, formula programs, and	Sample grant programs: RAISE (BUILD)*, Safe Streets for All (SS4A),	Mostly use for transformative projects but are competitive and often

Funding Source	Funding Mechanism	Funding Source/ Financial Tools	Trends and Commonalities
	federal aid transfers	Transportation Alternatives Set-Aside (TASA), American Rescue Plan Act (ARPA), Federal Transit Administration, (FTA) Federal Aviation Administration (FAA) grants	requires alignment with federal priorities
Regional Coordination	Shared revenue agreements, regional sales taxes, and joint capital planning	Metropolitan Planning Organizations (MPOs), transit agency partnerships with independent transit systems	Regional bodies act as a path for certain funds and must align with regional plans
Diversified Tools	Combination of multiple mechanisms to balance funding sources	Debt, taxes/fees, grants, partnerships, innovative finance (Synthetic Tax Increment Grants [STIGs], Income Tax Set-Aside [ITSA])	Mixture of tools provides resilience from economic downturns and political changes

*RAISE = Rebuilding American Infrastructure with Sustainability and Equity, now BUILD = Better Utilizing Investments to Leverage Development
Source: Cities Reviewed and AECOM

Appendix I: Revenue Sources and Financial Strategies Analysis: A Study from Phoenix, Austin, Columbus, San Antonio, and Charlotte

This appendix compiles a review of transportation funding sources and financial tools for five U.S. cities—Phoenix, Arizona; Austin, Texas; Columbus, Ohio; San Antonio, Texas; and Charlotte, North Carolina—to identify patterns, trends, and mechanisms that support capital and operational investments in transportation infrastructure. The purpose of this section is to research potential revenue sources and funding mechanisms for the City of Fort Worth. The study categorizes these funding into local, regional, state, and federal sources, highlighting revenue streams such as dedicated sales and property taxes, special districts fees, and state fuel tax distributions, alongside competitive grant programs and intergovernmental partnerships. The analysis also documents the financial mechanisms used to deploy these resources, including GO Bonds, revenue bonds, COs, PAYGO funding, and other financing models.

Funding sources and financial tools were identified through a review of publicly available city budget documents and Capital Improvement Program (CIP) reports for each of the five cities. These sources provided detailed line items, funding breakdowns, and project allocations that were analyzed to determine the origin of funds (local, regional, state, or federal) and the financial mechanisms used to apply them. Definitions of each funding source and tool were extracted or adapted from the cities' own descriptions, ensuring consistency. The summary of findings was standardized across cities for comparison and identification of common trends. The funding sources examined in this memo primarily support capital improvement projects, with operating revenues referenced where relevant throughout the analysis.

Summary of Findings on Revenue Sources

Table 16 outlines the primary trends and commonalities in transportation funding for each of the cities reviewed. The table highlights how the cities leverage a mix of **local, regional, state, and federal sources**, along with financing tools, to support both day-to-day operations and capital projects. The funding mechanisms range from dedicated taxes and user fees to competitive grants, formula allocations, and debt issuance.

City-by-City Analysis of Potential Funding Sources

Phoenix, Arizona

The City of Phoenix's Street Transportation and Drainage Program is financed through a mix of local, regional, state, and federal funding sources, complemented by various financial mechanisms. Financial tools include the voter-approved 0.7 percent Transportation 2050 sales tax, Highway User Revenue Funds (state gas tax), impact fees, general fund allocations, and 2023 GO Bonds. External support comes from grants provided by federal, state, and regional partners, such as the Maricopa Association of Governments and Arizona Department of Transportation.

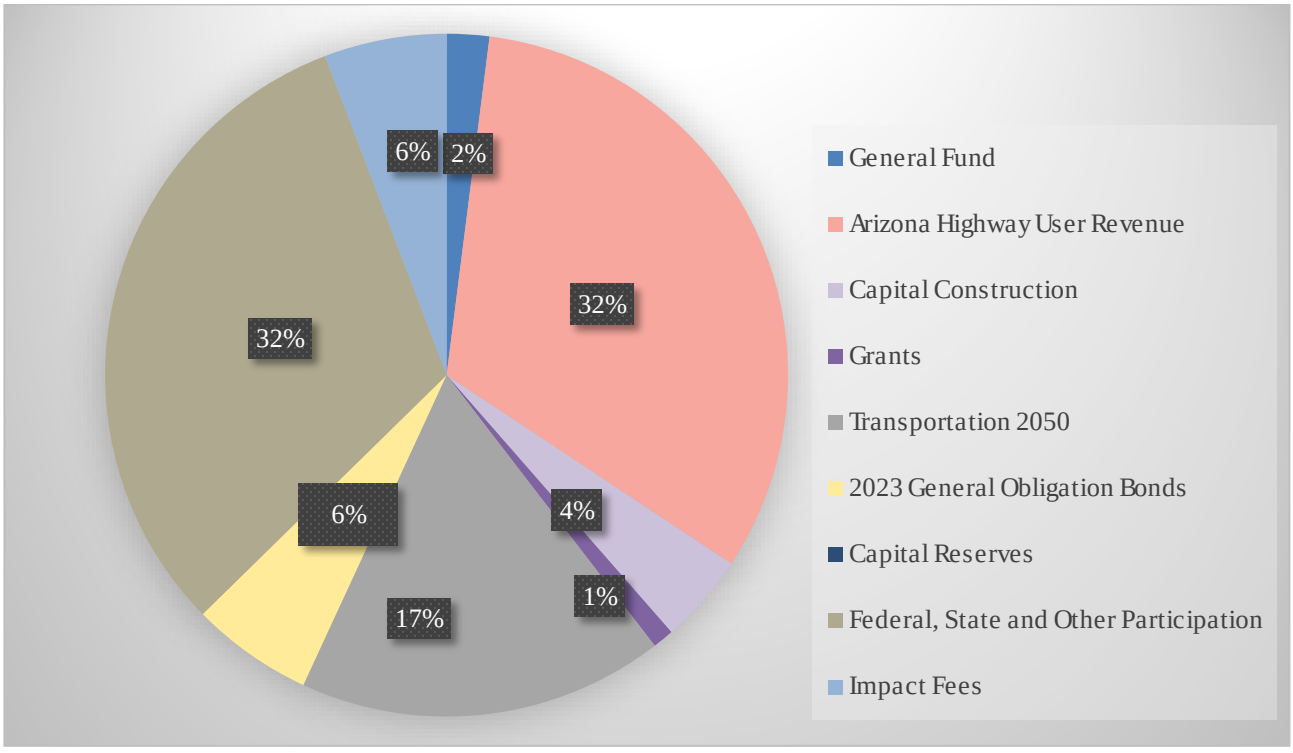
Table 17: City of Phoenix – Transportation Funding Sources

Funding Source	Average 5 Years ($M) 2025–2029	Definitions
General Fund	$9.4	Resources derived from taxes and fees that have unrestricted use, meaning they are not earmarked for specific purposes. This is a category within Operating Funds.
Arizona Highway User Revenue (AHUR)	$150.5	Various gas tax and vehicle licensing fees imposed and collected by the state and shared with cities and towns. This revenue under operating funds must be used for street or highway purposes. This fund is under the Operating Fund category.
Capital Construction	$19.8	A Special Revenue Fund under Operating Funds that finances capital improvements in STREET TRANSPORTATION, plus related operations and maintenance.
Grants	$4.7	Within Operating Fund category received from external sources, typically governmental or institutional, to support specific projects or initiatives.
Transportation 2050	$80.8	A Special Revenue Fund supported by a 0.7 percent voter-approved sales tax dedicated to a comprehensive transportation plan, including public transit and street improvements, with allocations to both the Public Transit and Streets departments. This is under the Operating Fund category.
Total Operating Funds	$265.2	The combined total of the General Fund, AHUR, Capital Construction, Grants, and Transportation 2050 used to support the city's operational and capital program expenditures.
2023 GO Bonds	$26.9	Debt instruments approved by voters in 2023, backed by the city and repaid through the secondary property tax levy, used to finance a range of public capital projects.
Total Bond Funds	$26.9	The total resources from all GO bonds, including the 2023 issuance, allocated to CIPs.
Capital Reserves	$0.0	Capital Fund consisting of resources designated specifically for capital projects, often serving as matching funds for federal grants and supporting various infrastructure and facility improvements.

Funding Source	Average 5 Years ($M) 2025–2029	Definitions
Federal, State, and Other Participation	$147.0	Capital Fund representing contributions from federal and state governments and other entities for capital projects, including cost recovery for grant administration and revenue sharing based on population.
Impact Fees	$27.0	Fees charged to new developments in outlying planning areas to cover their proportional share of public infrastructure costs, funding projects in accordance with state statutes and the city's Infrastructure Financing Plan.
Total Other Capital Funds[3]	$174.0	The combined total of resources from Capital Reserves, Federal/State/Other Participation, and Impact Fees designated for capital projects.
Program Total	$466.1	-

Source: City of Phoenix, Detail Budget 2024 to 2025 [4]; AECOM

Figure 1. City of Phoenix Sources of Funds (2025 to 2029)



Source: City of Phoenix, Detail Budget 2024 to 2025 [5]; AECOM

[3] Capital Reserves; Federal, State, and Other Participation; Impact Fees
[4] https://www.phoenix.gov/content/dam/phoenix/budgetsite/budget-books/2024-25_detail_budget_book.pdf
[5] https://www.phoenix.gov/content/dam/phoenix/budgetsite/budget-books/2024-25_detail_budget_book.pdf

Austin, Texas

Table 19 summarizes funding sources (local, regional, state, federal) and financial tools for Austin's Transportation and Public Works departments . This summary includes mechanisms such as transportation fees, current revenue, bonds, and grants. Financial tools include the Transportation User Fee on utility bills, property taxes, GO bonds, and regional partnerships through CapMetro and Project Connect. External funding mostly comes from federal grants such as SS4A and state coordination through the Texas Department of Transportation.

Table 18: City of Austin Transportation Funding Sources

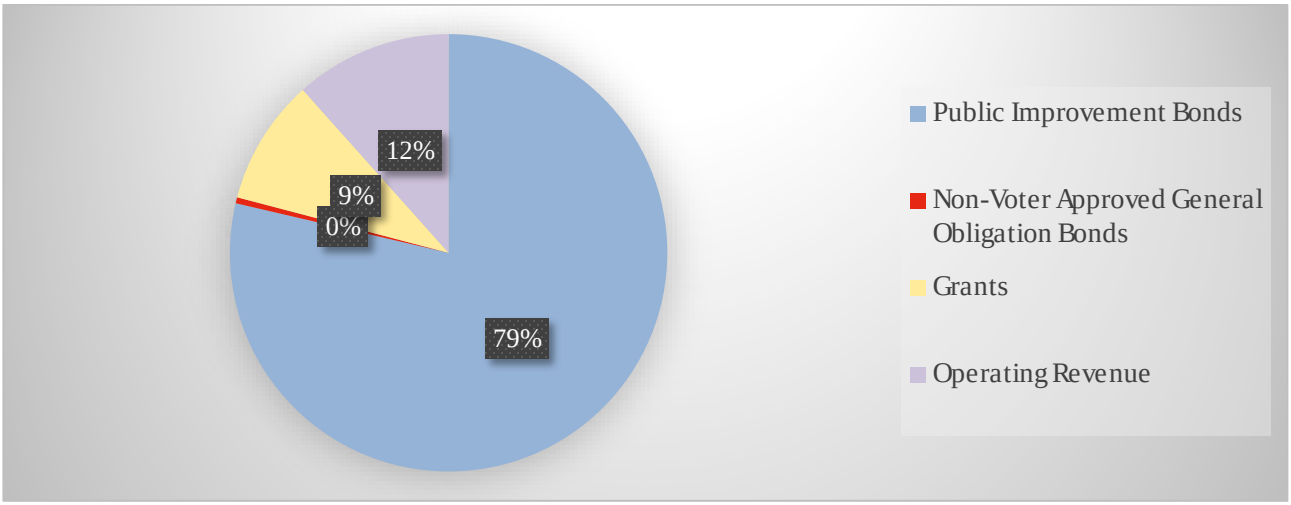
Funding Source	Average 5 Years ($M) 2025–2029	Definition
Public Improvement Bonds (Local)	$636.7	Voter-approved bonds issued by the city secured by and payable by property taxes.
Non-Voter Approved GO Bonds (Local)	$3.6	Funding from Public Property Finance Contractual Obligations and COs.
Earmarks and Grants: SS4A, TASA, Capital Area Metropolitan Planning Organization, Reconnecting Communities Pilot	$75.3	Funding from federal, state, and local agencies.
Operating Revenue[6] (mostly local with some federal)	$94.0	Funds from operating transfers, fees, insurance proceeds, donations, and contributions from partner organizations.

Source: City of Austin, FY 2024 to 2025 City of Austin approved budget,[7] page 715; AECOM

[6] Operating Revenue includes multiple funding groups, which is a combination of funding sources (e.g., mix of current revenue and commercial paper).

[7] https://www.austintexas.gov/sites/default/files/files/Finance/Financial%20Transparency/ApprovedBudget/FY%202024-25%20City%20of%20Austin%20Approved%20Budget.pdf

Figure 2. City of Austin Sources of Funds (2025 to 2029)



Source: City of Austin, FY 2024 to 25 City of Austin approved budget,[8] page 715; AECOM

Columbus, Ohio

The City of Columbus funds transportation projects through local financial tools such as bonds, tax, user fee and state/federal programs. The ITSA plays a pivotal role in supporting transportation-related capital improvement projects in the city's 2025 budget and 6-year Capital Improvements Program (CIP). **Table 20** below outlines notable general funding sources supported by ITSA.

Table 19: City of Columbus – Transportation Funding Sources

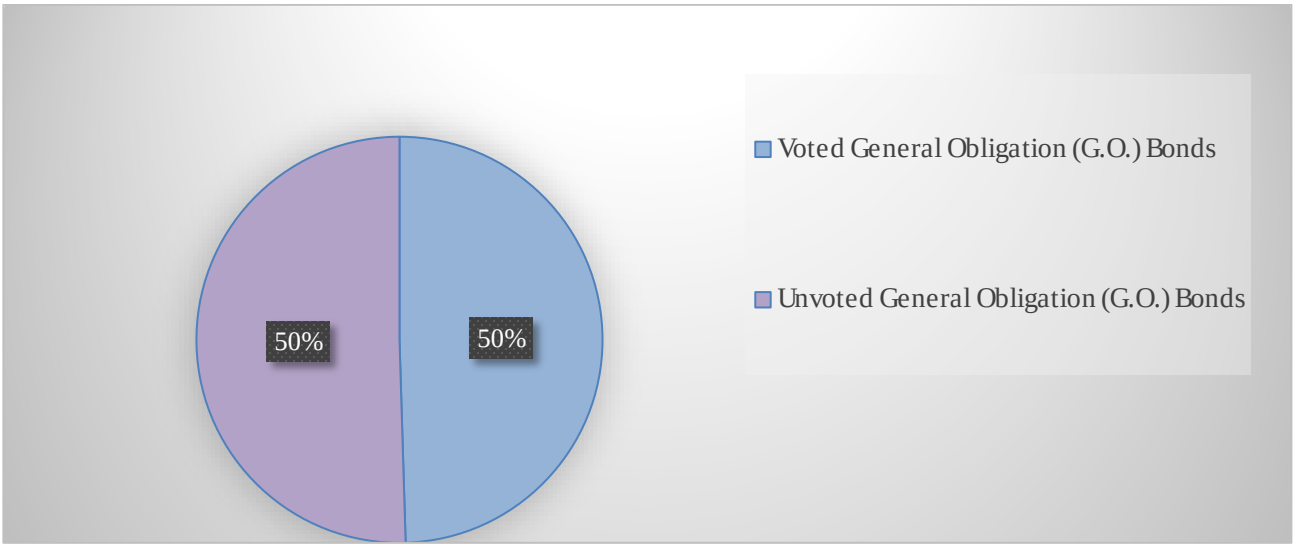
Funding Source	Average 6 Years ($M) 2025–2030	Projects Summary
Voted GO Bonds	$47.0	Debt authorized by a popular vote of the electorate, which generally carries a lower interest expense due to the city's ability to levy and ad valorem property tax to service the debt, although the city does not intend to do so. These bonds are supported by the ITSA fund, to which 25 percent of the city's 2.5 percent income tax is deposited.
Unvoted (Councilmanic) GO Bonds	$48.0	Unvoted debt authorized by the city council, which is also supported by the ITSA fund. Unvoted debt is subject to additional limits set by the Ohio Revised Code and typically has a higher interest rate compared to voted debt

Source: City of Columbus, 2025 Capital improvements,[9] PDF page 14–15; AECOM

[8] https://www.austintexas.gov/sites/default/files/files/Finance/Financial%20Transparency/ApprovedBudget/FY%202024-25%20City%20of%20Austin%20Approved%20Budget.pdf

[9] https://www.columbus.gov/files/sharedassets/city/v/1/finance/budget/2025/039-2025.pdf

Figure 3. City of Columbus Sources of Funds (2025 to 2030)



Source: City of Columbus, 2025 Capital improvements,[10] PDF page 14–15; AECOM

Furthermore, the City of Columbus CIPs highlighted key funding sources and financial tools for transportation projects, as outlined in **Table 21** below.

Table 20: Other Funding Sources and Financial Tools for the City of Columbus

Other Funding Source / Tool	Definition
Local	
ITSA Fund	Receives 25 percent of the city's 2.5 percent income tax; used directly for transportation projects or transferred to the Debt Retirement Fund to service debt including the voted and unvoted GO Bond for transportation capital.
Internal Service and Enterprise Agency User Fees	Bonds and loans repaid through fees charged to users of specific services (e.g., Fleet Management); used primarily for enterprise projects.
State	
SIB Loans	Low-interest loans funded from federal sources but administered by the Ohio Department of Transportation for developing transportation facilities and infrastructure.
Ohio Public Works Commission – State Capital Improvement Program and Local	State programs that provide capital funding to municipalities for infrastructure projects; can partially or fully fund transportation projects.

[10] https://www.columbus.gov/files/sharedassets/city/v/1/finance/budget/2025/039-2025.pdf

Other Funding Source / Tool	Definition
Transportation Improvement Program	
State/Federal	
Ohio Environmental Protection Agency/Ohio Water Development Authority Loan Programs	Loan programs for water, wastewater, and stormwater projects that can support transportation-related infrastructure components, such as utility relocation.

Source: City of Columbus, 2025 Capital improvements; AECOM

San Antonio, Texas

Table 22 summarizes the City of San Antonio's funding sources and financial tools for transportation projects. These mechanisms draw from a combination of local, regional, state, federal, and partnership resources. The classification highlights the primary revenue streams, ranging from debt instruments and dedicated taxes to grants and leveraged partnerships. The financial tools include GO bonds, COs, and PAYGO from the Infrastructure Management Program.

Table 21: City of San Antonio Transportation Funding Sources

Funding Source[11]	Average 6 Years ($M) 2025–2030	Definition
Local		
2022 GO Bond	$171	Voter-approved local debt repaid with property taxes for capital projects, including streets.
2017 GO Bond	$15	Voter-approved local debt from 2017 for transportation and infrastructure projects.
Tax Notes	$39	Short-term local debt repaid with future tax revenues.
COs	$99	Local debt instrument issued without voter approval for various public improvements.
Airport Funding	$403	
Self-Supporting CO	$4	Local debt instrument issued without voter approval for various public improvements.
Previous Debt	$2	Remaining funds from previously issued local debt.
Other Revenues	$45	Miscellaneous local revenues including General Fund, Municipal Facilities

[11] https://www.sa.gov/files/assets/main/v/1/omb/documents/fy2025/adopted-capital-budget.pdf

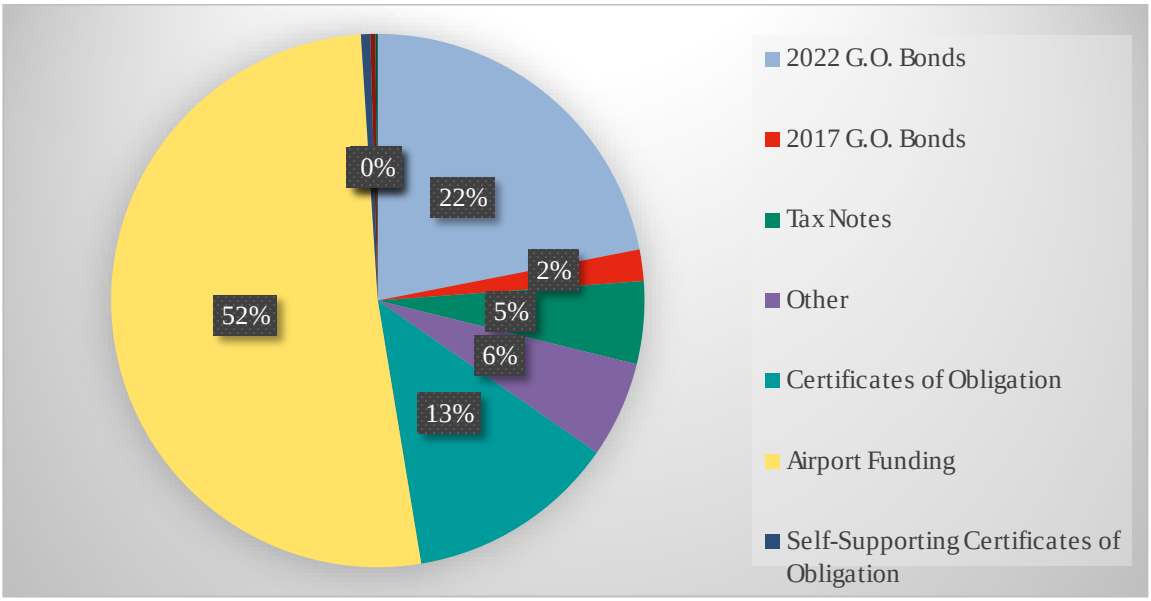
Funding Source[11]	Average 6 Years ($M) 2025–2030	Definition
		Corporation, and Advanced Transportation District (ATD). The ATD provides a 1/4-cent sales tax supporting the city's transportation projects.
ATD	$7[12]–$7.5[13]	Created November 2, 2004, by voter approval; funded by additional ¼-cent sales tax. Included in "Other" revenue category in the 6-Year CIP. Total Funding (FY 2025–2030): $45M (Spending Plan) and $43M (Appropriation Plan).
State/Federal		
Grant Funding (Non-Airport)	$1	Grants from state and/or federal sources for non-airport transportation projects.
Other Local		
Airport Funding	-	
General Airport Revenue Bonds	-	Debt issued by the airport authority, repaid with airport revenues.
Interim Airport Funding	-	Temporary local funding for airport projects until permanent financing is secured.
Airport Improvement and Contingency Fund	-	Local airport reserve fund for improvements and contingencies.
Stinson Revolving Fund	-	Local revolving fund for Stinson Municipal Airport improvements.
Airport Customer Facility Charge Fund	-	Locally collected fee on car rentals at the airport; used for facility improvements.
Airport Passenger Facility Charge Fund	-	Locally collected fee on airline tickets; used for passenger-related facility projects.
Federal		
Airport Improvement Program Grants (FAA)	-	Federal grants provided by the FAA for airport improvements.
Airport Terminals Program Grant (FAA)	-	Federal grant from the FAA to support airport terminal upgrades.
Airport Infrastructure Grant	-	Federal grant to improve airport infrastructure.

[12] On page 18 of the CIP, under Table 1, Spending Plan SUMMARY OF CAPITAL IMPROVEMENTS PROGRAM BY REVENUE SOURCE For FY 2025 Through FY 2030 (Dollars In Thousands)
[13] On Page 169 of the CIP under Table 1, Appropriation Plan SUMMARY OF CAPITAL IMPROVEMENTS PROGRAM BY REVENUE SOURCE For FY 2025 Through FY 2030 (Dollars In Thousands)

Funding Source[11]	Average 6 Years ($M) 2025–2030	Definition
FAA Zero Emissions Vehicle and Infrastructure Program	-	Federal program funding zero-emission airport vehicles and infrastructure.

Source: City of San Antonio. FY 2025 adopted capital budget: CIP, FY 2025–FY 2030,[14] Page 4; AECOM

Figure 4. City of San Antonio Sources of Funds (2025 to 2030)



Source: City of San Antonio, FY 2025 adopted capital budget: CIP, FY 2025–FY 2030,[15] page 4; AECOM

Charlotte, North Carolina

Table 23 summarizes the average annual funding available for transportation projects in Charlotte from 2025 to 2029 by primary funding source. It highlights the relative scale of PAYGO funds and GO bonds, along with definitions of each funding type. This funds are in the General Fund category for transportation capital projects.

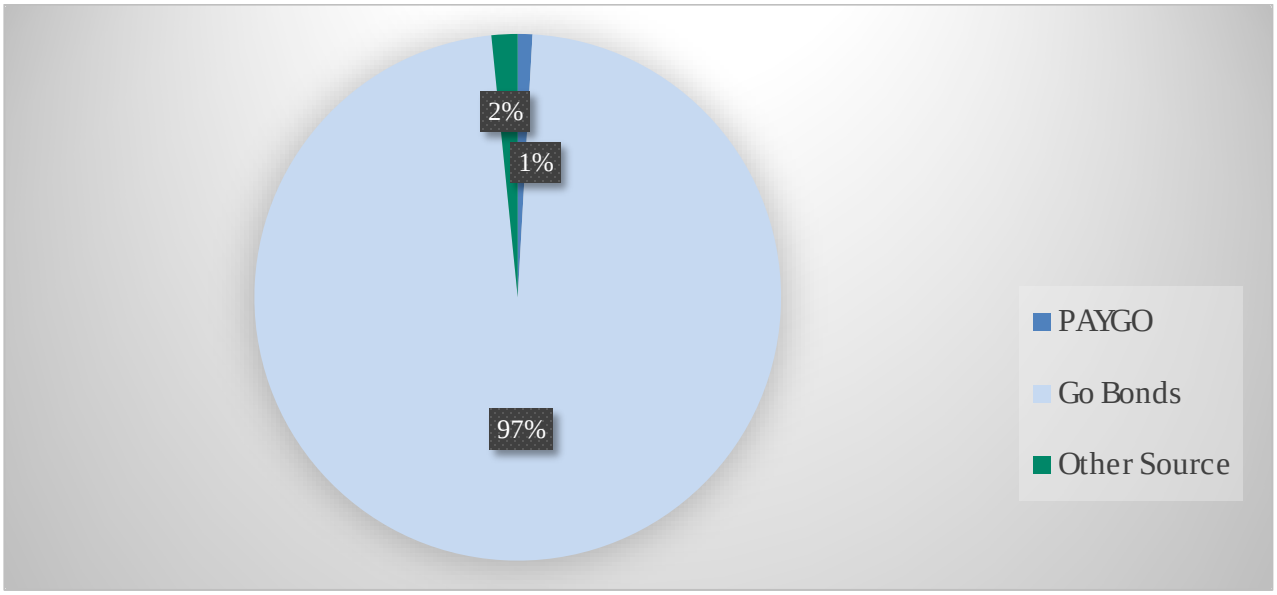
[14] https://www.sa.gov/files/assets/main/v/1/omb/documents/fy2025/adopted-capital-budget.pdf
[15] https://www.sa.gov/files/assets/main/v/1/omb/documents/fy2025/adopted-capital-budget.pdf

Table 22: City of Charlotte Transportation Funding Sources

Funding Source	Average 5 Years ($M) 2025–2029	Definition
PAYGO	$0.94	A capital funding method where projects are financed directly from current revenues rather than borrowed funds, typically for smaller-scale projects.
Go Bonds	$102.30	Long-term debt issued by the city and backed by property tax revenues, requiring voter approval. Used for large transportation projects.

Source: City of Charlotte, Proposed FY2025 budget,[16] page 331 to 389; AECOM

Figure 5. City of Charlotte Average Sources of Funds (2025 to 2029)



Source: City of Charlotte, Proposed FY2025 budget,[17] [18] page 331 to 389; AECOM

Furthermore, **Table 24** outlines Charlotte's key transportation funding sources, categorized as local, regional, state, or federal. These sources include Powell Bill funds for maintenance, North Carolina Department of Transportation (NCDOT) funding, and federal transit grants. It also reflects the city's use of financial tools such as GO Bonds, COs, the Transportation Capacity Fee, special districts, and developer contributions to finance transportation operations, capital projects, and strategic mobility initiatives.

[16] https://www.charlottenc.gov/files/sharedassets/city/v/3/city-government/departments/documents/budget/fy2025/proposed-fy-25-budget.pdf
[17] https://www.charlottenc.gov/files/sharedassets/city/v/3/city-government/departments/documents/budget/fy2025/proposed-fy-25-budget.pdf
[18] The other source is mostly a project named Complete the Cross Charlotte Trail.

Table 23: Other Funding Sources and Financial Tools for the City of Charlotte

Other Funding Source / Tool[19]	Definition
Local	
General Fund	The city's main operating fund, supported primarily by property and sales taxes. Pays for basic services (e.g., police, fire, street maintenance) and certain transportation expenses.
Property Tax	A levy on property values, providing revenue for the General Fund, debt service, and PAYGO funds. Includes dedicated portions for transportation and capital projects.
Sales Tax	A tax on retail sales, with portions dedicated to transit (e.g., Article 43 for the Charlotte Area Transit System [CATS]) or capital investment programs.
User Fees	Charges to individuals or businesses for specific services or facilities (e.g., parking fees, airport landing fees, development review fees) that recover service costs.
Municipal Debt Service Fund	A city fund used to pay principal and interest on outstanding city debt, often funded by property and sales taxes. A special tax district established within the City of Charlotte.
Capital Investment Plan	A multi-year budget outlining planned investments in long-term infrastructure such as roads, sidewalks, and transit facilities.
COPs	Financing tool that allows the city to borrow for capital projects without voter approval, secured by lease payments on city assets.
Revenue Bonds	Debt repaid from revenues generated by a specific service or facility (e.g., airport fees, water/sewer charges).
Transfers from Other Funds / Interfund Charges	Funds moved between city accounts to cover administrative or operational support for transportation services.
STIGs	Public-private partnership financing where increases in property tax revenue from a redevelopment area help pay for project costs.
Regional	

[19] https://www.charlottenc.gov/files/sharedassets/city/v/3/city-government/departments/documents/budget/fy2025/proposed-fy-25-budget.pdf

Other Funding Source / Tool[19]	Definition
Charlotte Regional Transportation Planning Organization	The MPO responsible for regional transportation planning and project funding in the Charlotte area.
Metropolitan Transit Commission	Policy board governing CATS, approving its operating and capital budgets.
State	
Powell Bill Fund	State-distributed motor fuel tax revenue allocated to municipalities based on population and local street mileage, for road and sidewalk maintenance.
State Grants	Funds awarded by the state (often through NCDOT) for specific transportation projects such as road widening or intersection improvements.
Federal	
Federal Grants	Competitive or formula-based awards from the federal government for transportation and infrastructure projects.
ARPA Funds	Federal COVID-19 recovery funds, portions of which can be applied to transportation-related initiatives.
RAISE Grant	Federal grant program for projects improving transportation safety, access, and sustainability.
Community Development Block Grant	Federal funding for community development, which may include transportation components.
Housing Opportunities for Persons with AIDS	Federal funding for housing-related services; in some cases, tied to transportation and accessibility.
FAA Grants	Federal funds for airport infrastructure and operations.
FTA Grants	Federal funds for public transportation capital and operating assistance.

Source: City of Charlotte, Proposed FY2025 budget; AECOM

APPENDIX F

TECHNICAL MEMO 6: MEDIUM-TERM MODELING ANALYSIS

FORT WORTH®

Master Transportation Plan

Medium-Term Modeling Analysis

Technical Memorandum

September 2025

AECOM

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1 Executive Summary

The City of Fort Worth's (CoFW) Moving A Million (M1M) program requires a defensible medium-term forecasting framework to assess how planned roadway investments affect travel demand, congestion, and operational performance. This memorandum summarizes the Medium-Term Modeling Analysis, which combines systemwide travel demand modeling with targeted intersection operational analysis to support project prioritization and implementation decisions.

1.1 Approach

Systemwide forecasts were developed using the North Central Texas Council of Governments (NCTCOG) regional travel demand model (TransCAD) and refined to better reflect local conditions within Fort Worth. A 2023 modeling year was established to serve as the calibration anchor, supported by observed traffic volumes from TxDOT's Texas Count Data System (TCDS). The calibrated model was used to evaluate a consistent medium-term demand condition applied to alternative network configurations representing No-Build and Build scenarios.

In parallel, detailed intersection operational analyses were conducted at two critical locations—Old Denton Road & Westport Parkway and Chapin Road & Chapel Creek Boulevard—to translate forecasted volumes into lane-level performance measures (delay, queuing, and LOS) under existing, no-build, and build conditions.

1.2 Scenarios Evaluated

The medium-term scenario set represents progressively higher levels of planned investment:

- No-Build: Existing/committed network configuration evaluated with medium-term demand.
- Baseline: Regional committed projects (MTP/TIP) reflected in the medium-term network.
- Scenario 1: Baseline plus CoFW primary bond projects.
- Scenario 2: Scenario 1 plus CoFW secondary bond projects.

All scenarios were evaluated using consistent demand assumptions to isolate the operational effects of network changes.

1.3 Key Findings

- System performance improves with bond projects. Compared to No-Build and Baseline conditions, Scenario 1 and Scenario 2 demonstrate improved system efficiency, reflected in improved travel time reliability measures, higher average speeds, and reductions in roadway miles operating at LOS F.
- Connectivity benefits are most evident on secondary facilities. Build scenarios shift trips away from local/secondary streets and improve access to higher-capacity corridors, with benefits most noticeable in targeted subareas where bond projects enhance network continuity.
- Benefits are incremental from Scenario 1 to Scenario 2. Scenario 2 provides additional localized improvements beyond Scenario 1, though major congestion hotspots remain in high-demand corridors.
- Core and freeway corridors remain critical. Key regional corridors continue to carry the highest demand across scenarios, reinforcing their importance to Fort Worth mobility and indicating

where persistent bottlenecks may require additional strategies over time.

- Intersection analyses confirm the need for targeted operational upgrades. At the two analyzed intersections, no-build conditions indicate worsening operations under forecast volumes, while build alternatives—particularly signalized configurations with appropriate turn-lane storage—substantially improve delay and LOS, supporting the City's preferred concepts.

1.4 Overall Conclusion

The combined systemwide and intersection-level analyses indicate that advancing CoFW's bond program projects provides measurable medium-term mobility benefits and improves overall network performance, while also highlighting remaining locations where targeted operational or capacity strategies may be needed to sustain long-term performance.

2 Introduction

This memorandum documents the Medium-Term Modeling Analysis conducted as part of the City of Fort Worth's (CoFW) Moving A Million (M1M) program. The purpose of this effort is to develop a consistent, decision-support forecasting framework to evaluate how planned transportation investments may influence future travel patterns and system performance within Fort Worth.

The analysis is grounded in the regional travel demand modeling tools maintained by the North Central Texas Council of Governments (NCTCOG) and incorporates localized refinement to better represent conditions within the CoFW study area. In addition to systemwide modeling, targeted intersection operational analyses were performed at select locations to translate forecasted volumes into localized operational performance.

The sections that follow describe the data sources, assumptions, and modeling procedures used to support the medium-term analysis, and present the resulting findings for the No-Build and Build scenarios evaluated.

To support the modeling and operational analyses, regional model inputs, roadway network data, demographic assumptions, and observed traffic counts were compiled and processed for consistency across analysis years. The following section summarizes the datasets used and the preparation steps completed prior to scenario development and evaluation.

3 10-Year Systemwide Travel Demand Analysis

This section documents the technical methodology used to support the medium-term traffic forecasts as part of the City of Fort Worth (CoFW) Moving A Million (M1M) project. The methodology encompasses three primary steps: matrix interpolation, model calibration and validation, and scenario development. Together, these steps are intended to produce travel demand forecasts that reflect both regional assumptions and localized conditions relevant to project-level decision-making.

The NCTCOG TDM, developed in TransCAD, serves as the primary forecasting tool for the Dallas-Fort Worth metropolitan area. For this study, we leveraged this tool's 2019 base, and 2026 forecast year outputs to interpolate 2023 demand levels, which were then calibrated using observed counts from the

Texas Count Data System (TCDS). The final calibrated model serves as the basis for evaluating medium-term No-Build and Build scenarios aligned with CoFW's capital improvement priorities. This section describes the processes, data and results from such analysis.

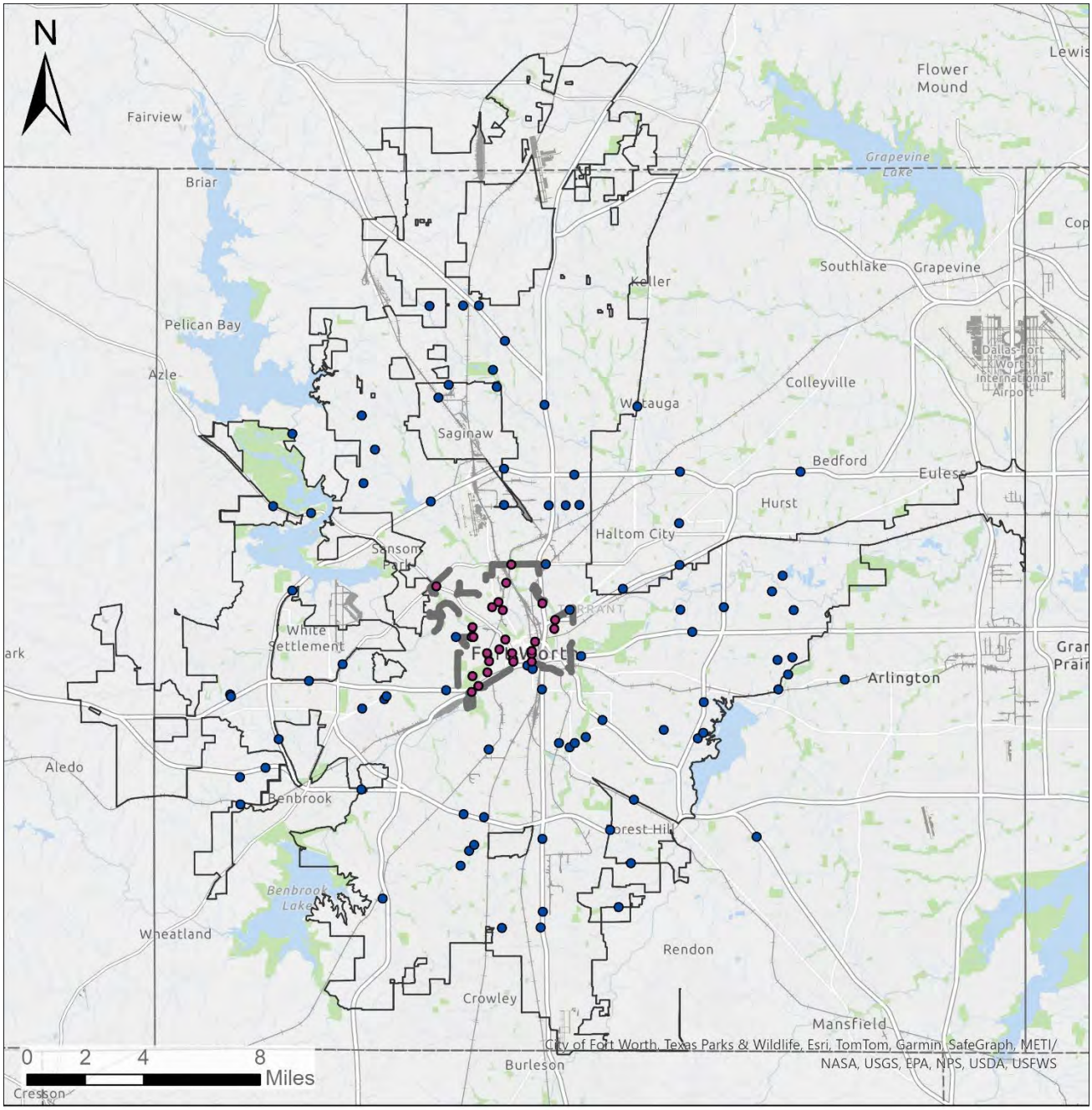
3.1 Data sources and preparation

Data was collected to inform existing traffic conditions, existing and future infrastructure projects, and existing and future demand. Table 1 summarizes the data used throughout this task to calibrate and produce the scenarios needed for medium-term analysis. Figure 1 shows the locations of TxDOT traffic count data from the Statewide Traffic Analysis and Reporting System (STARS II) used for calibration. Table 2 shows the distribution of the TCDS locations by functional class.

Table 1: Data Sources for the Model Calibration Task

Data	Source	Date received
NCTCOG 2050 Mobility Plan TDM files, for years: • 2019 (base year) • 2026 • 2050	NCTCOG	03/17/2025 – 03/25/2025
NCTCOG Demographic projections for 2050 Mobility Plan, for years: • 2019 • 2023 • 2026 • 2050	NCTCOG	03/17/2025
NCTCOG 2045 Mobility Plan TDM files, for years: • 2023 • 2026 • 2036 • 2045	NCTCOG	01/13/2025
Traffic Count Data for 2023 and 2022 in selected locations	TxDOT TCDS (STARS II)	03/06/2025

Figure 1: TxDOT TCDS Location for Calibration



TCDS Count Locations

- Fort Worth City Boundary
- County Boundary
- Lakes
- Streams
- Parks (2024)
- CTC Boundary
- TCDS Count Locations
- TCDS Count Locations (Connecting the Core)

Table 2: TxDOT Traffic Count Locations by Functional Class

Functional Class	2023 TxDOT Counts (Obs)
Interstate	44
Principal Arterial-Other Freeways and Expressways	19
Principal Arterial-Other	49
Minor Arterial	15
Major Collector	13
Local	4
All Functional Classes	**144**

3.1.1 Matrix Interpolation

The scenario development process for the medium-term analysis required two modelling years: 2023 (base year) and 2036 (medium-term year). The year 2023 serves as a calibration year, and all the calibration effort is then carried into 2026 and 2036 trip tables. 2036 year is the modelling year for the medium-term scenarios, so all of them will assume 2036 demand, but with different infrastructure (i.e., network) assumptions.

To generate a demand matrix for the 2023 analysis year, a linear interpolation was performed between the 2019 base year and 2026 forecast year OD matrices from the NCTCOG model. This was done at the individual cell (OD pair) level for each trip purpose and user class.

This approach preserved spatial demand patterns while reflecting the gradual increase or decrease in trips expected across the region. It was applied consistently across all trip purposes, including work, non-work, and truck-related travel. The resulting interpolated matrix served as the seed matrix for assignment and calibration in the next step.

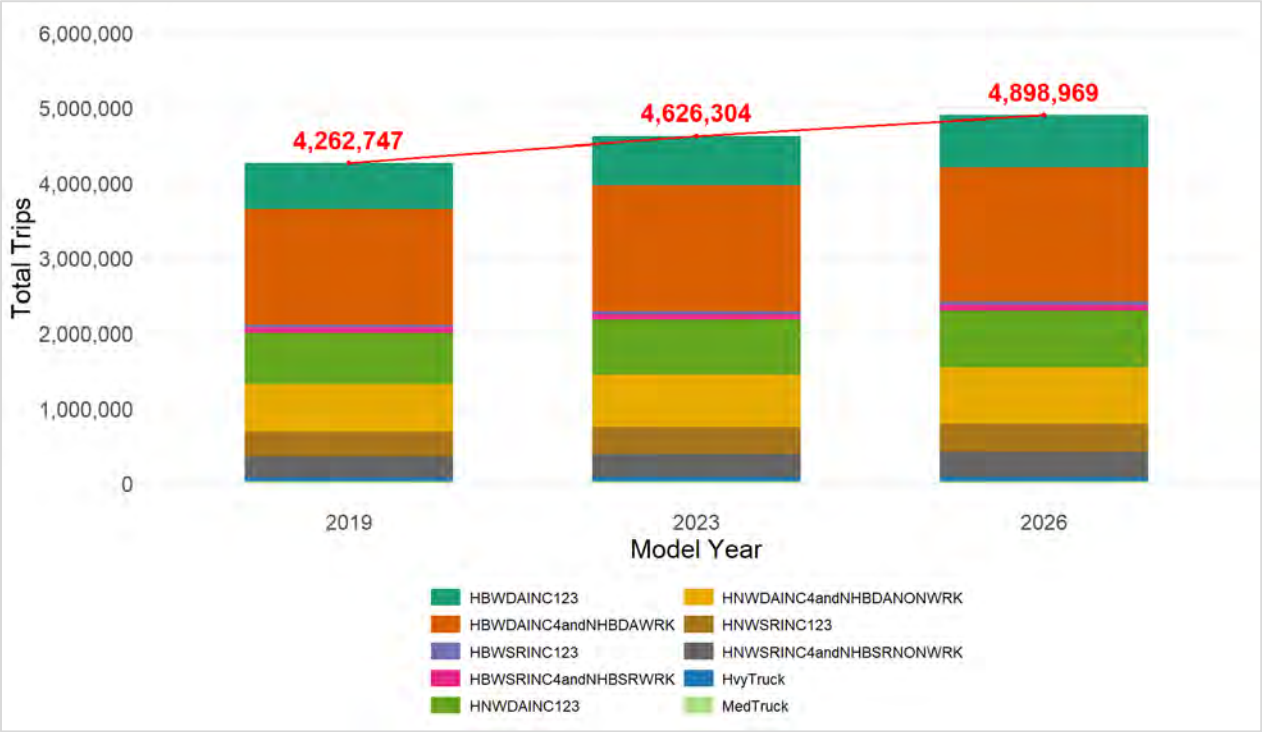
The NCTCOG TDM model has 12 vehicle classes used in the assignment process, based on the vehicle class, trip purpose and income group:

- HBWDAINC123: Drive-alone, home-based work, income <75,000
- HBWDAINC4: Drive-alone, home-based work, income ≥75,000
- HBWSRINC123: Shared ride, home-based work, income <75,000
- HBWSRINC4: Shared ride, home-based work, income ≥75,000
- HNWDAINC123: Drive-alone, home non-work, income <75,000
- HNWDAINC4: Drive-alone, home non-work, income ≥75,000
- HNWSRINC123: Shared ride, home non-work, income <75,000
- HNWSRINC4: Shared ride, home non-work, income ≥75,000
- NHBDAWRK: Drive-alone, non-home-based work related
- NHBSRWRK: Shared ride, non-home-based work related
- MedTruck: Medium trucks
- HVYTruck: Heavy trucks

Figure 2 presents a summary of total trips from the 2019, 2023 (interpolated), and 2026 matrices.

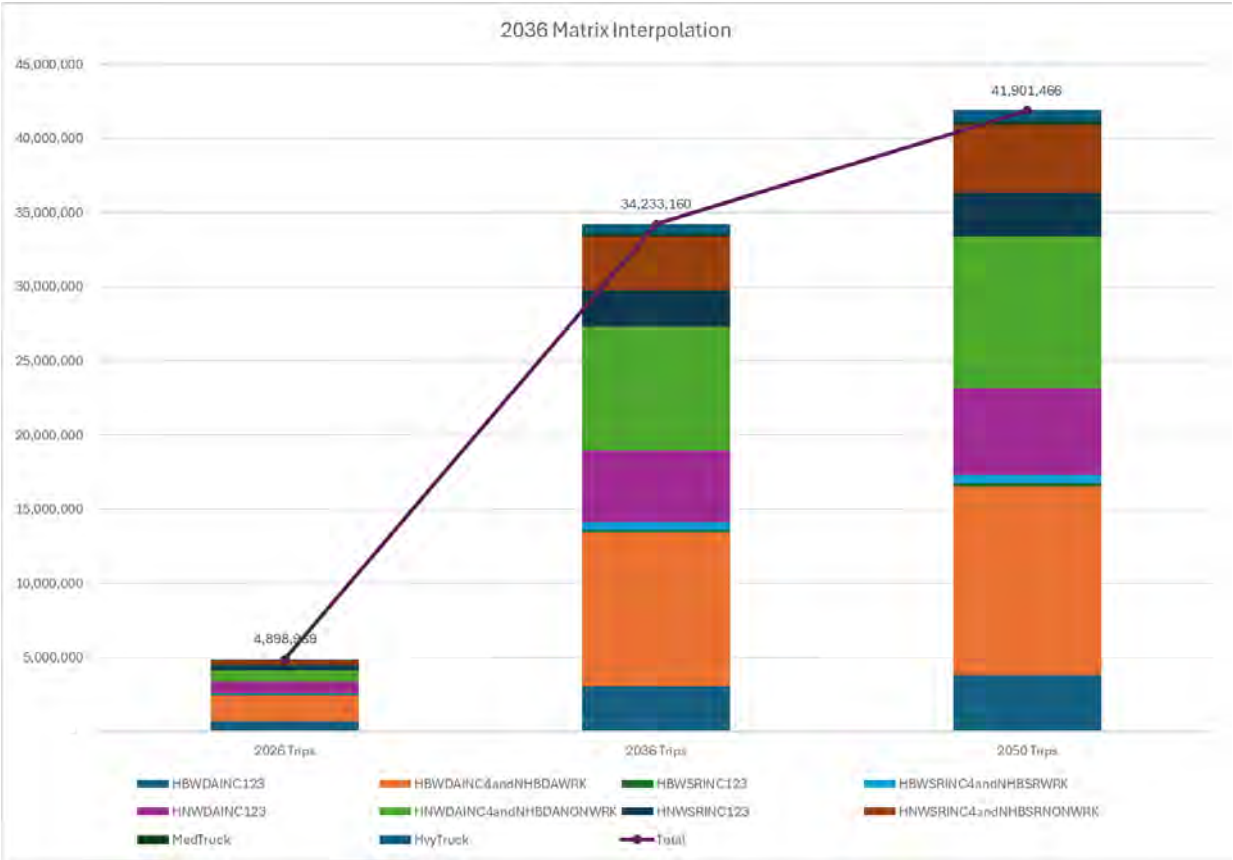
The 2023 matrix includes a total of 4,626,304 trips. Among all user classes, drive-alone home-based work trips for income ≥ $75,000 and drive-alone non-home-based work-related trips contribute the most significant share of total trips. The 2023 matrix shown here is the starting point for the calibration.

Figure 2: Matrix Interpolation for 2023 matrix



To generate the 2036 matrix, an interpolation between 2026 and 2050 trip tables was carried using the population as the interpolation anchor, instead of the year. Based on our analysis, between 2026 and 2050, the annual population growth rate is 1.51% in the NCTCOG region. Based on this approach, the 2036 resulting matrix is shown in Figure 3.

Figure 3: Matrix Interpolation for 2023 matrix



3.2 Model Calibration

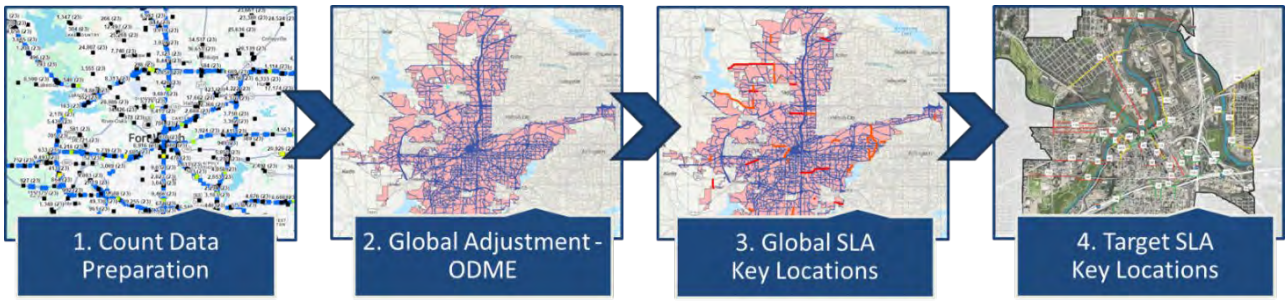
A key step in the methodology was calibrating the regional model to local traffic conditions. Since the regional model is validated at a macro scale, a local calibration effort was necessary to support accuracy in the CoFW project area. Furthermore, NCTCOG's model is calibrated for the base year, which is 2019. As this is a pre-pandemic year, and in the medium-term travel patterns have been affected posterior to Covid-19, the consultant team decided to use a further year as the base calibration year for the medium-term analysis of M1M project. Based on consistent availability of data, the year 2023 was selected.

The calibration process is shown in Figure 4. It consists of four main steps:

- Step 1: Count Data Preparation. This task includes all the post-processing steps needed to produce target by vehicle class for all the locations used for the calibration process.
- Step 2: Origin-Destination Matrix Adjustment (ODME), which is a process in which TransCAD runs iterative matrix adjustments and assignments to match traffic volumes set as targets (i.e., count data).
- Step 3: Select-Link Analysis (SLA) for global adjustments of key locations. This process identifies locations of the network of interest for medium-term and long-term analysis (e.g., bond projects) and runs adjustment queries for these locations.
- Step 4: Target SLA for key locations. After all the global adjustments finished, some locations

still showed traffic levels significantly different than the count data. For these, specific queries were made to do individual adjustments.

Figure 4: Calibration Process



A detailed description of the results of these steps is presented in the following sections.

3.2.1 Count Data Preparation

TCDS data was obtained for 144 segments throughout the study area. Out of these locations, 51 were selected in key locations close to the primary and secondary priority bond projects, to guarantee a close representation of traffic; and 15 additional locations were selected in the Core area, in the interest of Connecting the Core study. All the selected locations are shown in Figure 1.

The TCDS data provides only Average Annual Daily Traffic (AADT) for all the locations, as the TDM is meant to represent a typical weekday, a seasonality factor was needed to have comparable numbers. We selected the five permanent count locations in the study area, these locations have traffic counts for every day of the year, allowing to do seasonality analysis. For these locations, we extracted the count data for all the typical weekdays (Tuesday-Thursday) in April 2023, representing a typical school-month and estimated the factor between AADT and typical day, obtaining an average value of **1.09** (see Table 3). This seasonal adjustment factor is applied to all count locations, providing targets for an average-week day to compare with the modelled daily results.

Table 3: Seasonality Calculation

TCDS Count ID	AADT	Traffic Counts Apr 2023	Seasonality Factor
A109	155,190	158,457	1.02
A130	144,707	159,950	1.11
A193	101,772	110,844	1.09
A301	20,184	23,777	1.18
S524	128,273	134,586	1.05

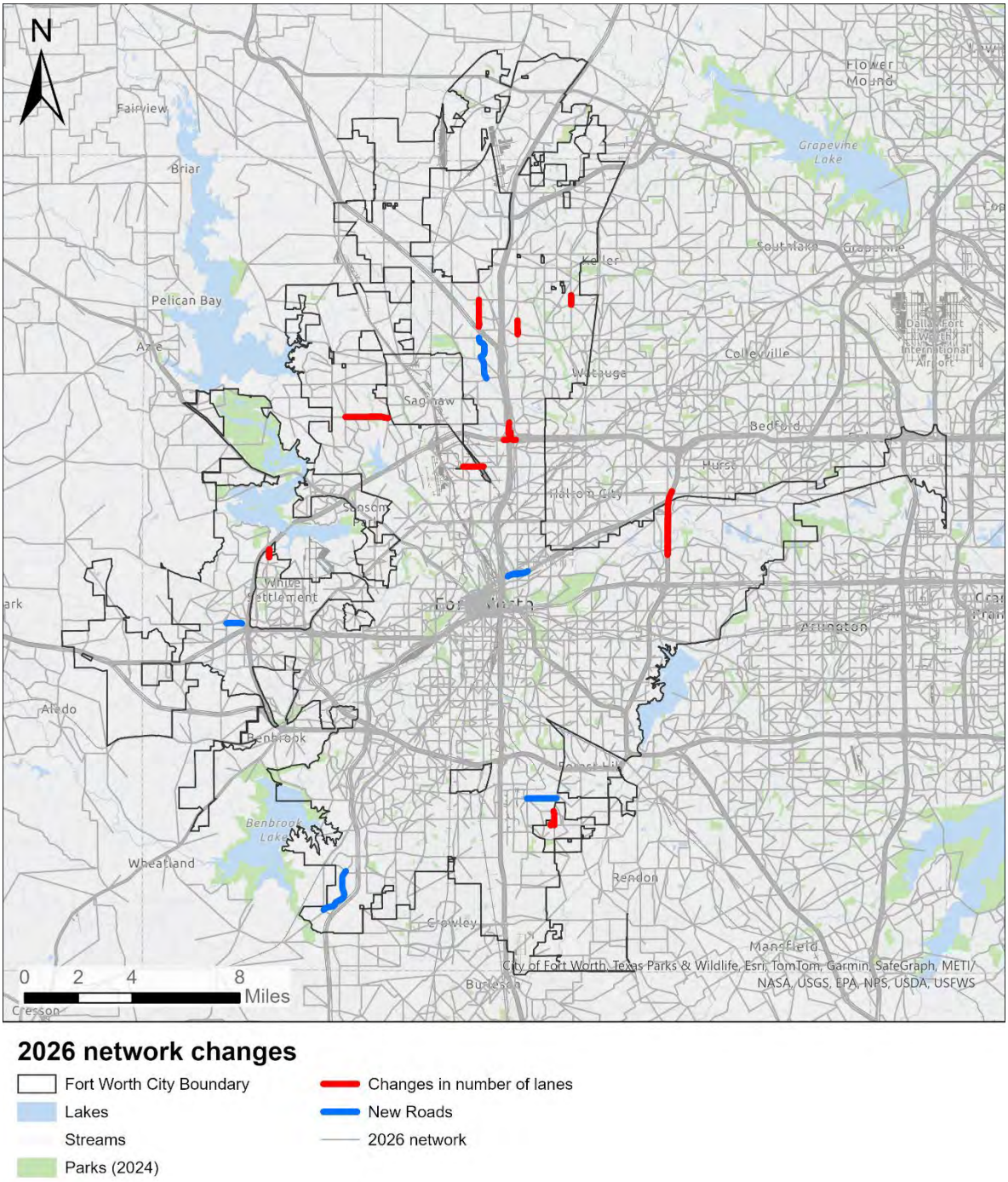
The count data collected from TxDOT TCDS did not include break-down by vehicle class for most of the locations, therefore a post-processing step was needed to split the daily count data into vehicle classes and time periods. Based on existing modelled data, the daily traffic counts were divided into time periods (AM, PM, OP) and four vehicle classes -Drive Alone (DA), Shared Ride (SR), Medium Truck (MT), and Heavy Truck (HT). This process was done at the link level, providing individual splits by direction and vehicle class for each location.
As a final step, the 12 classes from the NCTCOG TDM were aggregated into the four vehicle classes (DA, SR, MT, HT) to simplify the calibration process and considering that it is not possible to obtain traffic count targets at this level of granularity.

3.2.2 Pre-calibration Process

The calibration was done for 2023 modelling year which is not part of the NCTCOG 2050 Mobility Plan TDM files. Therefore, the demand (trip tables) and network were prepared by the modelling team. The 2023 interpolated matrix was used as the base demand input for calibration, as described previously.

Network preparation included a detailed comparison between the 2050 Mobility Plan NCTCOG's 2026 network and the 2045 NCTCOG Mobility 2023 network to identify differences in roadway facilities. Two types of adjustments were made: (1) new roadways coded in the 2026 network but not present in 2023 were removed, and (2) links with increased lane counts in 2026 were scaled down to match 2023 conditions. A map illustrating the locations of these network changes is provided in Figure 5.

Figure 5: Differences between 2023 and 2026 base networks



3.2.3 Initial Calibration Results

Calibration focused on refining the assignment results to better match observed traffic volumes using 2023 traffic counts from the Texas Count Data System (TCDS). The initial state of the calibration (at daily level) is shown in Figure 6 and Figure 7. As can be seen, the NCTCOG regional

model already has an overall good fit in terms of general distribution of volumes, presenting an R^2 of 0.96. The slope of the curve also tells us that at a global scale, numbers mostly fit well. However, since volumes differ quite significantly, some of the lower volumes' locations, i.e., non-highways, present more disparity against traffic counts.
Figure 7 shows the percent error distribution of the 144 calibration locations, again most of the locations have an error below 40%, showing already good overall fit. The calibration efforts focus on moving most of the locations to lower errors.

Figure 6: City-wide Model Validation (Daily)

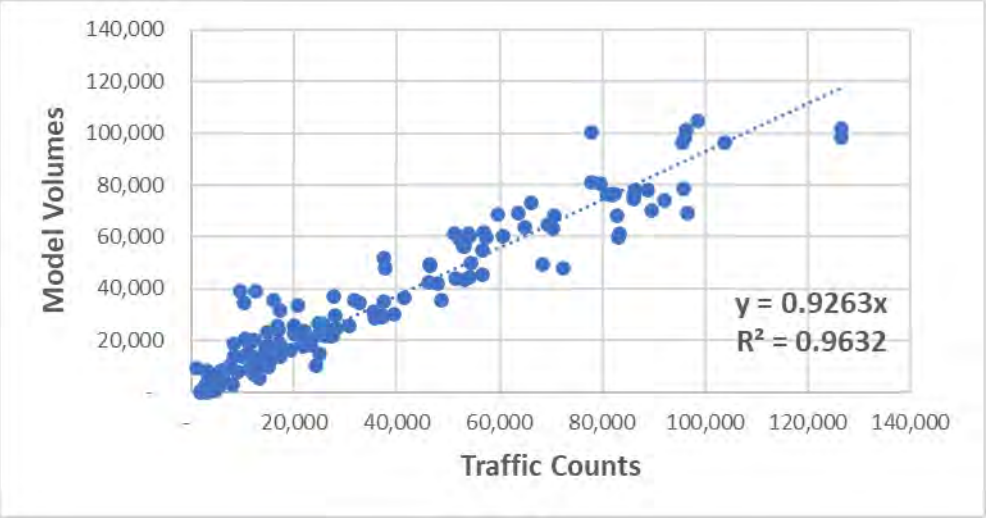
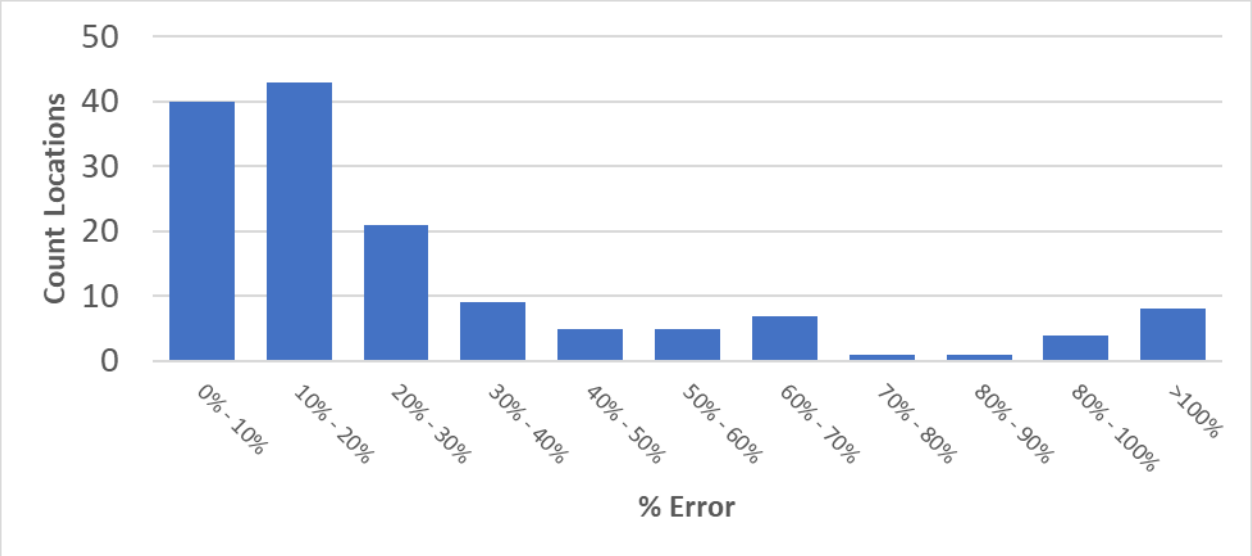


Figure 7: City-wide Error Distribution



Since the medium-term analysis will focus on producing results for projects in key locations, we

also reviewed how the model predicted values for these locations (51 key locations). Figure 8 and Figure 9 illustrate the model fit for these locations. As shown, the R^2 is lower than the global comparison for the key locations, and in some cases the model significantly overpredicts traffic volumes. Within the Core (i.e., downtown), only a few locations require additional attention. Calibration Steps 2–4 were directed at improving model performance at these key and Core locations, which then served as the calibration targets for the ODME process described below.

Figure 8: Key Locations Model Validation (Daily)

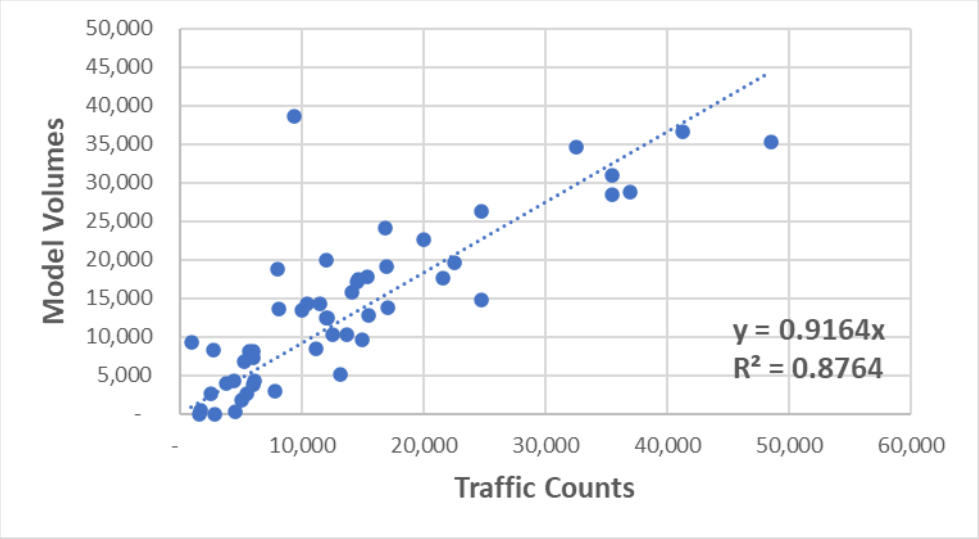
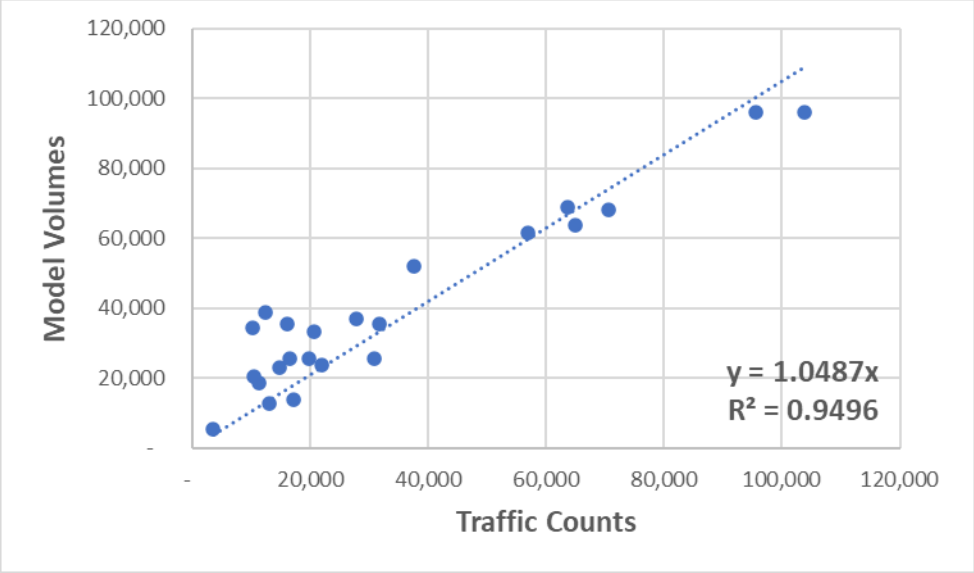


Figure 9: Core Locations Model Validation (Daily)



3.2.4 Calibration Process and Results

The counts at specific locations identified for the medium-term analysis (i.e. 51 key locations mentioned in the previous section) were used as calibration targets for the Origin-Destination Matrix Estimation (ODME). The ODME procedure adjusted trip matrices to improve assignment accuracy at these locations. This process was implemented separately for each time period and for the four classes: DA, SR, MT and HT. TransCAD's multimodal assignment ODME with the gradient method was applied for this analysis. Since the procedure requires a single value of time (VOT) per class, weighted average VOTs were derived from the original 12 vehicle classes (see Table 4).

Table 4: Adjusted VOT to four classes

Vehicle Class	VOT AM	VOT PM	VOT OP
Drive-alone (DA)	1.18	0.58	0.40
Shared ride (SR)	0.83	0.36	0.26
Medium truck (MT)	1.5	1	1
Heavy truck (HT)	1.5	1	1

The ODME-adjusted matrix was then reassigned, and discrepancies at certain locations were further addressed using Select Link Analysis (SLA) and manual network adjustments were necessary. This iterative calibration process ensured that the final assigned volumes matched observed counts to a reasonable degree and that modeled flows represented realistic travel patterns in the CoFW study area.

The results after calibration are shown in Figure 10 to Figure 16. These results show that a much closer fit was achieved through the calibration process, focusing on reducing the percent error and results at key locations.

Figure 10: City-wide Model Validation (Daily) – Post-Calibration

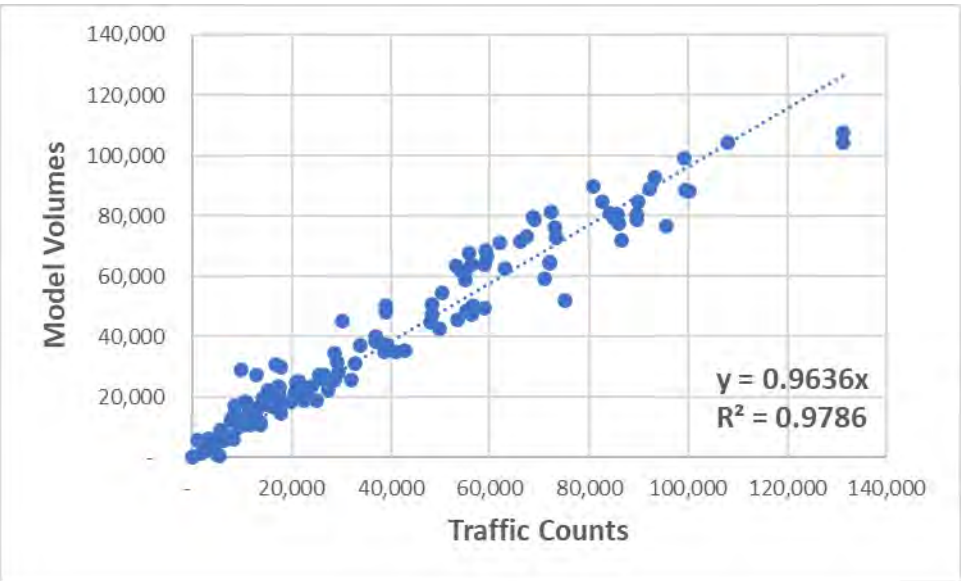


Figure 11: City-wide Model Validation (AM) – Post-Calibration

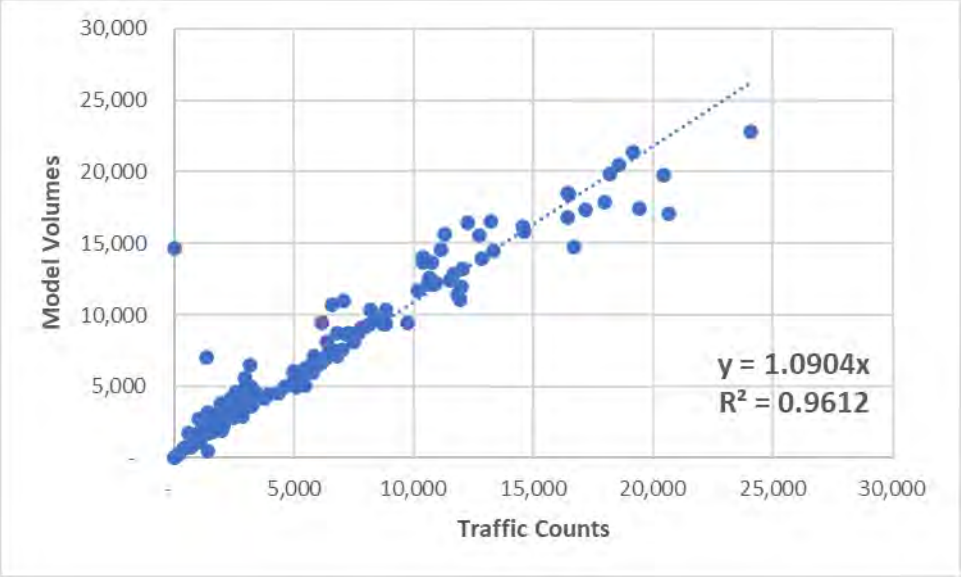


Figure 12: City-wide Model Validation (PM) – Post-Calibration

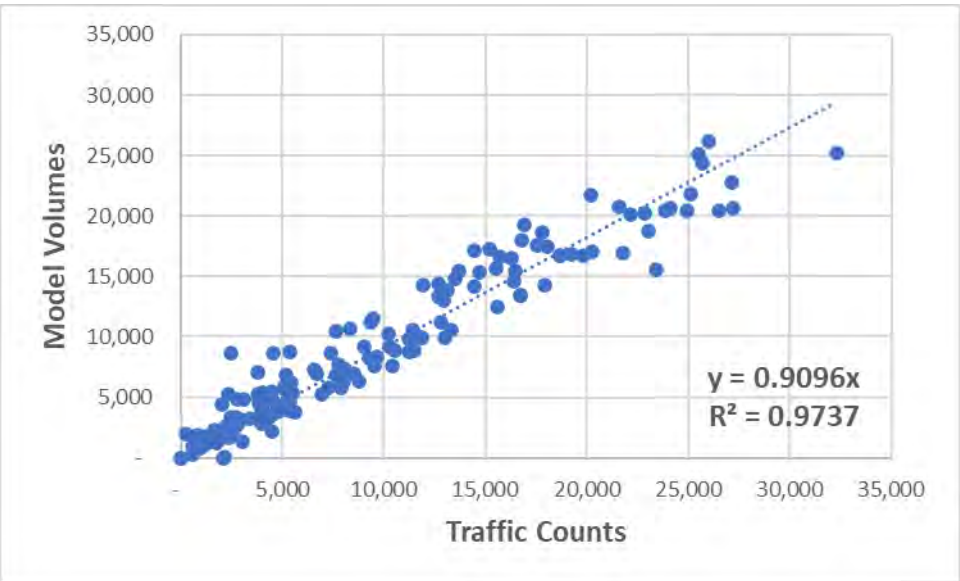


Figure 13: City-wide Model Validation (OP) – Post-Calibration

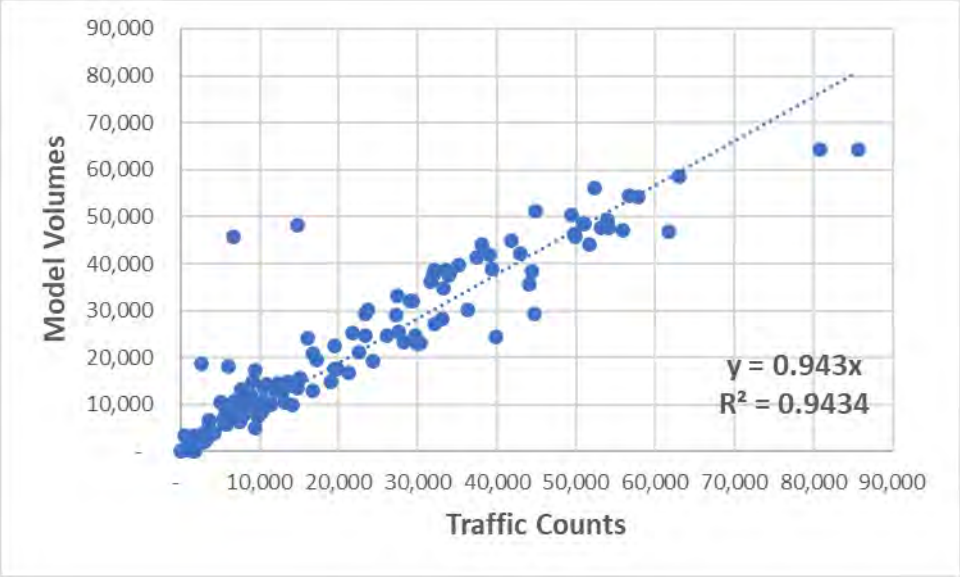


Figure 14: City-wide Error Distribution – Post-Calibration

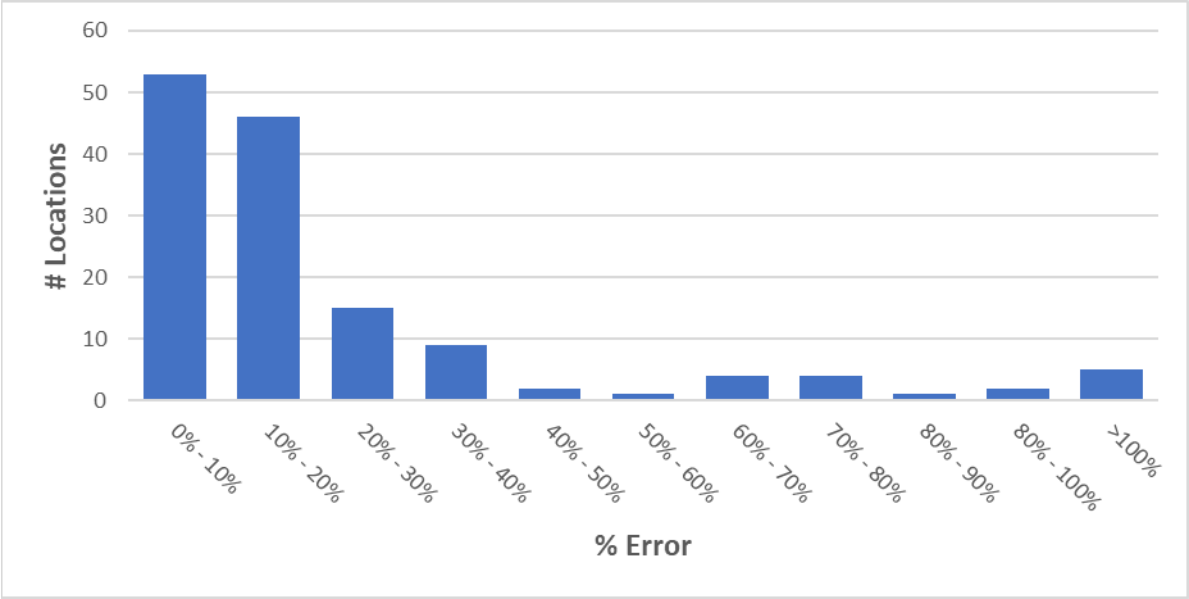


Figure 15: Key Locations Model Validation (Daily) – Post-Calibration

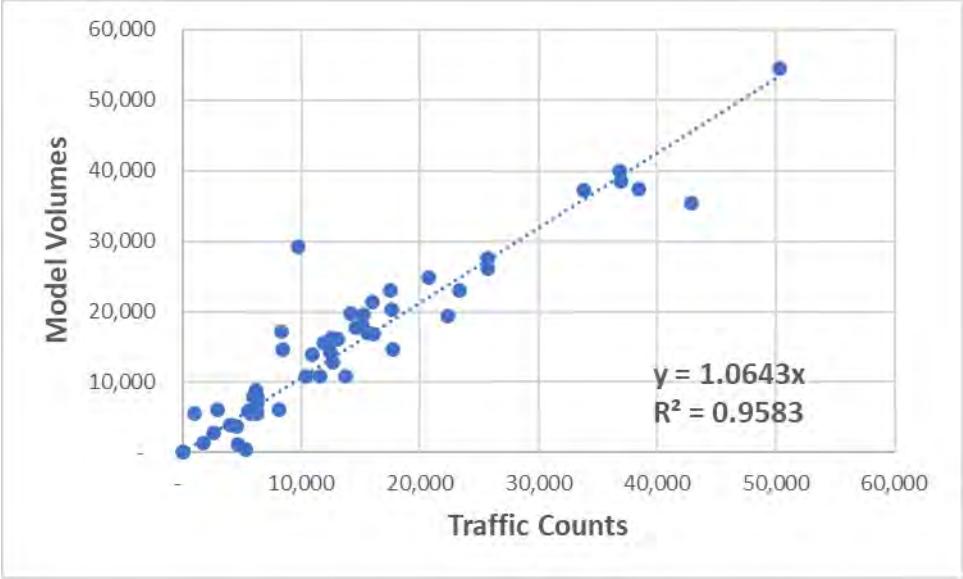
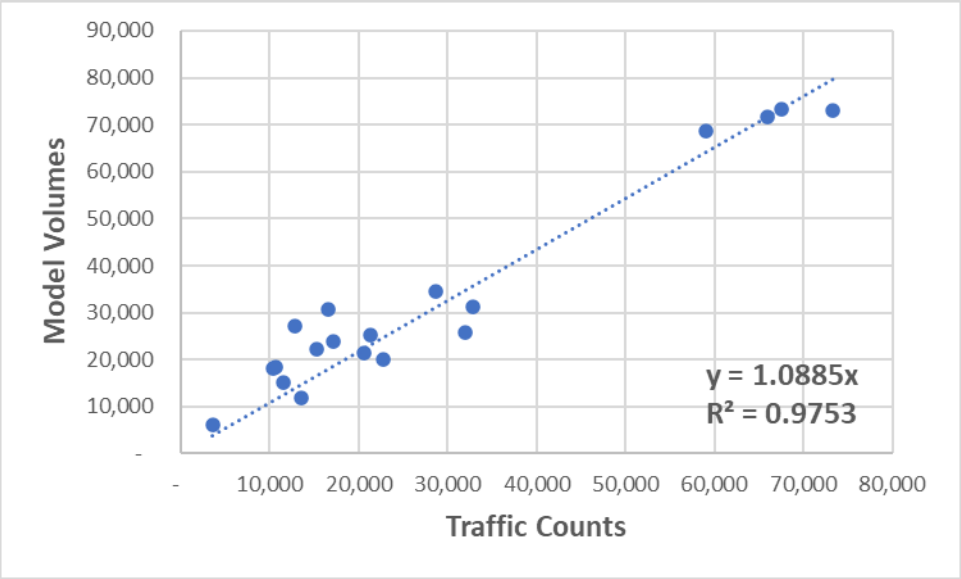


Figure 16: Core Locations Model Validation (Daily) – Post-Calibration



The final 2023 trip matrices by class were obtained by applying the same proportions on a cell-by-cell basis as the original matrix, to the calibrated matrix. The trips are specified in Figure 17 and Figure 18 (pre and post calibration).

Figure 17: 2023 Pre-calibration Matrix Trips by Trip Purpose

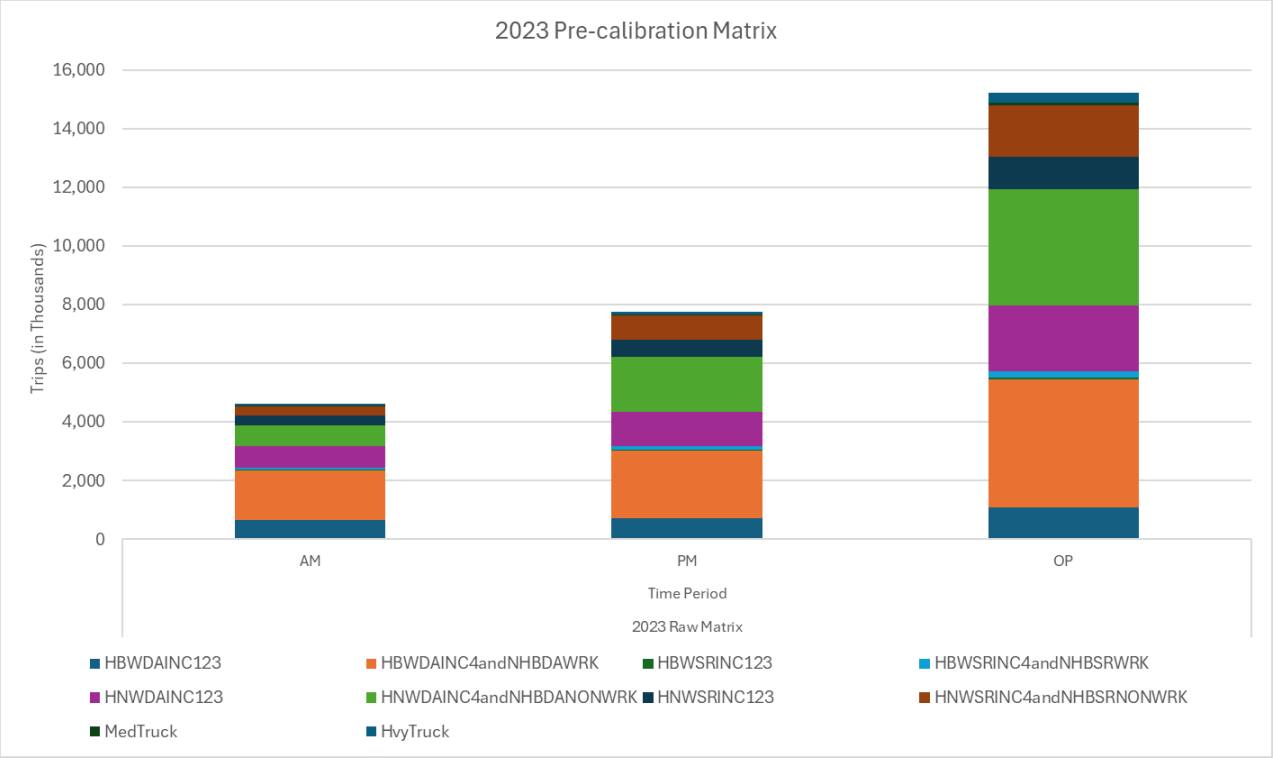
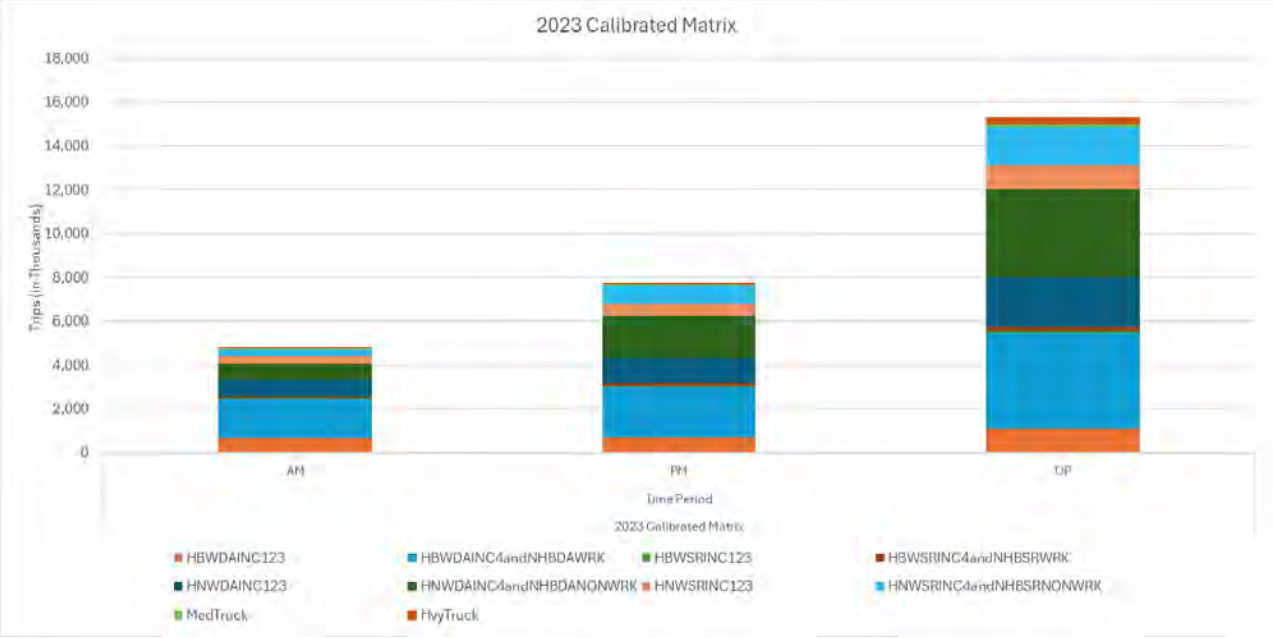


Figure 18: 2023 Calibrated Matrix Trips by Trip Purpose



3.3 Scenario definitions and assumptions

For this analysis, scenario development was based on the 2036 NCTCOG network, reflecting projects identified in the Metropolitan Transportation Plan (MTP 2050). To reflect near-term infrastructure investments, medium-term projects were coded onto this base network using implementation year data provided by CoFW.

The **No-Build scenario** reflects the 2026 network configuration with 2036 demand applied, representing a condition where no additional infrastructure improvements are implemented beyond existing facilities. This scenario establishes the baseline for evaluating the benefits of proposed investments.

Several Build scenarios were developed to represent increasing levels of planned improvements within the medium-term horizon:

- **Baseline:** Utilizes the 2036 network with projects from the NCTCOG Transportation Improvement Program (TIP), reflecting regionally committed investments.
- **Scenario 1 (NCTCOG TIP + Primary Bond Projects)**: Builds upon the NCTCOG TIP network by adding CoFW's priority (near-term) bond projects expected to be implemented within the medium-term horizon.
- **Scenario 2 (NCTCOG TIP + Primary & Secondary Bond Projects)**: Further expands the network to include both primary and secondary priority CoFW bond projects identified as feasible within the medium-term window.

All scenarios used consistent assumptions for land use and regional controls. The 2036 No-Build scenario served as the baseline, while the Build scenarios enabled evaluation of specific improvements' benefits on travel patterns and network performance.

To develop the 2036 network used in this study, the Mobility 2050 model's 2026 coded network was upgraded. This was accomplished by comparing it against the Mobility 2045 2036 network to identify planned roadway changes—including new facilities, widened segments, and updated speed limits. These modifications were then manually incorporated into the 2026 network to create a version that accurately reflects the expected 2036 conditions. Additionally, localized edits made during the 2023 calibration efforts (i.e., such as the addition or removal of centroid connectors) were carried forward to maintain consistency across analysis years.

To support the Build scenario development, relevant network attributes were updated to reflect proposed improvements. These included:

- **DIVID**: Divided roadway status
- **CNTRLA / CNTRLB**: Intersection control types at Node A and Node B
- **AMLN_AB / AMLN_BA**: AM peak hour lane counts in AB and BA directions

- **PMLN_AB / PMLN_BA**: PM peak hour lane counts in AB and BA directions
- **OPLN_AB / OPLN_BA**: Off-peak lane counts in AB and BA directions
- **SPLT_AB / SPLT_BA**: Speed limits in AB and BA directions

A summary of the projects considered, including project names, descriptions, and whether they were coded into the travel demand model (TDM), is provided in Appendix 1.
All scenarios were run using the same 2036 demand matrices and consistent land use and control total assumptions. This structured approach enabled a direct evaluation of the operational and mobility benefits associated with progressively higher levels of infrastructure investment.

3.4 Modeling results

This section presents the results of the model runs conducted for the medium-term analysis. The discussion focusses on the following key metrics:

- Volume on roadways
- Volume to Capacity Ratio (V/C Ratio)
- Difference in Volumes between scenarios
- Travel Time Index, Speed, and Level of Service (LOS)

A summary of key takeaways is provided at the end of the section, highlighting implications for overall system performance and informing project prioritization.

3.4.1 Volume

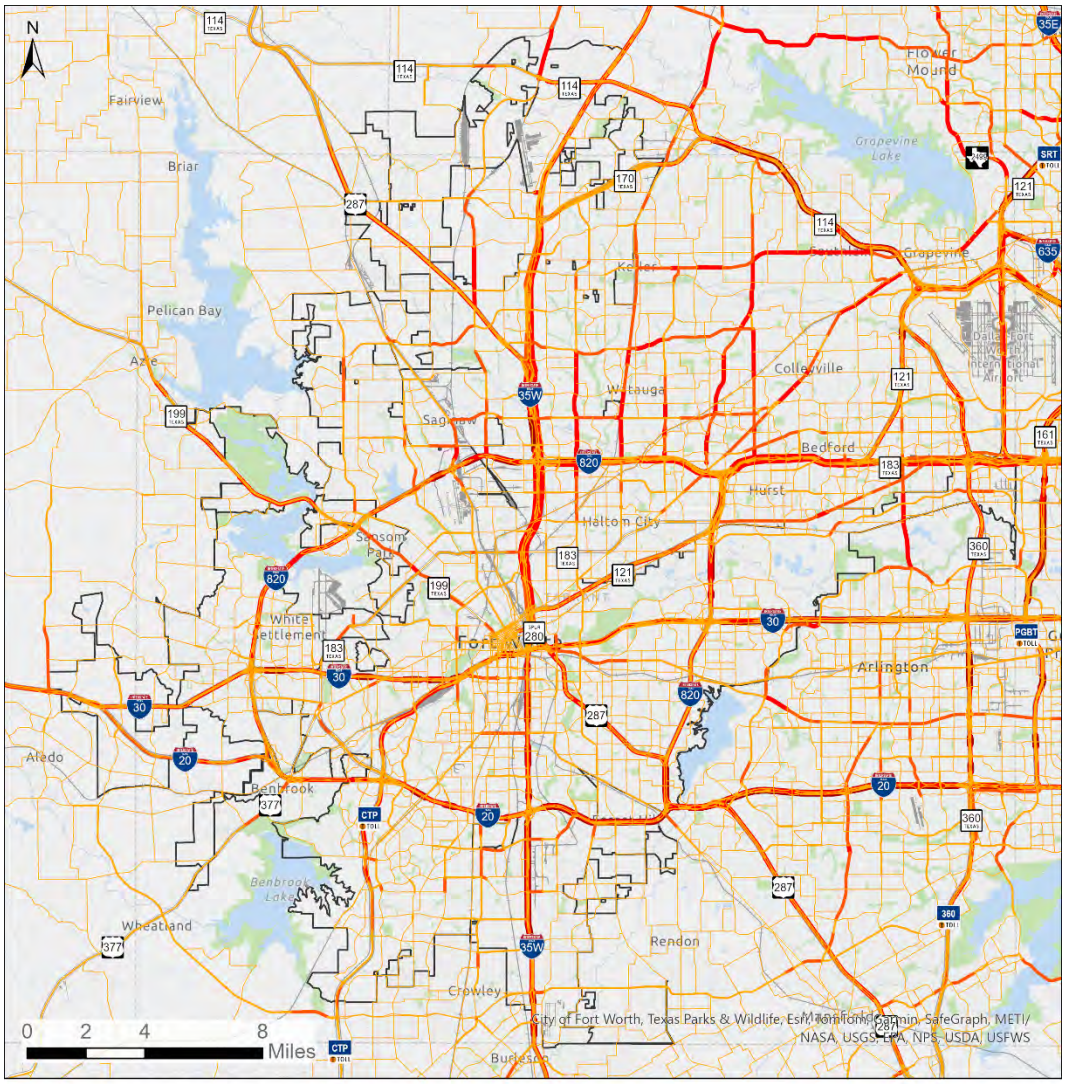
Figure 19, Figure 20, and Figure 21 show the AM, PM, and Daily volumes on the network for the Baseline. As expected, PM volumes are higher overall, with I-35W, I-820, and the eastern portion of I-20 carrying substantial demand (~20,000 vehicles) during both AM and PM periods. This highlights these corridors as critical components of the City of Fort Worth's network. Daily volumes follow similar patterns, reinforcing the prominence of I-820 and I-35W.

Figure 22, Figure 23 and Figure 24 present the AM, PM, and Daily volumes on the network for Scenario 1. Compared to Baseline, AM volumes on secondary streets are reduced, reflecting improved connectivity to interstates, FM roads, and other major corridors. These benefits are particularly evident in the Northeast and Northwest (around Saginaw, outside I-820), and in the Southwest near I-30. While PM benefits persist, they are more concentrated within the loop due to increased congestion. Daily volumes show the same trends of strengthened connectivity.

Figure 25, Figure 26, and Figure 27 show the AM, PM, and Daily volumes for the Scenario 2 scenario. Results are consistent with Scenario 1 but with additional reductions on secondary roads. This

indicates that secondary bond projects further consolidate travel onto interstates and major facilities, improving distribution of trips across the network.

Figure 19: AM Volume for Baseline

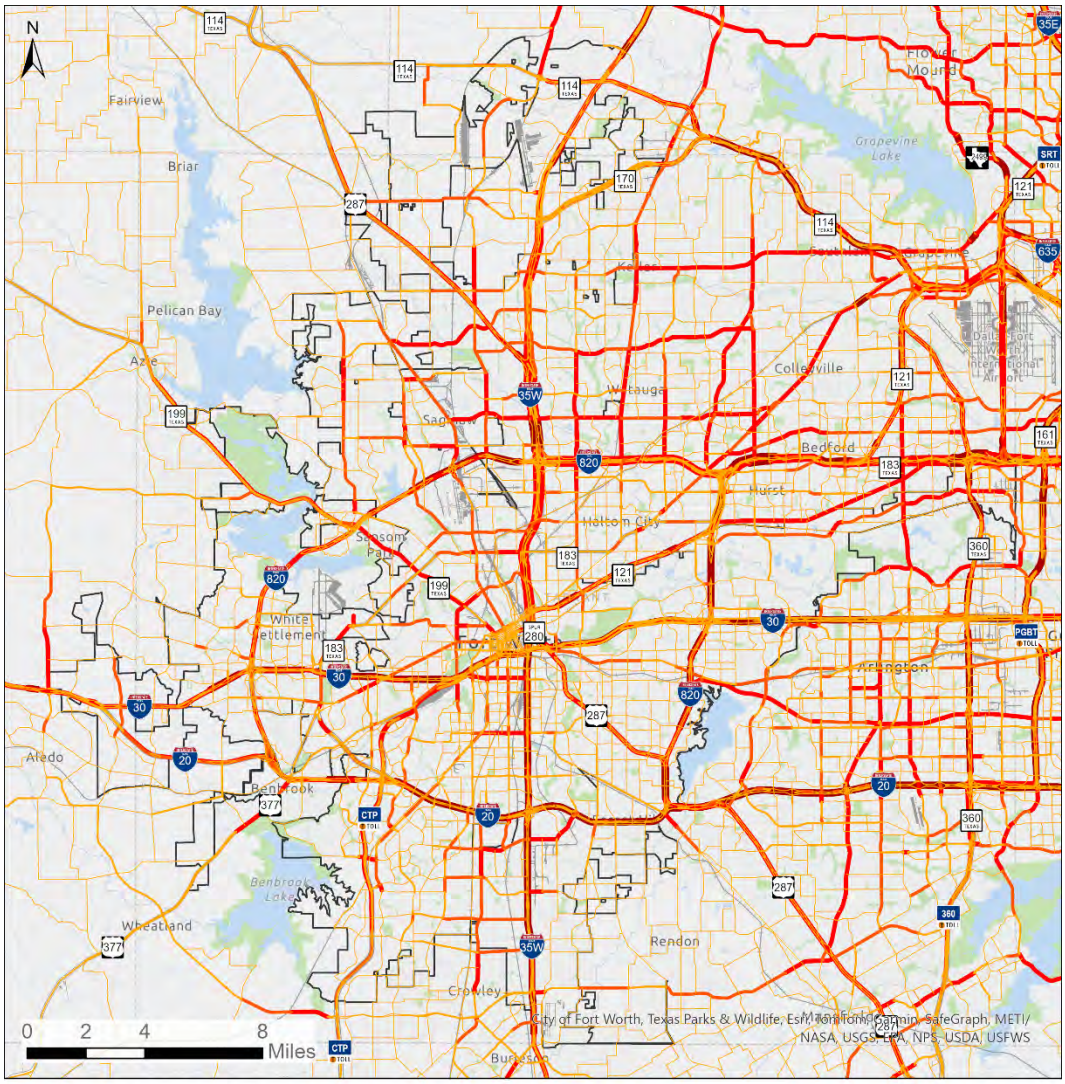


2036 Analysis - Baseline

AM Volume
- 0 - 5,000
- 5,000 - 7,500
- 7,500 - 10,000
- 10,000 - 20,000
- >20,000

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 20: PM Volume for Baseline

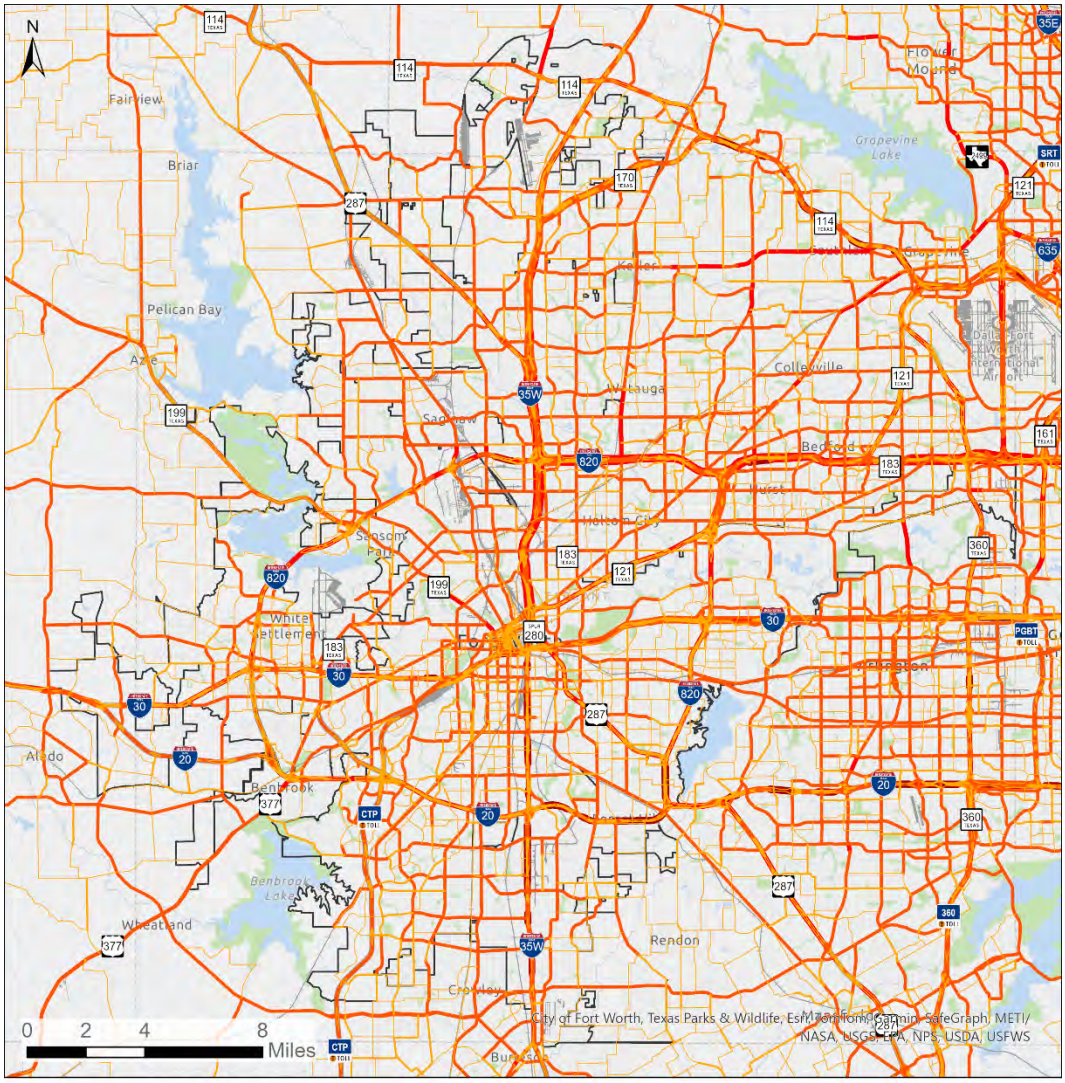


2036 Analysis - Baseline

PM Volume
- 0 - 5,000
- 5,000 - 7,500
- 7,500 - 10,000
- 10,000 - 20,000
- > 20,000

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 21: Daily Volume for Baseline

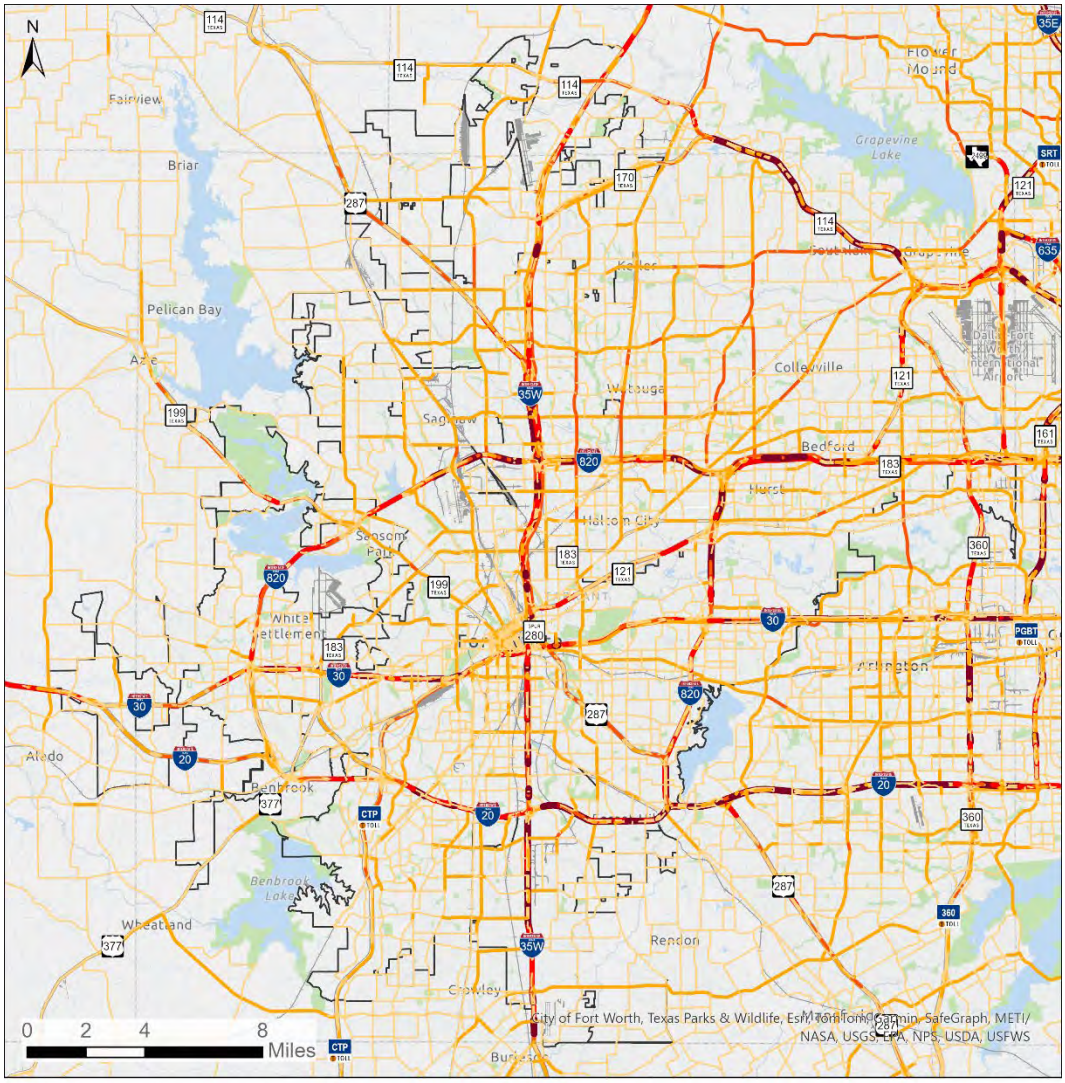


2036 Analysis - Baseline

Daily Volume
- 0 - 5,000
- 5,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- 100,000 - 150,000

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 22: AM Volume for Scenario 1



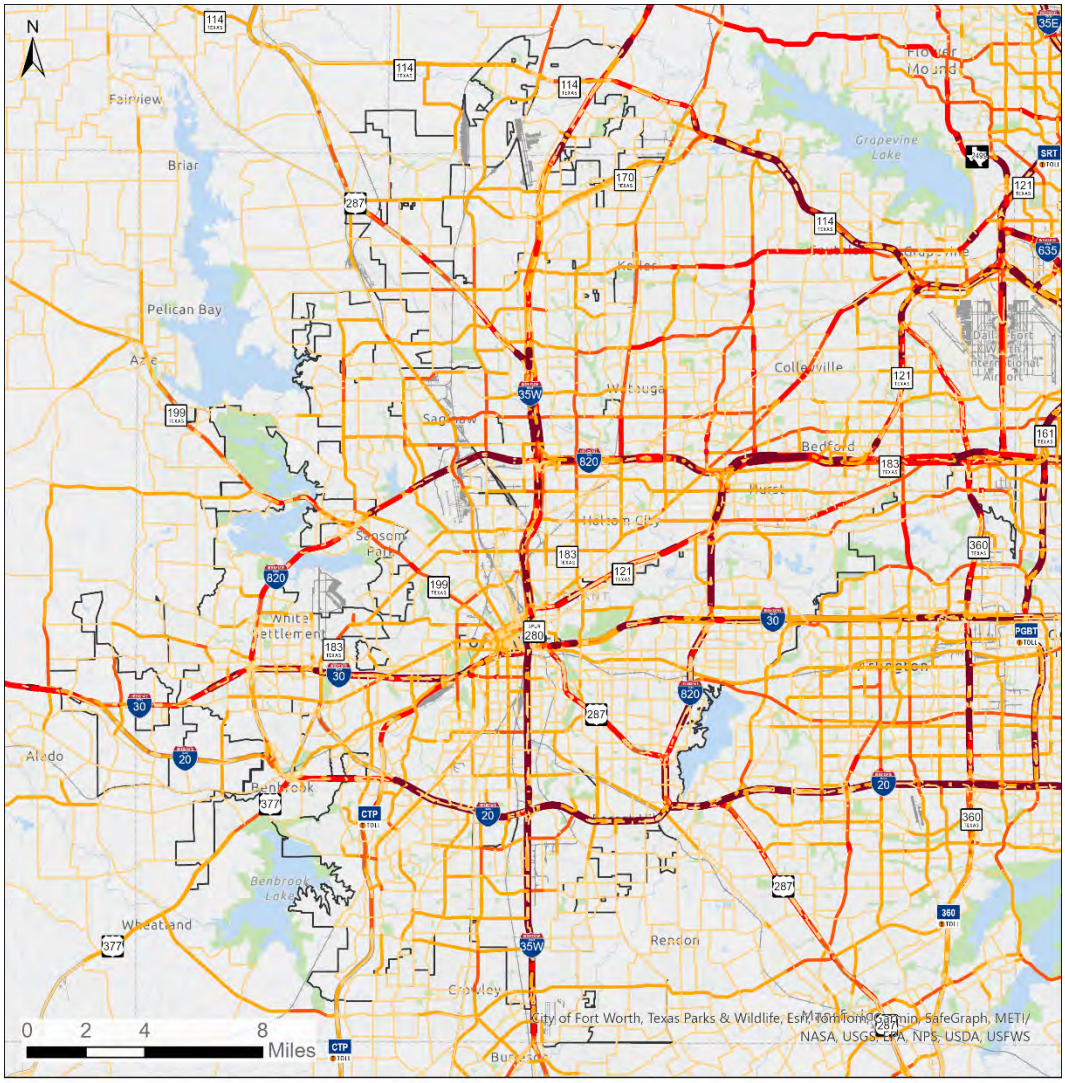
2036 Analysis - Scenario 1

AM Volume

- 0 - 5,000
- 5,000 - 10,000
- 10,000 - 15,000
- 15,000 - 20,000
- >20,000

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 23: PM Volume for Scenario 1

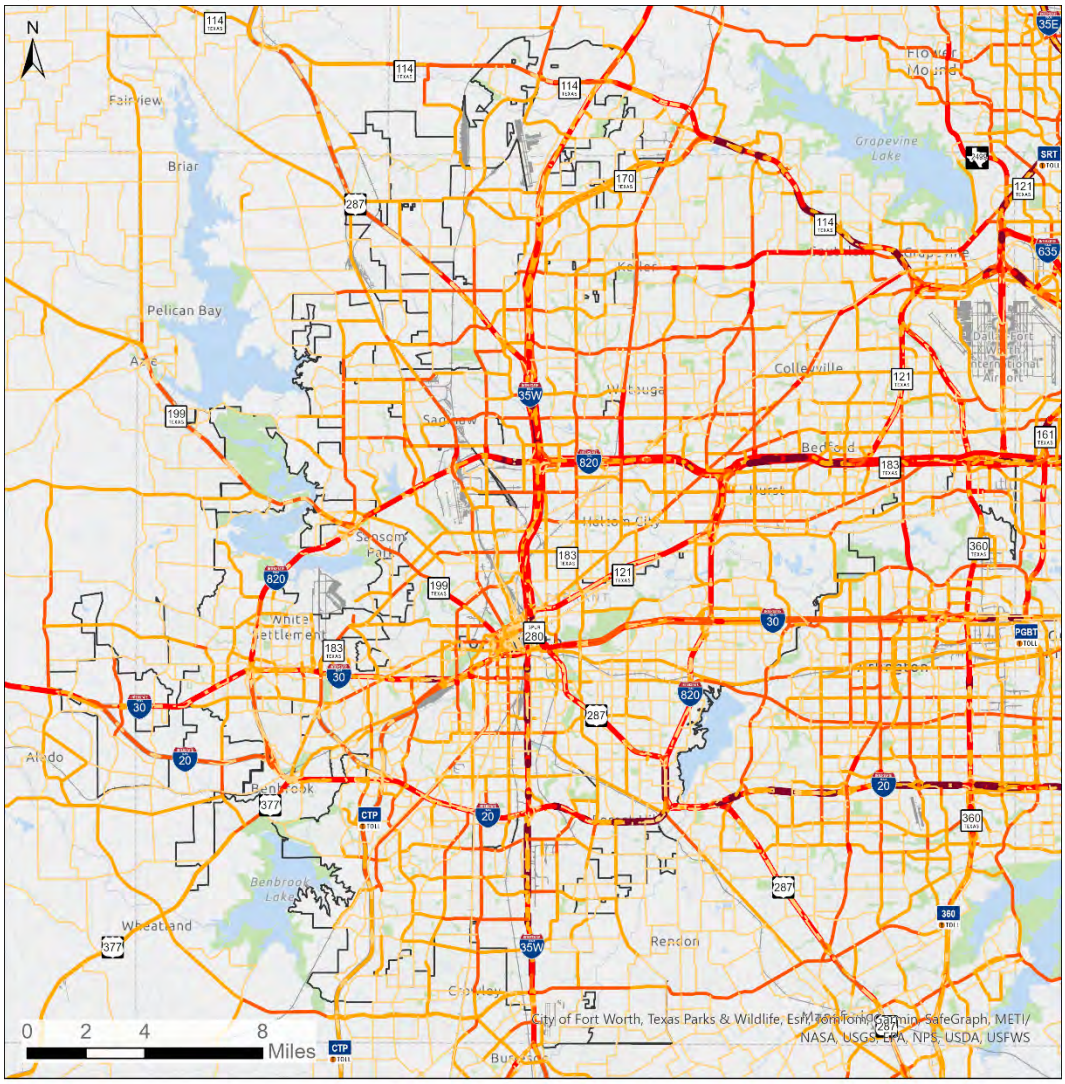


2036 Analysis - Scenario 1

PM Volume
- 0 - 5,000
- 5,000 - 10,000
- 10,000. - 15,000
- 15,000 - 20,000
- >20,000

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 24: Daily Volume for Scenario 1

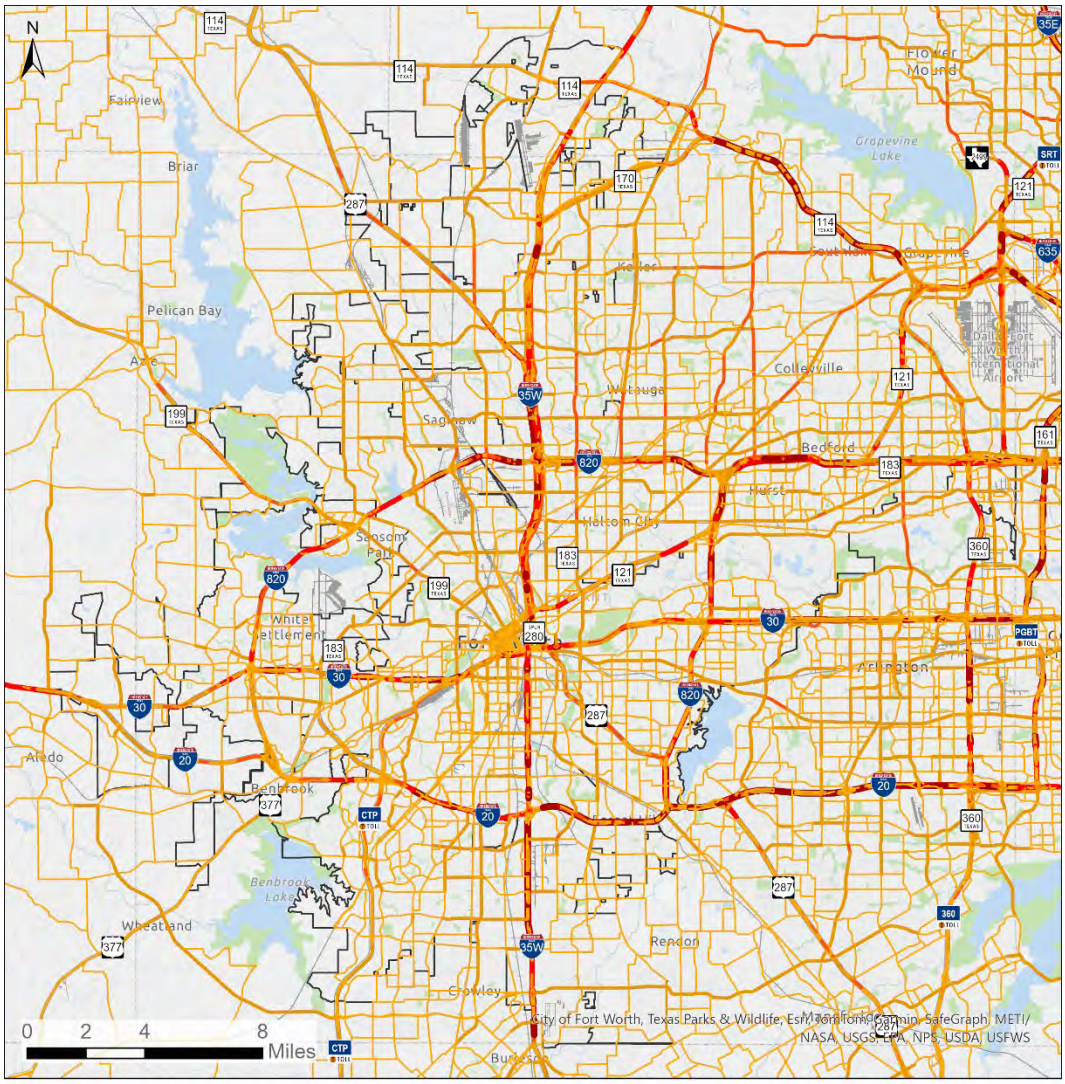


2036 Analysis - Scenario 1

Daily Volume
- 0 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 100,000
- >100,000

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 25: AM Volume for Scenario 2



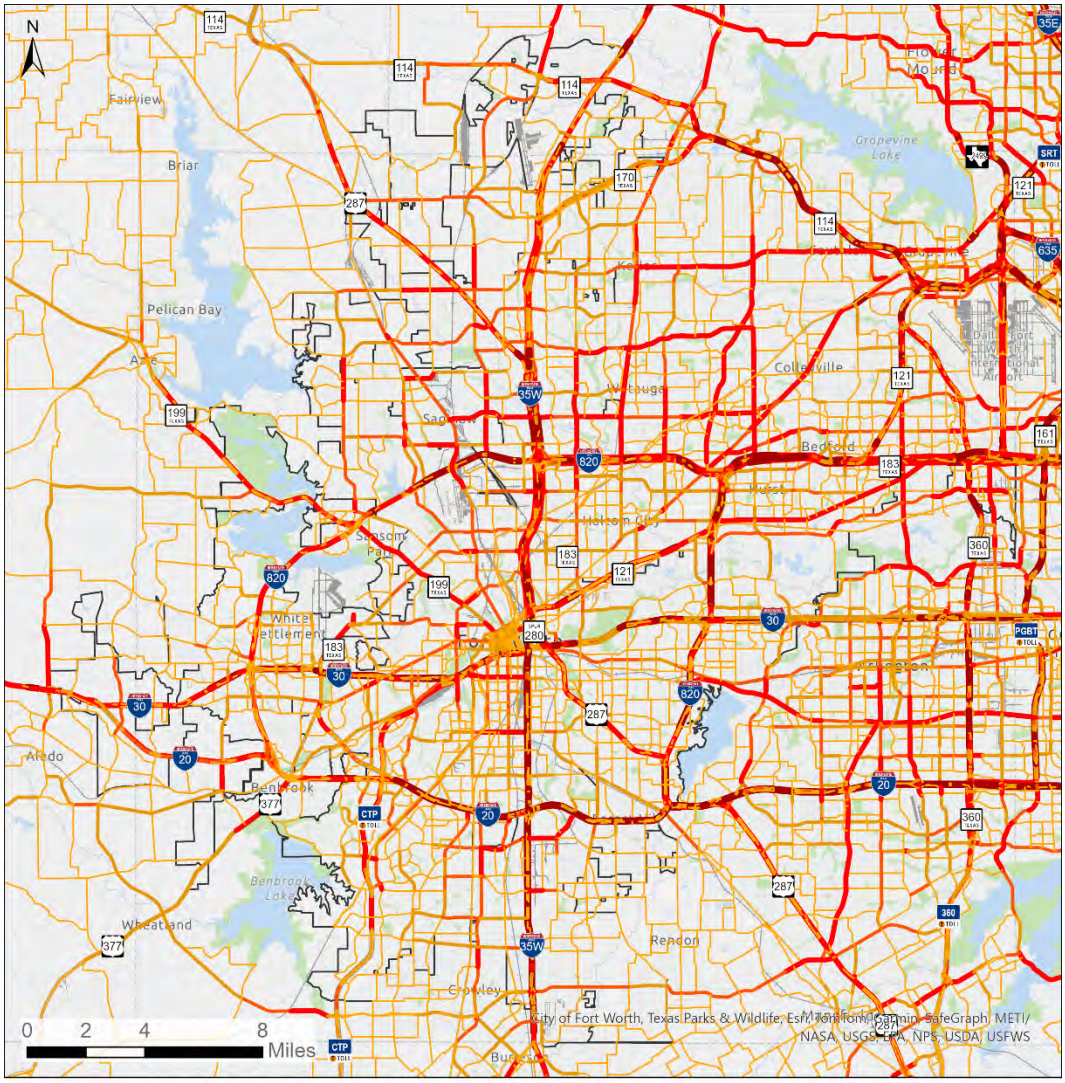
2036 Analysis - Scenario 2

AM Volume

- 0 - 5,000
- 5,000 - 10,000
- 10,000 - 15,000
- 15,000 - 20,000
- > 20,000

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 26: PM Volume for Scenario 2

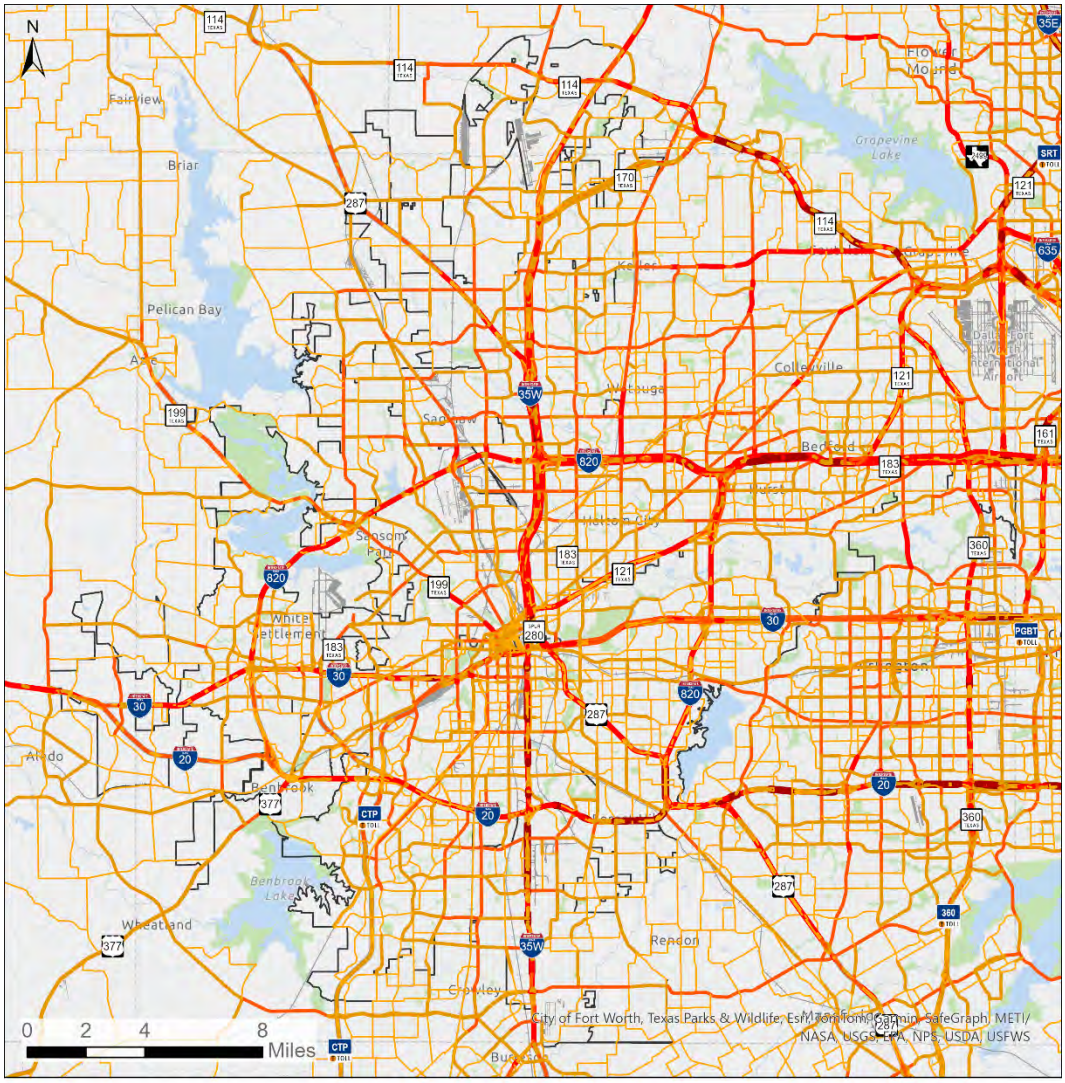


2036 Analysis - Scenario 2

PM Volume
- 0 - 5,000
- 5,000 - 7,500
- 7,500 - 10,000
- 10,000 - 20,000
- > 20,000

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 27: Daily Volume for Scenario 2



3.4.2 Volume to Capacity Ratio (V/C Ratio)

Figure 28 and Figure 29 illustrate AM and PM V/C ratios for Baseline. Congestion is concentrated along I-35W (near the airport) and in the downtown area to the south.

Figure 30 and Figure 31show AM and PM V/C ratio for Scenario 1; Figure 32 and Figure 33 show the AM

and PM V/C ratio for Scenario 2. Overall, systemwide V/C ratios remain broadly similar, but localized congestion relief is observed, particularly on secondary roads near the airport and in northern areas. While improvements are notable, persistent congestion suggests the need for additional capacity enhancements to sustain long-term network performance.

Figure 28: AM Volume to Capacity Ratio for Baseline

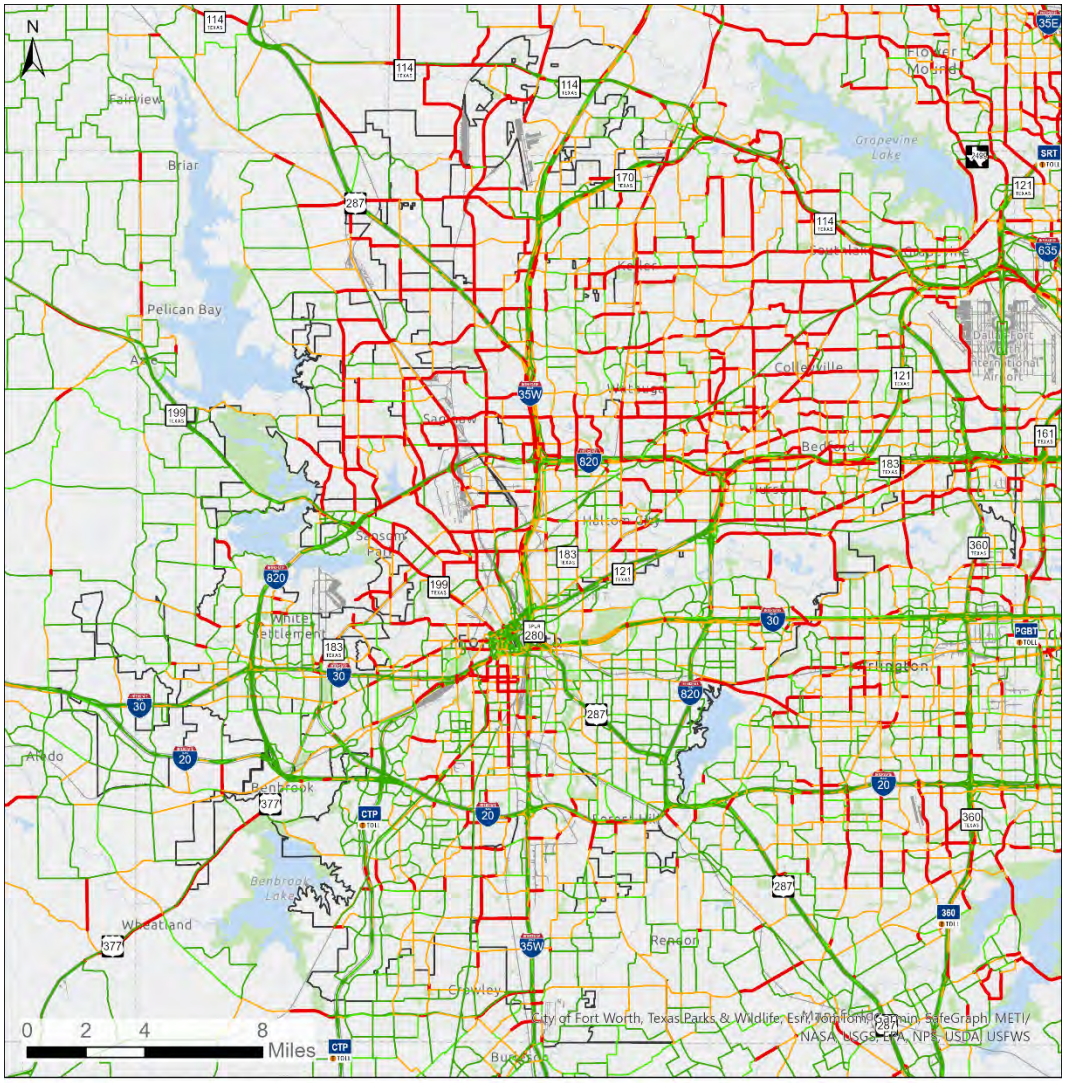
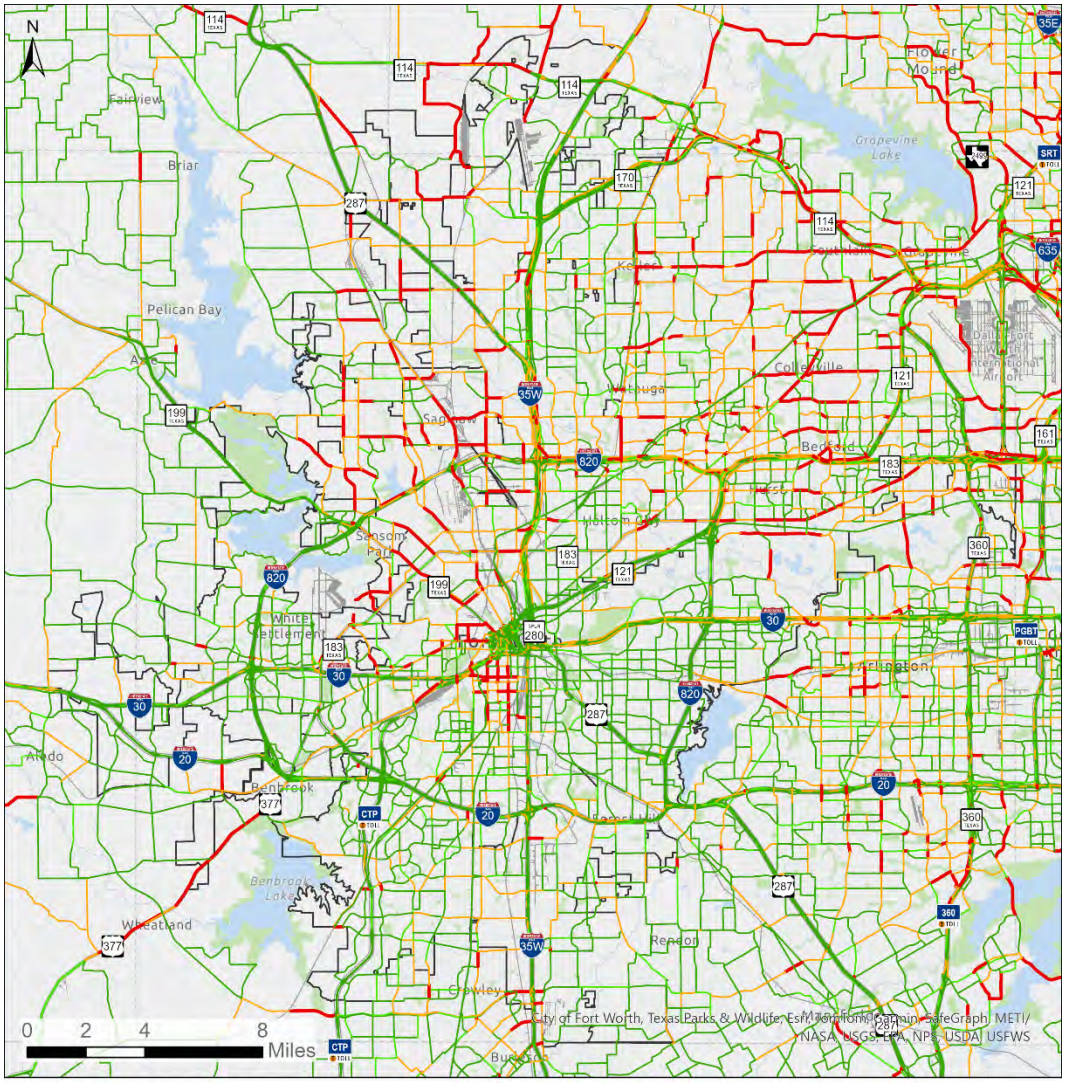


Figure 29: PM Volume to Capacity Ratio for Baseline



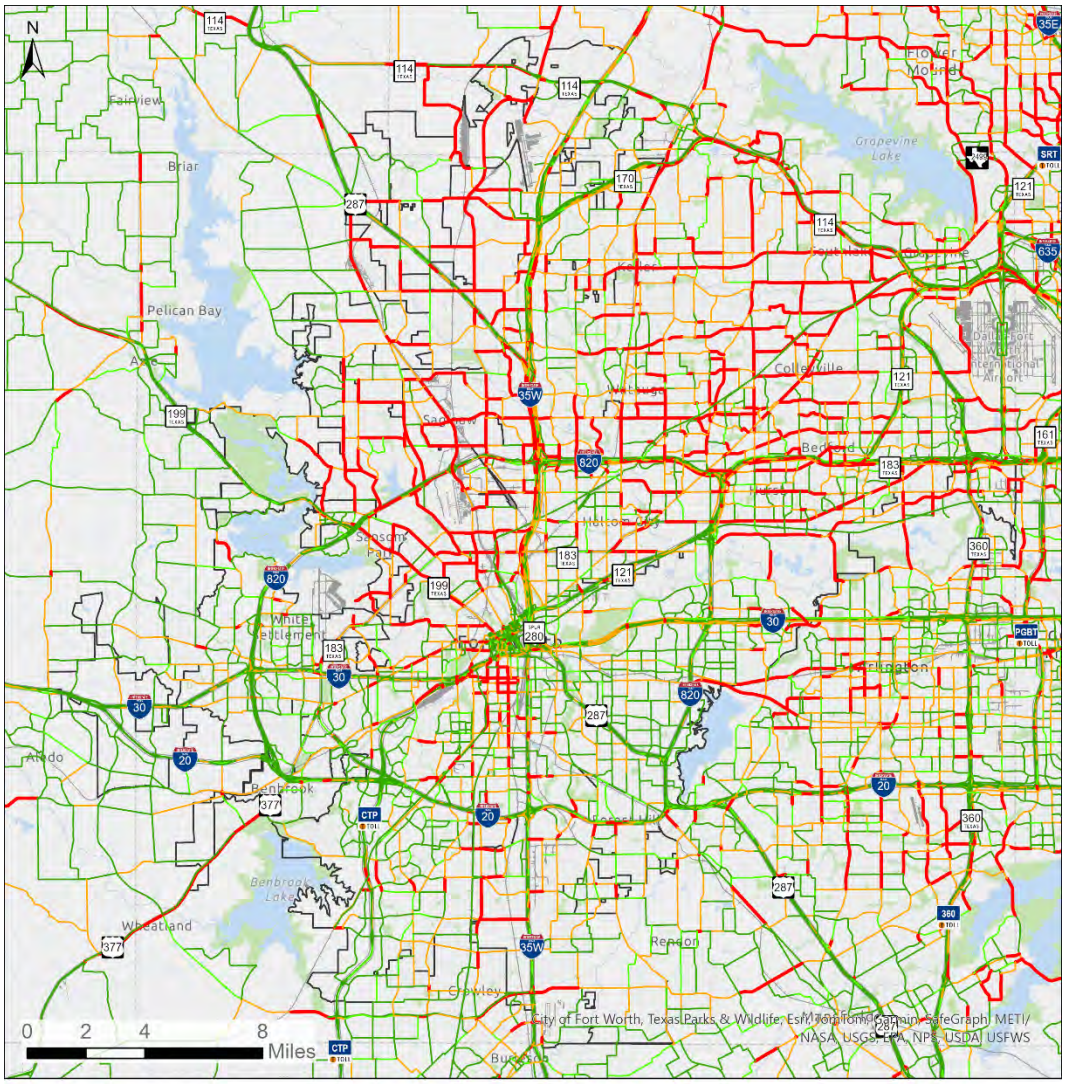
2036 Analysis - Baseline

PM V/C

- 0 - 0.65
- 0.65 - 0.75
- 0.75 - 1.0
- > 1.0

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 30: AM Volume to Capacity (V/C) Ratio for Scenario 1



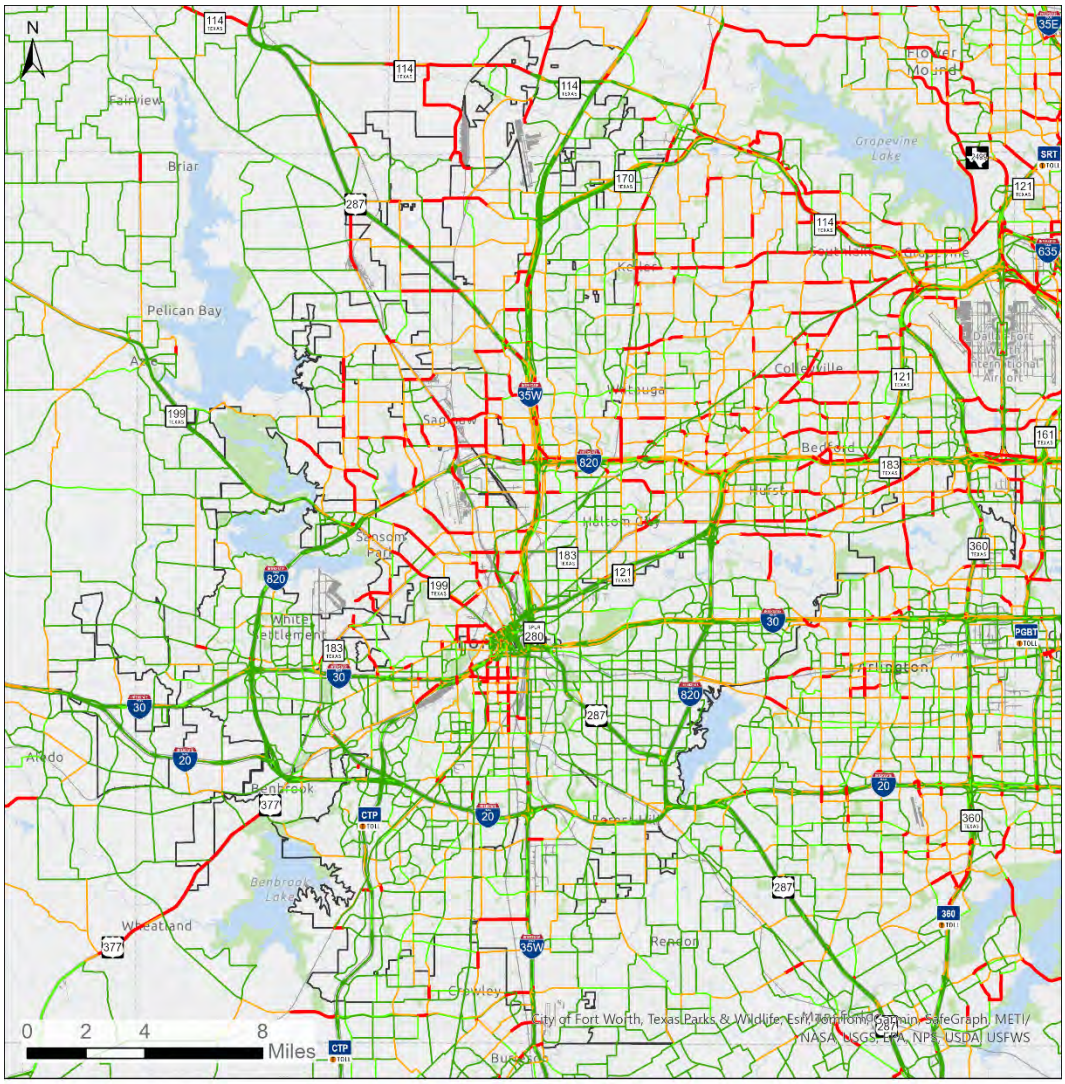
2036 Analysis - Scenario 1

AM V/C

- 0 - 0.65
- 0.65 - 0.75
- 0.75 - 1.0
- >1.0

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 31: PM Volume to Capacity (V/C) Ratio for Scenario 1



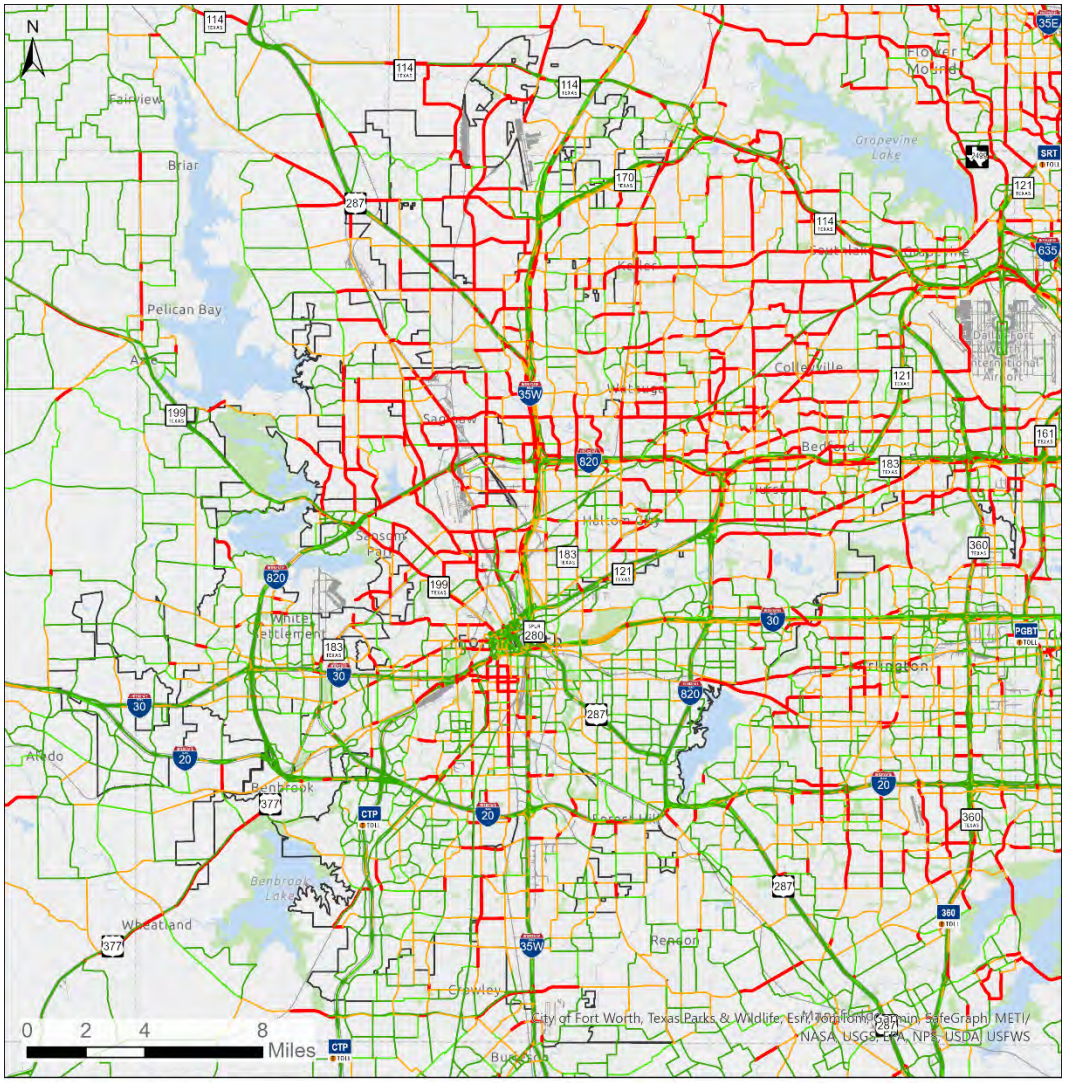
2036 Analysis - Scenario 1

PM V/C

- 0 - 0.65
- 0.65 - 0.75
- 0.75 - 1.0
- >1.0

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 32: AM Volume to Capacity (V/C) Ratio for Scenario 2



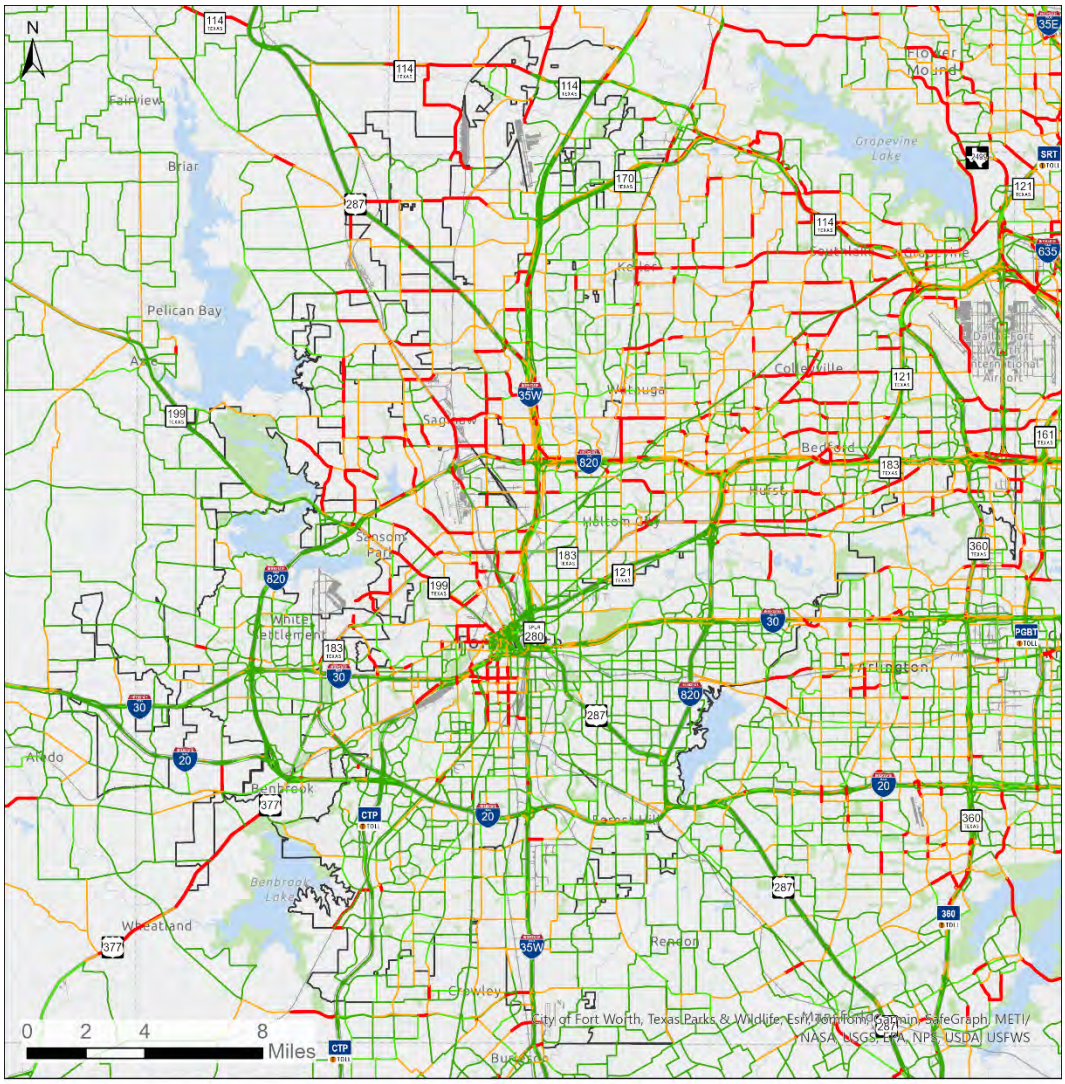
2036 Analysis - Scenario 2

AM V/C

- 0 - 0.65
- 0.65 - 0.75
- 0.75 - 1.0
- > 1.0

- Parks (2024)
- Lakes
- Fort Worth
- County Boundary
- TRN Streets

Figure 33: PM Volume to Capacity (V/C) Ratio for Scenario 2



3.4.3 Difference in Volumes

Figure 34 and Figure 35 compare daily volumes between Scenario 1 vs. Baseline and Scenario 2 vs. Baseline. The findings are as follows:

- Both Scenario 1 and Scenario 2 show increases in volume on connectors to US 287, I-30, FM 287, and FM 114, reflecting enhanced access.

- Reductions are observed on I-820 and sections of I-20, suggesting diversion of trips onto alternative facilities.
- In Scenario 1, FM 183 and I-35W see increased volumes, but in Scenario 2 these same corridors experience reductions, likely due to redistributed trips enabled by expanded Scenario 2 connections.

Figure 34: Daily Volume Difference Scenario 1 vs Baseline

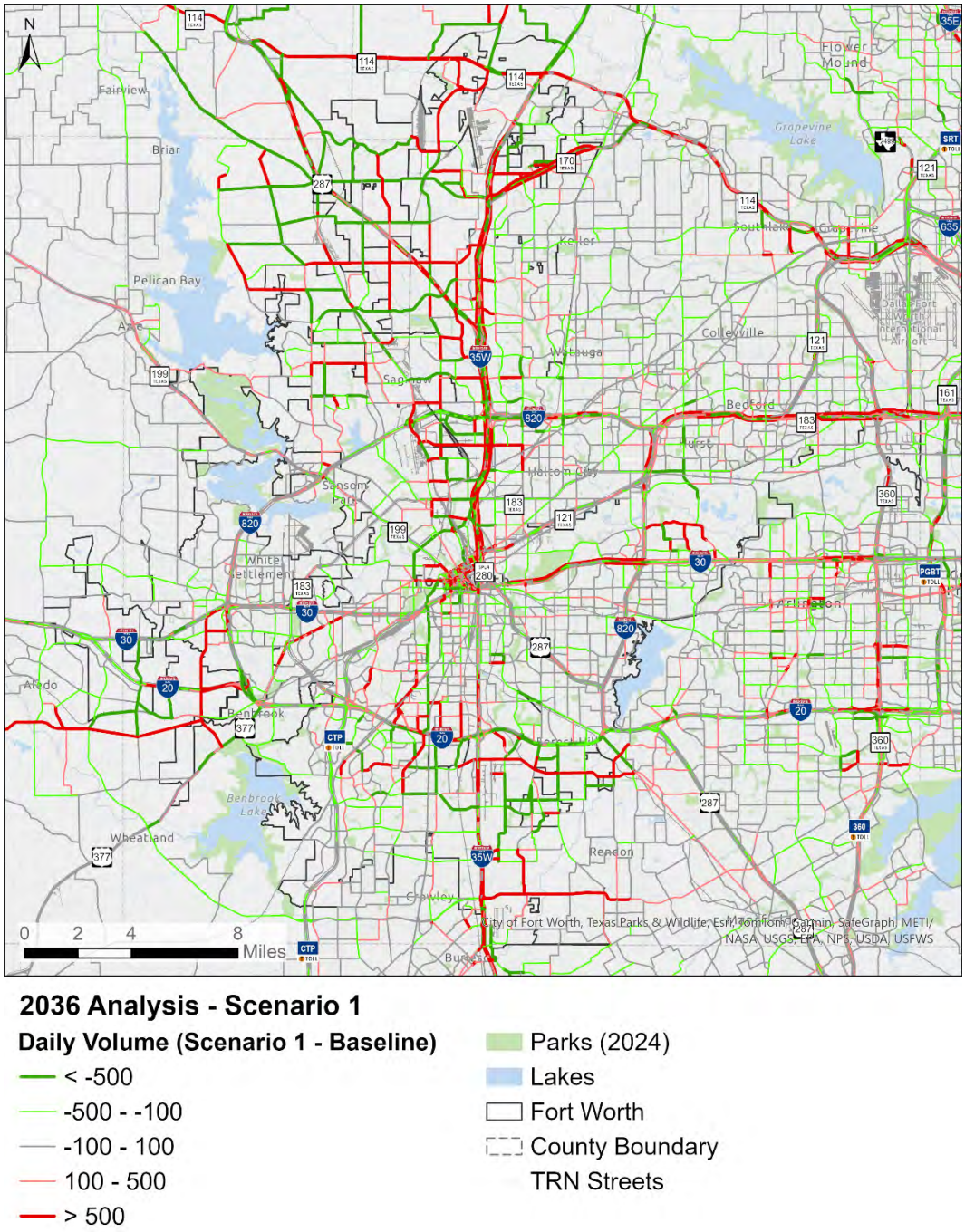
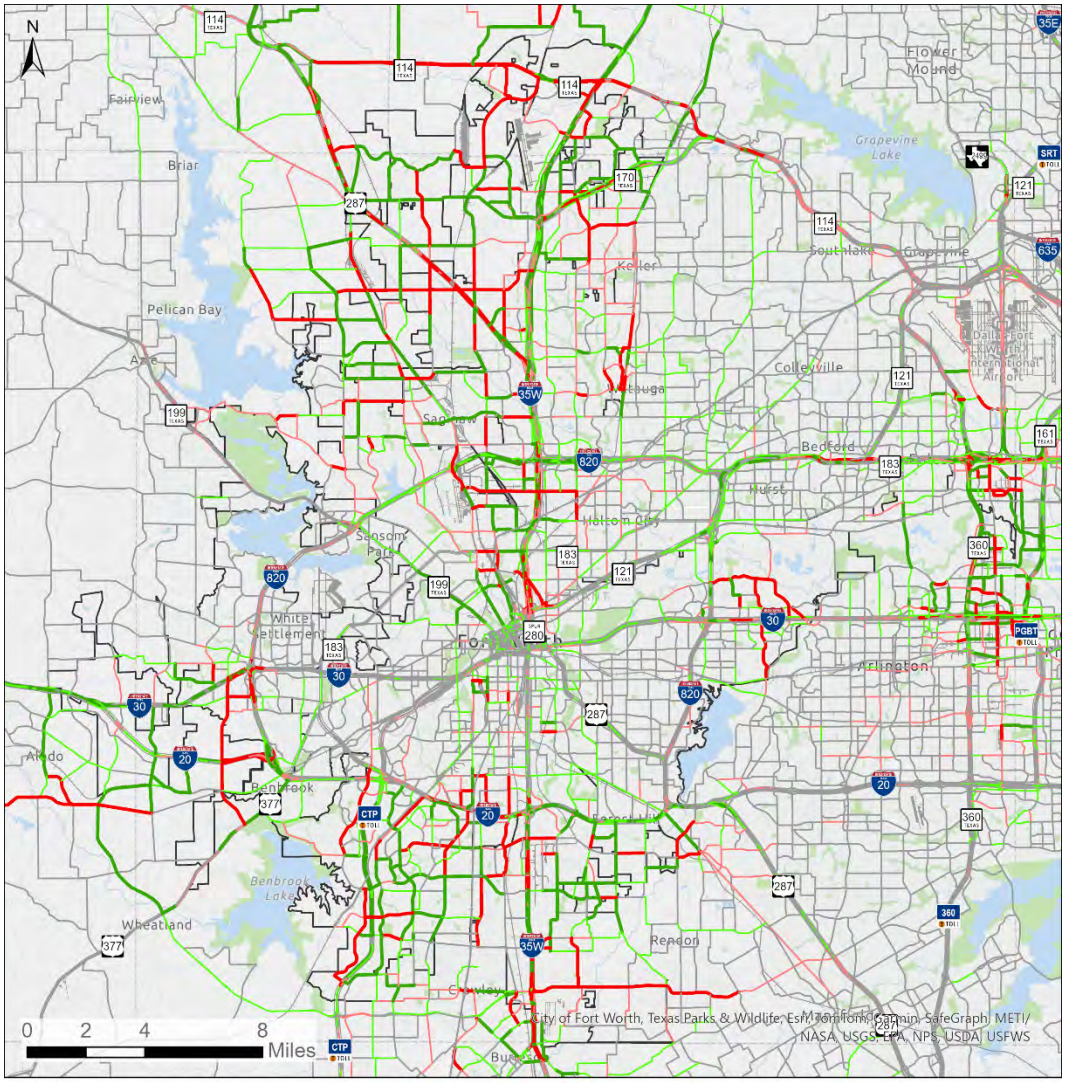


Figure 35: Daily Volume Difference Scenario 2 vs Baseline



3.5 Travel Time Index, Speed, and Level of Service (LOS)

This section summarizes system performance using travel time index, average speeds, and roadway miles operating at LOS F.

Figure 18 shows that the Travel Time Index improves under Scenario 1, with further modest gains

in Scenario 2, when compared to both the 2036 Baseline and the No-Build scenarios. As shown in Figure 19, speeds also increase in both Scenario 1 and Scenario 2 relative to No-Build across all time periods. While Scenario 1 speeds are generally comparable to Baseline, Scenario 2 achieves slight improvements beyond Baseline levels. Figure 20 highlights changes in the mileage of roadways operating at LOS F. Overall, the mileage declines in both Scenario 1 and Scenario 2 relative to the No-Build and Baseline conditions. Principal arterials, however, experience some increases in LOS F mileage due to higher utilization from improved connectivity, whereas freeways generally show reductions in LOS F mileage.

These results indicate network-wide improvements in reliability and efficiency under Scenario 1 and Scenario 2, though localized deficiencies remain where added connectivity concentrates new demand.

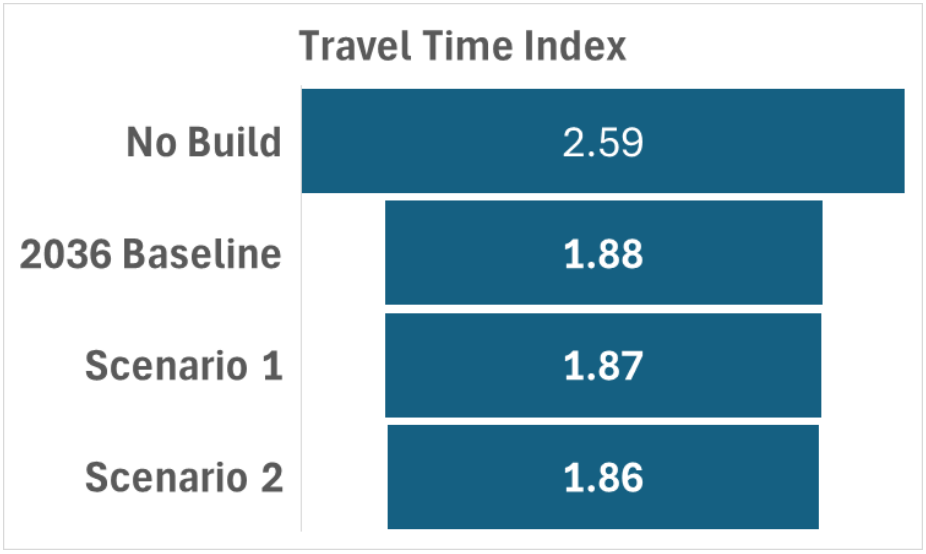


Figure 36: Travel Time Index by Scenario

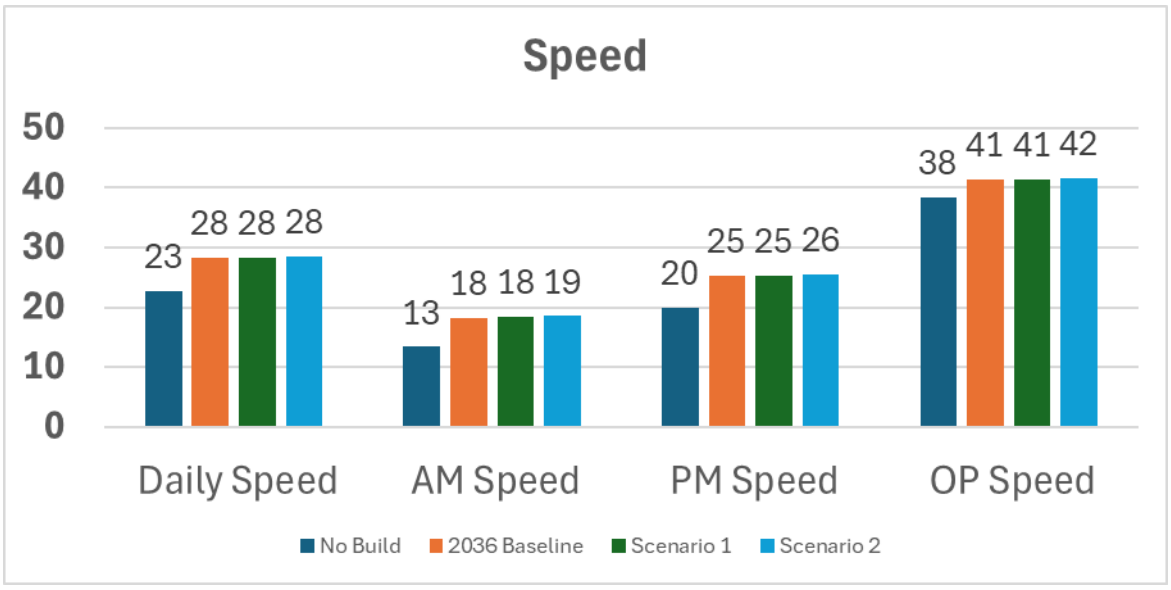


Figure 37: Speed at Daily and Time Period Level by Scenario

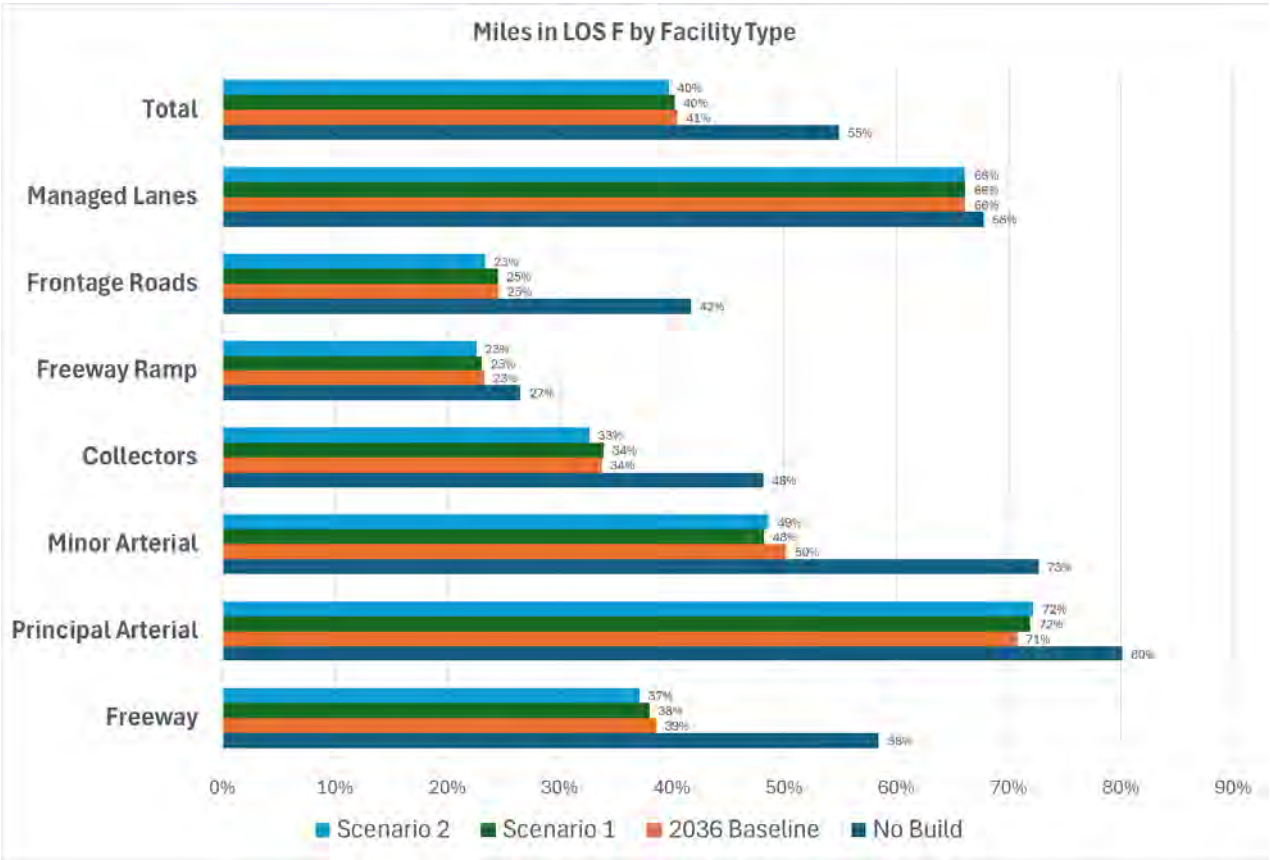


Figure 38: Miles of Roadway Functioning at Level of Service (LOS) F by Facility Type by Scenario

3.6 Key takeaways for system performance and project prioritization

- **Critical corridors remain central:** I-35W, I-820, and I-20 continue to carry the heaviest volumes across all scenarios, underscoring their importance for regional mobility.
- **Scenario 1 improvements strengthen connectivity:** By diverting trips from local streets to higher-capacity facilities, Scenario 1 reduces stress on secondary roads, especially in the Northeast and Southwest quadrants.
- **Scenario 2 provides incremental gains:** Additional connectivity further reduces volumes on secondary facilities and improves overall speeds, though congestion hotspots persist.
- **Localized trade-offs emerge:** While principal arterials experience added pressure from new connections, freeway facilities benefit from reduced LOS F mileage.
- **Overall system efficiency improves:** Both Scenario 1 and Scenario 2 scenarios outperform No-Build and Baseline in terms of travel time index, speeds, and LOS distribution, suggesting a clear benefit to advancing these projects.
- **Need for targeted future investments:** Remaining congestion along I-35W, near the airport, and in downtown Fort Worth indicates that complementary infrastructure strategies will be needed to sustain long-term performance.

4 Intersection Operational Analyses

In addition to the systemwide travel demand modeling and medium-term analysis summarized in Section 2, detailed intersection operational analyses were conducted at two critical locations within the study area:

- Old Denton Rd & Westport Parkway, and
- Chapin Road & Chapel Creek Road

These intersections represent “pressure points” where projected growth, land use intensity, and freight activity converge, and where deficiencies are expected to become most evident under future conditions.

While the regional model provides a corridor-level view of future volumes, intersection analysis supplements this by translating forecast volumes into lane-level turning movement operations. Together, these analyses support recommendations in the Transportation Investment Program (TIP) that reflect both systemwide capacity needs and localized operational challenges.

Each intersection analysis followed a consistent methodology:

- **Forecast Development**: Directional average daily traffic (ADT) volumes for 2026, 2036, and 2050 were obtained from the NCTCOG travel demand model. Replica Network Link Analysis provided turn movement proportions based on 2024 baseline conditions, assumed to remain stable for forecast years. A K-factor of 10 percent was applied to derive peak-hour turning movement

counts.

- **Operational Modeling**: Using Synchro 12 and the HCM 7th Edition, turning movement counts were tested under existing, no-build, and build conditions. LOS A–D was considered acceptable, while LOS E and F were considered failing[1].
- **Field Verification**: Existing conditions were validated with field counts collected in July 2025 to establish baseline peak-hour performance.
- **Alternative Testing**: Multiple control types and geometric configurations were tested, with the intent of identifying feasible short- to medium-term improvements that align with available right-of-way, funding cycles, and freight movement needs.

4.1 Old Denton Road & Westport Parkway

Old Denton Road and Westport Parkway is four legged, a two-way stop controlled intersection with both northbound and southbound approaches along Old Denton Road are stop controlled. This intersection is located approximately 0.6 miles east of the IH-35 and Westport Parkway Interchange. Both Old Denton Road and Westport Parkway are minor arterials and have two lanes with one lane in each direction operating at 40 mph.

4.1.1 Existing and Forecast Conditions

Directional ADTs for 2026, 2036, and 2050 were extracted from the NCTCOG model and converted to peak-hour turning-movement counts using Replica-derived 2024 distributions and a K-factor of 10 percent. Field data collected July 29–30, 2025, identified critical peak hours of 6:45 - 7:30 AM and 3:30 - 4:30 PM.

Under existing conditions, the intersection currently operating under two-way stop control (TWSC) functions acceptably in the AM peak (HCM LOS C / Synchro LOS A) but experiences substantial PM peak delay (HCM LOS F / Synchro LOS D).

4.1.2 No-Build Operations

For 2026, 2036, and 2050, no-build conditions retain the existing geometry. HCM analyses show LOS F for all three forecast years, indicating severe operational degradation as regional volumes increase.

4.1.3 Build Alternatives

A set of alternatives was developed and tested for 2036 and 2050 build scenarios under both two-way top control (TWSC) and signalized control conditions. The results of the alternative analysis are shown in Table 5 and Table 6.All TWSC alternatives resulted in failing operations (LOS F) under forecast volumes, reflecting significant delay on the minor-street approaches due to heavy conflicting flows on Old Denton Road. Conversely, the signalized alternatives consistently achieved LOS B in both HCM 7th

[1] A stop-controlled intersection at LOS E/F may still operate acceptably if delays are manageable and supported by engineering judgment.

Edition and Synchro analyses for 2036 and 2050, even with conservative assumptions on turn-bay storage. Among the signalized options, Alternative 1-2 which introduces a four-lane divided cross-section with two through lanes and one 250 ft left-turn bay per direction on both Old Denton Road and Westport Parkway provides the most balanced performance. All the HCM and Synchro results for the Existing, No-Build and Build conditions for Old Denton Road and Westport Parkway intersection are included in Appendix 3.

Table 5: 2036 Build Condition Alternative Analysis Results

Alternatives	Control	Turn Lane	Description	HCM 7 LOS	Synchro LOS
Alt 0	TWSC	No	Four-lane divided cross section along Westport Parkway (two lanes per direction, no turn lanes) and Old Denton Road (two lanes per direction, no turn lanes).	F	N/A
Alt 1_1	Signalized	Yes	Four-lane divided section along Westport Parkway (two lanes per direction, no turn lanes) and Old Denton Road (one shared through-right lane and a 500 ft left-turn bay in each direction).	B	B
Alt 1_2	Signalized	Yes	Four-lane divided sections on both Westport Parkway and Old Denton Road, each with two through lanes and one 250 ft left-turn bay per direction.	B	B

Note:

1. *N/A- Not Available*
2. *For TWSC control, the overall intersection LOS is reported based on the worst-performing approach, as defined by HCM.*
3. *For Signalized Control LOS is for overall intersection as per HCM*

Table 6: 2050 Build Condition Alternative Analysis Results

Alternatives	Control Type	Turn Lane	Full Description	HCM 7 LOS	Synchro LOS
Alt 0	TWSC	No	Four-lane divided cross sections along Westport Parkway and Old Denton Road (two lanes per direction, no turn lanes).	F	N/A
Alt 1	Signalized	No	Signalized; four-lane divided cross sections on both Westport Parkway and Old Denton Road (two lanes per direction, no turn lanes).	B	B

Alternatives	Control Type	Turn Lane	Full Description	HCM 7 LOS	Synchro LOS
Alt 1_1	Signalized	Yes	Signalized; Westport Parkway with two lanes per direction (no turn lanes); Old Denton Road with one shared through-right lane and a 500 ft left-turn bay in each direction.	B	B
Alt 1_2	Signalized	Yes	Signalized; both roadways with two through lanes and one 250 ft left-turn bay per direction.	B	B
Alt 2_1	TWSC	Yes	Westport Parkway with two lanes per direction (no turn lanes); southbound Old Denton Road without turn lanes; northbound Old Denton Road with one 500 ft left-turn bay.	F	N/A
Alt 2_2	TWSC	Yes	Westport Parkway with two lanes per direction (no turn lanes); both northbound and southbound Old Denton Road with single 500 ft left-turn bays.	F	N/A
Alt 2_3	TWSC	Yes	Westport Parkway with two lanes per direction (no turn lanes); southbound Old Denton Road with single 500 ft left-turn bay; northbound Old Denton Road with dual 500 ft left-turn bays.	N/A	N/A
Alt 2_4	TWSC	Yes	Westport Parkway with two lanes per direction (no turn lanes); both northbound and southbound Old Denton Road with dual 500 ft left-turn bays.	N/A	N/A

Alternatives	Control Type	Turn Lane	Full Description	HCM 7 LOS	Synchro LOS
Alt 2_5	TWSC	Yes	Eastbound and westbound Westport Parkway with single 500 ft left-turn bays; northbound and southbound Old Denton Road with dual 500 ft left-turn bays.	F	N/A

Note:

1. *N/A- Not Available*
2. *For TWSC control, the overall intersection LOS is reported based on the worst-performing approach, as defined by HCM.*

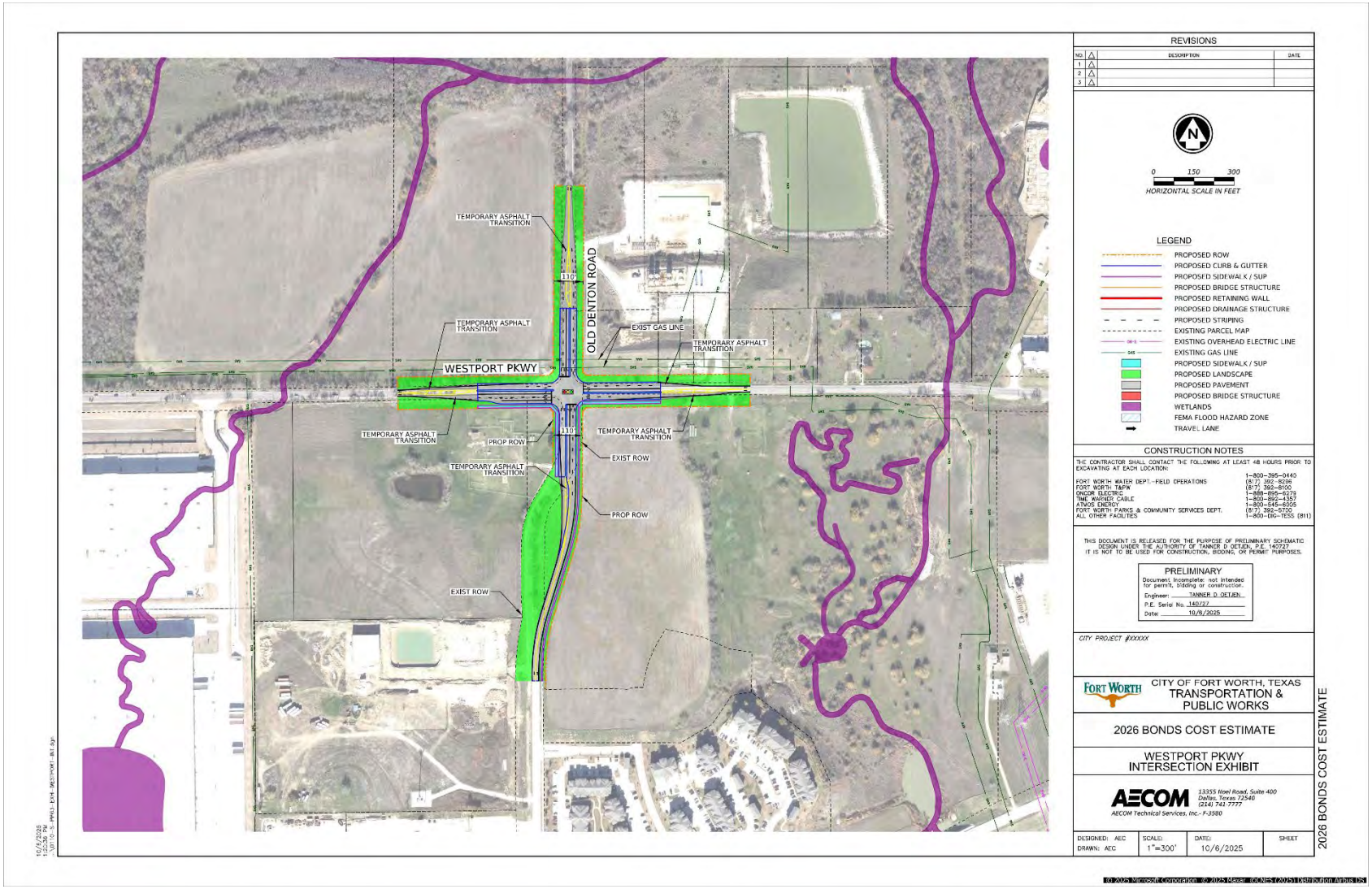


Figure 39 Preferred Intersection Layout of Old Denton Road & Westport Parkway

4.1.4 Preferred Alternative and City Decision

Based on the analysis results, the signalized alternatives not only reduce overall delay but also improve freight mobility, safety, and intersection efficiency, ensuring long-term operational reliability within available right-of-way. Following coordination with the City of Fort Worth, Alternative 1_2 was identified as the recommended configuration for implementation under both 2036 and 2050 build conditions.

On **August 13, 2025**, the City of Fort Worth selected **Alternative 1_2** as the preferred design (see Figure 39). Appendix 2 contains the detailed proposed intersection layout for the preferred Alternative 1_2. This alternative balances operational efficiency with right-of-way constraints, improves freight truck turning movements, and supports long-term regional growth. Designers were directed to evaluate maximum feasible left-turn storage lengths in final design, beyond the 250-foot minimum assumption. Preliminary testing shows that longer storage lengths would further improve queue management without compromising LOS.

4.2 Chapin Road & Chapel Creek Blvd

Chapin Road and Chapel Creek Blvd is three legged, a two-way stop controlled intersection with an eastbound approach along Chapin Road is a stop controlled and both approaches along Chapel Creek Road operate freely. Both the roadways are minor arterials, and this intersection is located approximately 0.15 miles north of the IH-30 and Chapel Creek Boulevard interchange. Chapin Road has one right lane and one left turn storage lane operating at 35 mph. Northbound approach along Chapel Creek Road has two lanes and one left turn storage lane and southbound approach has two thorough lanes, both operating at 40 mph.

4.2.1 Existing Conditions and LOS analysis

Directional average daily traffic (ADT) volumes for 2026 and 2050 were obtained from the NCTCOG travel demand model for all approaches at the Chapin Road and Chapel Creek Road intersection. Turn-movement distributions were derived using Replica's 2024 baseline Network Link Analysis, assumed to remain stable for future years. A K-factor of 10 percent was applied to derive design-hour turning-movement counts.

The intersection currently operates under two-way stop control (TWSC). Field observations and model calibration indicate that the intersection presently performs acceptably under current traffic conditions, but capacity constraints are expected as regional development continues along both corridors.

4.2.2 No-Build Operations

Under no-build conditions, retaining the existing geometry and TWSC control LOS analyses were conducted for 2026 and 2050 using the HCM 7th Edition and Synchro 12 methodologies. Table 7 shows the results for no-build conditions analysis.

Table 7: 2026 and 2050 No-Build Condition Results

Methodology	2026 No Build	2050 No Build
HCM 7	B	F
Synchro	A	F

The eastbound approach operates at LOS F by 2050, with substantial delays driven by high left-turn and right-turn volumes from Chapin Road onto Chapel Creek Blvd. These operational issues are expected to worsen without additional control or geometric improvements.

4.2.3 Build Alternatives

A set of build alternatives was developed and tested for the 2050 build scenario under signalized control, focusing on improving eastbound and northbound operations where the most critical delays occur. The results of the analysis are summarized in Table 8.

The signalized alternatives improve delay and queuing performance compared to the TWSC configuration, particularly for eastbound and northbound approaches. Signalization combined with northbound dual left-turn lanes provides the most balanced operational outcome under 2050 traffic volumes, effectively reducing eastbound delay while supporting long-term mobility needs within the corridor.

Table 8: 2050 Build Condition Alternative Analysis Results

Alternatives	Control Type	Turn Lane	Description	HCM 7th
Alt 1	Signalized	No	Convert the intersection from TWSC to signalized control; eastbound left-turn operates as protected; eastbound right-turn operates as permitted; northbound left-turn operates as permitted and protected	E
Alt 2	Signalized	No	Same as Alt 1, with eastbound left-turn bay extended to 500 ft	E
Alt 3	Signalized	Yes	Convert to signalized control; add a 500 ft eastbound right-turn bay (dual right turns); eastbound left-turn permitted; dual right-turns protected; northbound left-turn permitted and protected	B
Alt 4	Signalized	Yes	Convert the intersection to signalized control and add a 200-foot northbound left-turn bay along Chapel Creek Blvd, creating dual northbound left-turn lanes with protected phasing. The Chapin Road (minor street) approach will include two receiving lanes to accommodate the dual northbound left-turns from Chapel Creek Blvd. The eastbound approach will provide a full inside left-turn lane rather than a storage lane. The right-turn lane on the eastbound approach will be channelized, and the continuation of this outer lane beyond the channelization will be hatched off with pavement markings to reserve space for future expansion when a fourth leg of the intersection is constructed as part of the Chapin Road extension.	A

Note: LOS values reflect overall intersection delay per HCM 7th Edition methodology.

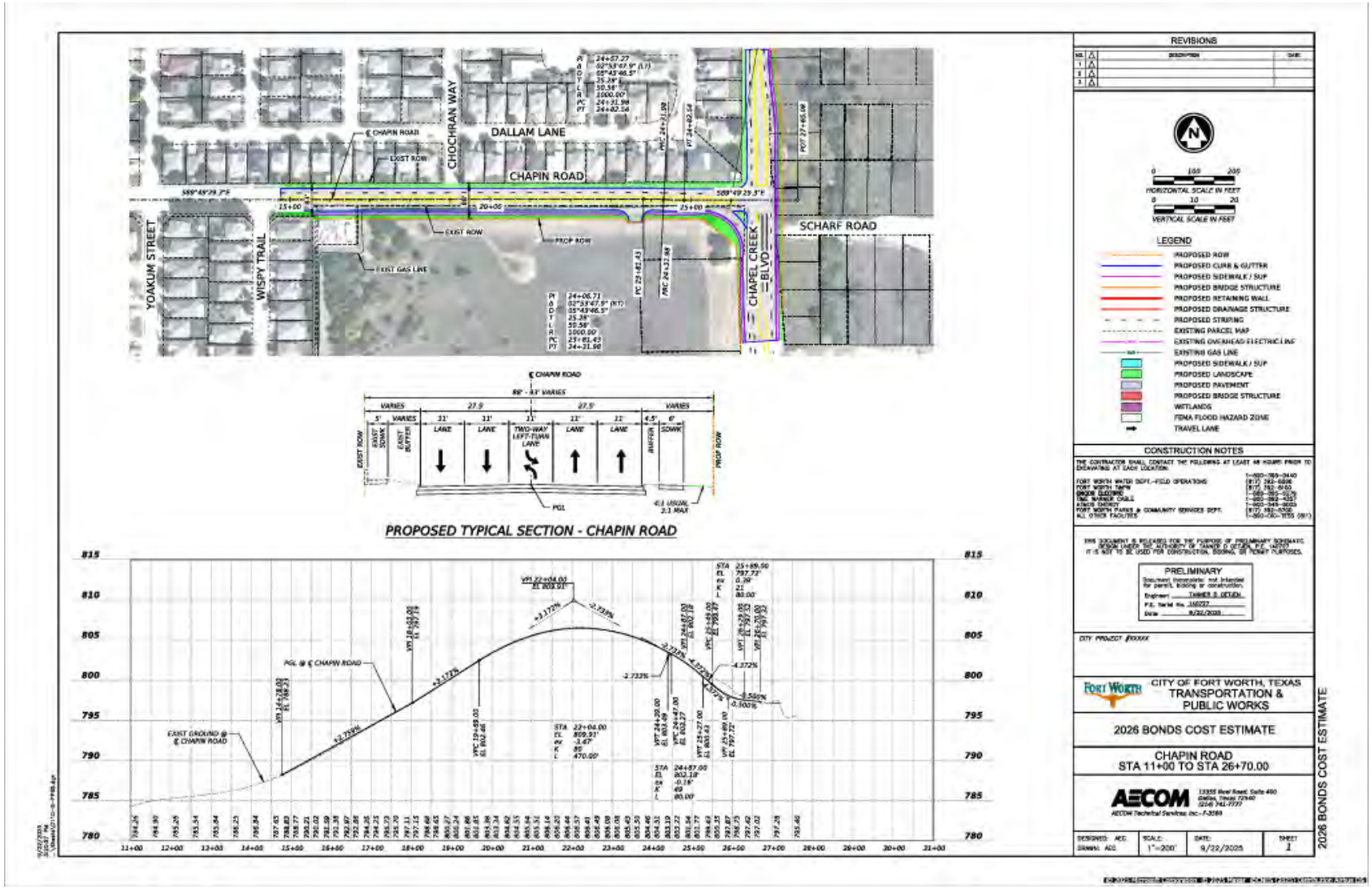


Figure 40 Preferred Intersection Layout of Chapin Road & Chapel Creek Blvd

4.2.4 Preferred Alternative and City Decision

Among the alternatives evaluated, **Alternative 4** (see Figure 40) which introduces a 200-ft northbound left-turn bay creating dual left-turn lanes **was identified as the preferred alternative** following coordination with the City of Fort Worth.

The selected alternative includes:

- Conversion from unsignalized to signalized control
- Addition of a 200 ft northbound dual left-turn bay along Chapel Creek Blvd with protected phasing for the northbound left-turn movement
- Provision of two receiving lanes along Chapin Road to accommodate the dual northbound left-turns
- Modification of the eastbound approach to include a full inside left-turn lane
- Channelization of the eastbound right-turn lane, with the continuation of the outer lane hatched off to reserve space for future intersection expansion.

Appendix 2 contains the detailed proposed intersection layout of the preferred Alternative 4. The addition of northbound turn lane capacity and the channelization of the eastbound right-turn movement significantly improve intersection operations. Under optimized signal timing, Alternative 4 is projected to operate at LOS A with an overall average control delay of 6.8 seconds per vehicle, based on the HCM 7th Edition methodology. AECOM will continue coordination with the City of Fort Worth to refine lane configurations, storage lengths, and signal phasing parameters prior to final design implementation.

Appendices

Appendix 1: Summary of Projects Coded

Table A- 1: Medium-Term Analysis List of Projects

	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
Scenario 1	1	WJ Boaz Rd.(west half) (2022)	Boat Club Rd.	Elkins School Rd.	Design and construction of 1.03 miles of a 4-lane divided thoroughfare with curb and gutter, drainage, streetlights, and shared paths	Y
	2	Meacham Blvd Phase II (West) (2022)	I-35W	Blue Mound Road	Reconstruct existing 2-lane undivided to 4-lane divided roadway	Y
	3	E. Bailey Boswell Rd (2022)	Horseman Dr	Blue Mound Rd/FM 156	Design and ROW of 0.7 miles of a 4-lane divided roadway with curb and gutter, drainage, streetlights, and shared paths	Y
	4	Heritage Trace Parkway I (2022)	@BUS 287 (Saginaw Blvd)/Old Decatur	Wagley Robertson Rd	Construct a new 4-lane divided roadway with grade-separation at RR and Bus 287. Connect to Old Decautur and Bus 287.	Y
	5	Bonds Ranch Road	FM 1220	N. Saginaw Blvd	Reconstruct two (2) lane undivided to four (4)-lane divided roadway.	Y
	6	Bonds Ranch Road	East of BNSF/UP RR	Wagley Robertson Rd	Reconstruct two (2) lane undivided to four (4)-lane divided roadway.	Y

	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	7	Bonds Ranch Road	Shire Meadow Roundabout	Blue Mound Rd	Reconstruct two (2) lane undivided to four (4)-lane divided roadway.	Y
	8	Altamesa Blvd	Anglin Dr	Dick Price Rd	Design/Construct four (4)-lane divided roadway.	Y
	9	Calhoun/Jones Street	6th Street	19th Street/East Lancaster	Reconstruct context-sensitive transit-oriented streets (0.6 mi)	N
	10	Chapin School Rd (RM 2871)	City Limit/Aledo Road	IH 20	Construct two (2)-lane undivided to four (4)-lane undivided roadway	Y
	11	E. Berry St	IH 35W	Miller Ave	Reconstruct four (4)-lane undivided with center turn lane/divided roadway.	Y
	12	E. Berry St	Miller St	IH 820	Design four (4)-lane undivided; Upgraded arterial	Y
	13	E. Berry St	IH 820	Lake Arlington	Design two (2)-lane undivided to 3-lane with center turn lane arterial; Upgraded arterial.	Y
	14	Camp Bowie Blvd.	Horne Street	Wellington Road	Retrofit and capital renewal of 6-lane divided roadway with pedestrian and lighting enhancements	Y
	15	Westport Pkwy	Haslet Roanoke Rd/High Mesa Rd	Park Vista Blvd	Construct four (4)-lane with center turn lane and bridge.	Y

	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	16	Westport Pkwy	IH 35W	Beach St	Reconstruct two (2) lane undivided to four (4)-lane with center turn lane.	Y
	17	Altamesa Blvd	Lana Circle	Forest Hill Dr	Design/Construct four (4)-lane divided roadway.	Y
	18	Shelby Rd	Race St	Forest Hill Dr	Reconstruct two (2)-lane undivided to 4-lane undivided with center turn lane.	Y
	19	Altamesa Blvd	Wichita St	Lana Circle	Retrofit existing six (6) lane divided roadway to enhance safety and operations improvements.	Y
	20	Altamesa Blvd	Forest Hill Drive	Anglin Drive	Design two (2)-lane undivided to 4-lane divided arterial.	Y
	21	23rd Street	Niles City Blvd	Northside Drive	Reconstruct and construct 2 to 4-lane undivided with grade separation at railroad	Y
	22	Forest Park Blvd	Fort Worth Trail/Summit Ave	IH30/Vickery Blvd	Reconstruct four (4)-lane divided with median for resurfacing.	Y
	23	McCart Ave	Covert Ave	Sycamore School Road	Design of reconstructed six (6)-lane divided arterial, pending study.	Y
	24	Altamesa Blvd	at FWWR RR		Construct at-grade and design six (6)-lane future grade separation.	Y

	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	25	Altamesa Blvd	at FWRR	Wichita St	Construct 3-lane undivided arterial; shared use path.	Y
Scenario 2	26	Meacham Blvd (East)	I-35W	N. Beach St	Reconstruct 4-lane divided roadway.	Y
	27	Eastchase Pkwy/Dottie Lynn Pkwy	East Lancaster (SH180)	John T. White Rd	Design a retrofit of roadway to include advanced signals, transit cue jumps, continuous shared-use paths, and intersection treatments	N
	28	Forest Park Blvd	Fort Worth Trail/Summit Ave	IH30/Vickery Blvd	Reconstruct four (4)-lane divided with median for resurfacing.	Y
	29	Risinger Road	Technology Boulevard	Crowley Rd (FM 731)	Reconstruct two (2)-lane undivided to 4-lane divided arterial	Y
	30	Precinct Line Rd/Cooks Lane	John T. White Rd	Concho Trail	Design four (4)-lane divided arterial.	Y
	31	Cooks Lane	Brentwood Stair Rd	Dottie Lynn Pkwy	Reconstruct two (2)-lane divided to four (4)-lane divided arterial.	Y
	32	Bowman Roberts Rd	W. Bailey Boswell Rd	WJ Boaz	Design two (2)-lane existing to three 3-lane with center turn lane arterial.	Y

	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	33	Dottie Lynn Pkwy/Green Oaks Pkwy Interchange	Dottie Lynn Pkwy/Green Oaks Pkwy @ E. Lancaster Ave (SH 180)		Design Interchange	N
	34	Randoll Mill Rd	Precinct Line Rd	Racquet Club	Design four (4)-lane divided arterial.	Y
	35	Westshore Way (Quail Ridge Rd)	Ramey St	E. Berry St	Design three (3)-lane undivided arterial; Upgraded arterial with parallel parking and shared use path.	Y
	36	Randoll Mill Rd	Oakland Blvd	Woodhaven Blvd	Design four (4)-lane divided arterial.	Y
	37	Amon-Carter Extension	W. Fork Trinity River	Trinity Blvd	Design four (4)-lane divided w/ Trinity River Bridge	Y
	38	John T. White	Racquet Club Dr	Green Oaks Blvd	Design four (4)-lane undivided arterial. with bridge over floodway	Y
	39	John T. White	Newport Rd	Racquet Club Dr	Design east-bound two (2)-lane to create a four (4)-lane divided arterial.	Y
	40	Heritage Trace Parkway	@ BNSF RR		Construct grade separation and interchange.	N

	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	41	Ten Mile Bridge	Boat Club Rd	Samora Ct	Design two (2)-lane divided to (3)-three lane divided arterial.	Y
	42	Wagley Robertson Rd	Coneflower	City Limits	Design two (2)-lane undivided to three (3)-lane with center lane arterial.	Y
	43	Columbus Trail/Sycamore School Rd	Bryant Irvin Rd	Brewer Blvd	Construct two four (2) to (4)-lane arterial	Y
	44	Wagley Robertson Rd	Bonds Ranch	Quicksilver	Design two (2)-lane undivided to four (4)-lane divided arterial.	Y
	45	Bryant Irvin Rd	Summerglade St	Old Granbury Rd/Columbus Trail/Sycamore School Rd	Construct two (2) lanes of the four (4)-lane arterial up to 400' ft north of Sycamore School Rd.	Y
	46	Ten Mile Bridge	Bowman Roberts	Boat Club Road	Design two (2)-lane undivided to (3)-three lane undivided arterial.	Y
	47	Bowman Roberts Rd	WJ Boaz	Ten Mile Bridge Rd	Reconstruct two (2)-lane to three 3-lane with center turn lane arterial.	Y
	48	Sendera Ranch Road	Diamondback	Avondale Haslet	Construct four (4)-lane divided roadway	Y

	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	49	Hemphill Street	W. Risinger Road	Sycamore School Road	Design and construct four (4)-lane divided arterial.	Y
	50	Hemphill Street	Brasenose Street	Tufted Drive	Design and construct four (4)-lane divided arterial.	Y
	51	Chapin Rd/Chapel Creek Blvd	Chapel Creek	Whispey Trail	Reconstruct four (4)-lane divided with median for resurfacing.	Y
	52	IH 30	IH 30	Barnwell Drive	Construct four (4)-lane divided arterial.	Y
	53	Leslie Drive	Mistleoe Blvd	Park Place	Construct 2-lane roadway (0.4 mi); construct ped/bike/technology pathways to serve TexRail station	Y
	54	White Settlement	Adolph	University	Needs corridor study	N
	55	White Settlement	University	Rockwood		N
	56	West Cleburne Road	West Cleburne N	West Cleburne-Crowley/Old Cleburne	Needs corridor study	N

	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	57	Walsh Ranch Minor 1	Minor 4	IH30 (West Freeway)	Construct a five (5)-lane undivided roadway with shared-use paths	N
	58	Camp Bowie Blvd	Hulen Street	Boland Street	Reconstruction of brick pavement	N
	59	UTA West Roadways	Various around Campus		Construct multiple internal and connector roadways	N
	60	Marine Creek Parkway	Old Decatur/Angle	Loop 820	Reconstruct 4-lane divided roadway	Y
	61	Westport Parkway	I-35W	North Beach	Reconstruct two (2) lane undivided to four (4)-lane with center turn lane.	Y
	62	Old Denton/Riverside	Westport	Sawtimber Road	Upgrade to 3 lanes divided roadway	N
	63	North Beach Street	Keller Haslet	Eagle Parkway	Construct 2 lanes divided roadway	Y

APPENDIX G

TECHNICAL MEMO 7: BUILD-OUT SCENARIO

FORT WORTH®

Master Transportation Plan

Build-Out Scenario Analyses

Technical Memorandum

December 2025

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Acronyms

AASHTO	American Association of State Highway and Transportation Officials
ACS	American Community Survey
ADA	Americans with Disabilities Act
ATP	Active Transportation Plan
AV	autonomous vehicle
CR	Commuter Rail
CRIS	Crash Records Information System
DART	Dallas Area Rapid Transit
DFW	Dallas Fort Worth International Airport
DR	Demand Response
ETJ	Extraterritorial Jurisdiction
GIS	Geographic Information System
IH	Interstate Highway
ITS	Intelligent Transportation Systems
JEOC	Joint Emergency Operations Center
KSI	Killed or Seriously Injured
LEHD	Longitudinal Employer-Household Dynamics
LOS	Level of Service
LTS	Level of Traffic Stress
MaaS	mobility-as-a-service
MB	Motor Bus
mph	miles per hour
MTP	Master Thoroughfare Plan
M1M	Moving a Million
NACTO	National Association of City Transportation Officials
NCTCOG	North Central Texas Council of Governments
OD	Origin-Destination
OTP	On-Time Performance
PPP	public-private partnership
PTC	Positive Train Control
PxLTS	Pedestrian Crossing Level of Traffic Stress
ROW	Right-of-Way
SNAP	Supplemental Nutrition Assistance Program
TAZ	Transportation Analysis Zone
TCC	Tarrant County College
TDM	Travel Demand Model
TNC	Transportation Network Company
TOD	Transit-Oriented Development
TSI	Transportation Supportive Index
TSP	Transit Signal Priority
TTI	Travel Time Index
UTA	University of Texas at Arlington
V/C	Volume-to-Capacity
VIA	VIA Metropolitan Transit (San Antonio, TX)
VMT	Vehicle Miles Traveled
VP	Vanpool

1 Executive Summary

The City of Fort Worth continues to experience strong population and employment growth, this growth presents an opportunity to strengthen the City's Core Area and Downtown as economic, cultural, and mobility anchors, while also posing challenges related to congestion, accessibility, and long-term infrastructure capacity. The Moving a Million (M1M) and Connecting the Core (CtC) initiatives represent a coordinated effort to proactively address these challenges by aligning land use, transportation investments, and mobility strategies with the City's long-range vision.

This technical memorandum documents a build-out scenario analysis undertaken to evaluate how alternative growth patterns, targeted roadway investments, and enhanced transit strategies could shape Fort Worth's long-term transportation system. The analysis explores various future scenarios to understand tradeoffs, assess system performance, and identify the types of investments required to support the City's desired growth trajectory. The results provide a robust, data-driven foundation to inform long-range planning, project prioritization, and policy decisions.

1.1 Planning Context and Approach

Regional travel demand models, including the NCTCOG 2050 Mobility Plan, provide a consistent framework for evaluating long-term transportation needs across North Central Texas. However, these models are primarily designed to reflect adopted plans and historic growth trends and are generally more responsive to greenfield development than to redevelopment and infill within established urban areas. As Fort Worth advances policies and initiatives that emphasize compact growth, reinvestment in the Core, and enhanced multimodal options, additional analysis is required to understand how such strategies may influence travel demand and infrastructure performance.

To address this need, a scenario planning approach was applied that allows the City to test alternative assumptions and assess their implications in a transparent and structured manner. The analysis focuses on three primary dimensions that strongly influence travel outcomes:

1. the distribution of population and employment growth,
2. the configuration of the roadway network, and
3. the role of transit in supporting Core-focused development.

1.2 Scenarios Evaluated

Four scenarios were evaluated, each building incrementally on the previous condition:

- **Baseline 2050** reflects NCTCOG's adopted 2050 demographic, roadway, and transit assumptions and serves as the reference condition.
- **Future Scenario #1 – Acting Our Size (AOS)** reallocates a greater share of future population and employment to the Core Area and Downtown, based on national benchmarking, planned development activity, and major local planning initiatives, while maintaining the baseline network and mode-share assumptions.
- **Future Scenario #2 – AOS + M1M Network** adds the M1M and CtC priority roadway projects to test how targeted connectivity and capacity improvements perform under a Core-focused

growth pattern.

- **Future Scenario #3 – AOS + M1M + Transit Strategy** incorporates a planning-level transit mode shift in priority corridors, reflecting higher transit usage consistent with peer cities that support dense, mixed-use downtowns.

This stepwise structure allows the City to clearly isolate the effects of growth concentration, roadway investments, and transit strategies, and to understand how these elements interact.

1.3 Key Findings and Takeaways

1.3.1 Concentrating growth in the Core significantly reshapes travel patterns

Under the Acting Our Size scenario, total travel activity within Fort Worth increases relative to the Baseline, with a disproportionately larger share occurring within the Core Area. This outcome reflects the intent of compact growth: trips are drawn inward from outlying areas rather than being uniformly distributed across the region. The Core becomes the dominant generator and attractor of trips, reinforcing its role as the City's primary activity center.

1.3.2 Land use intensification alone increases congestion and degrades performance

Scenario 1 demonstrates that concentrating population and employment in the Core without accompanying transportation investments places substantial pressure on the existing roadway network. Congestion increases on downtown streets, freeway ramps, and key regional corridors, and travel times worsen in several Core neighborhoods. While this scenario supports economic development and placemaking goals, it confirms that land use change by itself is insufficient to maintain acceptable mobility.

1.3.3 Targeted roadway investments materially improve system performance

The addition of the M1M and CtC roadway projects in Scenario 2 improves connectivity, addresses network gaps, and redistributes traffic more efficiently. These investments provide localized congestion relief, particularly on collectors and minor arterials, and help stabilize overall system performance despite higher activity levels. The results underscore the importance of targeted, multimodal roadway investments rather than reliance on freeway expansion alone.

1.3.4 Transit investments support Core growth but are not a standalone solution

The planning-level transit strategy tested in Scenario 3 shifts a portion of shorter, Core-based auto trips to transit, reducing pressure on several local facilities and reinforcing Core-focused travel patterns. While congestion is not eliminated, the results demonstrate the supporting role that transit can play when combined with roadway improvements. Because this analysis applies a simplified, policy-level approach, the findings should be interpreted as directional, highlighting potential benefits rather than precise forecasts.

1.3.5 Integrated strategies yield the most balanced outcomes

Across all key performance indicators, including vehicle miles traveled, vehicle hours traveled, speeds, travel time index, and level-of-service measures, the strongest outcomes occur when growth concentration, roadway investments, and transit strategies are implemented together. No single strategy alone resolves congestion, but coordinated action produces a more resilient and balanced transportation system.

1.3.6 Implications for Long-Term Decision-Making

The scenario planning analysis demonstrates that Fort Worth can successfully pursue a Core-focused growth strategy, but doing so requires intentional alignment between land use policy and transportation investment. Concentrating growth without infrastructure support leads to unacceptable congestion, while targeted roadway and transit investments can meaningfully offset these impacts and improve system performance.

Importantly, this analysis does not prescribe a single preferred solution. Instead, it provides a transparent, defensible framework to evaluate tradeoffs, prioritize investments, and guide future updates to long-range plans. The findings reinforce the value of using scenario planning as a decision-support tool so that Fort Worth's transportation system evolves in step with its growth vision.

Together, the results establish a clear foundation for advancing M1M and CtC priorities and for shaping future mobility investments that support economic vitality, accessibility, and quality of life in Fort Worth.

2 Introduction

Regional forecast models are essential tools in long-range planning, providing insights into future population and employment growth based on a wide range of inputs. These models incorporate authorized plans, approved developments, committed infrastructure projects, and historical growth trends. At the regional level, NCTCOG is responsible for preparing and maintaining demographic forecasts, which are updated every five years in close coordination with cities to reflect the evolving growth patterns and local land use and infrastructure plans.

While regional models provide valuable, consistent projections, they tend to represent greenfield development (i.e. growth on undeveloped land at the urban fringe) more effectively than redevelopment or infill within existing urban areas. Greenfield areas generally offer greater flexibility for accommodating new development, making them easier to model at regional scale. In contrast, infill and re-development are often constrained by existing land uses, regulations, and site-specific conditions, and therefore require a more detailed, locally informed analysis than regional models are designed to provide.

It is also important to note that regional forecasts typically reflect a continuation of current policies and adopted plans. They do not explicitly account for potential future policy changes, unofficial or emerging development activity, or future re-development activities. As cities like Fort Worth consider strategic shifts such as adopting smart growth policies or other transformative approaches, scenario planning becomes a valuable tool to support informed decision-making.

Scenario planning is widely used by agencies around the U.S. and worldwide to explore plausible futures and assess the impacts of alternative assumptions. A scenario is defined as "*an internally consistent view of what the future might turn out to be—not a forecast, but one possible future outcome*." [1] For Fort Worth, this approach enables the city to test how strategies aligned with long-term goals may influence travel patterns, congestion, and system performance, helping guide investment and policy decisions that support a more vibrant and sustainable urban future.

To address these considerations, this memo outlines the scenario planning methodology and key steps for developing three future scenarios (Section 7). The three scenarios consider the following:

- An alternative demographic growth scenario (Acting Our Size, Section 4),
- Targeted infrastructure investments identified through the Moving a Million (M1M) gap analysis and Connecting the Core (CtC) needs assessment (Section 5); and
- A planning-level transit strategy in priority areas to support growth (Section 6).

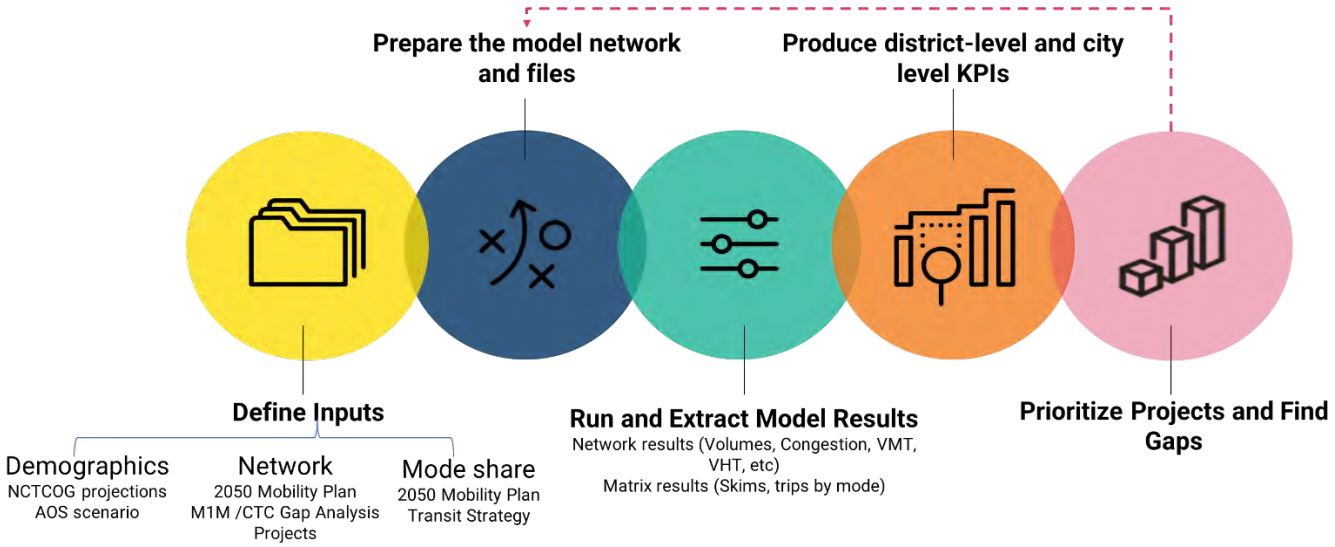
[1] https://ops.fhwa.dot.gov/publications/fhwahop16016/ch2.htm#fn1

3 Methodology

The proposed approach for the scenario planning exercise consists of five key steps as shown in Figure 1. The first step consists of the definition of plausible variations of the key inputs of the NCTCOG's Travel Demand Model (TDM) that align with different strategies and developmental changes for the City of Fort Worth. For this scenario planning exercise, three inputs were identified for incorporating changes that more accurately align with the city's vision and goals: demographic inputs, future infrastructure projects (represented by the network), and mode share assumptions:

- The demographic scenario considered a redevelopment effort in the Core Area to match national benchmarks of downtown population and employment, and aligns with current development plans, policies and growth trends across the City. The baseline scenario considers NCTCOG's 2050 Mobility Plan demographic projections. Section 4 details the methodology for the development of demographic scenarios.
- As a result of the need assessment and gap analysis of the M1M and CtC projects, a list of transportation projects has been identified as priority investments for the long term. Some of these are new concepts and will be added to the city's thoroughfare plan, therefore, they are not reflected in NCTCOG's 2050 TDM network. For this reason, a network update, including these recently identified projects (or *Unconstrained Network*) is needed to reflect the latest infrastructure priorities of Fort Worth. A detailed description of the network changes is included in Section 5.
- In alignment with NCTCOG's Transit 2.0 vision, one of the key strategies to be incorporated is investing in high-capacity, high-frequency transit services in priority areas to support the densification of the core and major origin-destination movements within the city. Different mode shift targets are estimated based on a benchmarking exercise of transit use in similar cities, with a higher level of transit service and density (see Section 6). The aim of changing this input is to understand the impact on the roadway network when a higher level of transit usage is present.

Figure 1: M1M/CtC Future Scenario Planning Methodology



The following steps of the methodology consist of the preparation of the model network and files to

translate input assumptions into model inputs. These inputs are then incorporated into the TDM model to produce model results in step 3. As some of the changes have higher implications for the model results, different levels of model runs are defined depending on the input to be changed:

- For the demographic assumption changes, a full 4-step model[2] run is carried out by NCTCOG. As one of the main drivers of TDM, any major changes in the population and employment assumptions would affect trip generation, distribution, and therefore final travel patterns and congestion.
- To review the impact of network changes, only a traffic assignment[3] (last step of the 4-step model) is performed. Spot infrastructure changes would likely not affect overall trip generation and attraction but primarily affect trip routes, and congestion results, which are captured in the traffic assignment.
- The transit strategy is defined as a planning-level strategy, and therefore, no specific routes, transit corridors, capacity and operational characteristics are defined at this point. For this reason, a post-processing step of the trip tables is carried out to reflect the benchmarked mode shares around capture areas when such strategies are incorporated (detailed methodology can be found in Section 6). Once the adjusted trip tables are estimated, a traffic assignment is carried out.

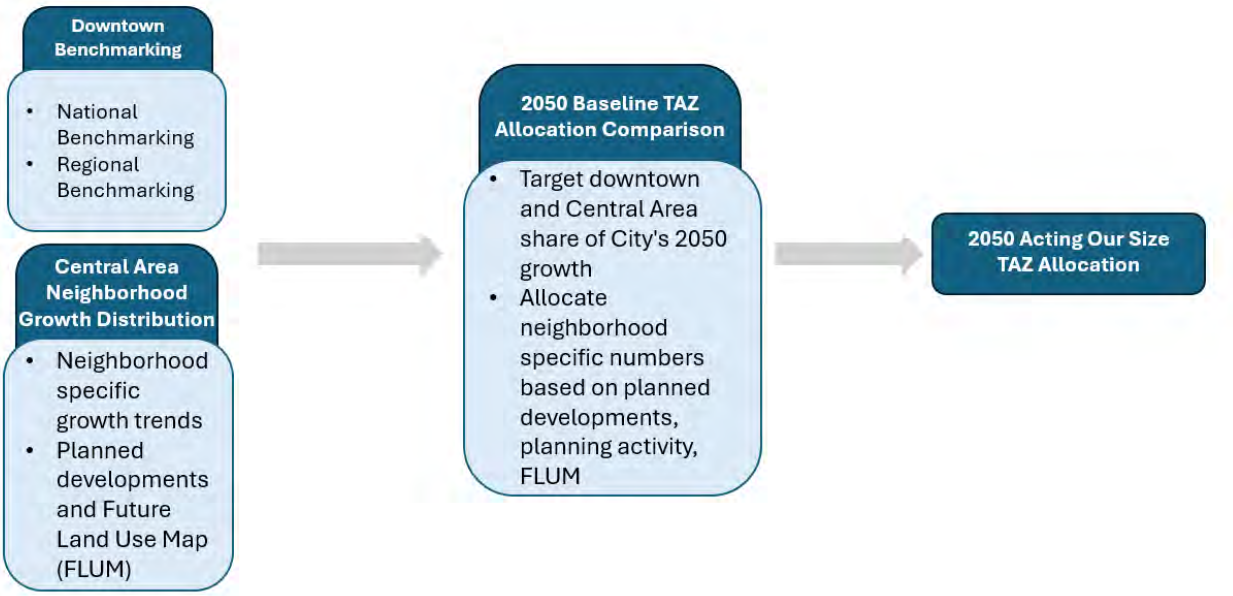
The final two steps of the methodology involve the development of comparable Key Performance Indicators (KPIs) that reflect roadway network performance at both the citywide and Core Area levels and allow for comparison across scenarios. Section 7 describes the future scenarios evaluated, while Section 8 presents the resulting KPIs and other travel demand model outputs used to assess system performance. Together, these results inform project prioritization and help identify additional long-term infrastructure gaps.

4 Demographic Scenarios

The methodology for the demographic scenarios follows a tiered approach, first starting with comparison of the City of Fort Worth's growth trends with other major cities and benchmarking the downtown and Central area/ Core Area neighborhoods. Next, the planned and proposed developments in the Central area are incorporated into the future development at the TAZ level and compared with COG's 2050 forecasts, which will be referred to as the Baseline scenario. Both these exercises, the benchmarking and Central Area planning efforts build the 2050 baseline scenario to create the alternative Acting Our Size (AOS) demographic scenario as shown in Figure 2.

[2] The full model run takes about 2 weeks between input preparation, run time and review by NCTCOG.
[3] The assignment run takes about 2-3 days between run time and review.

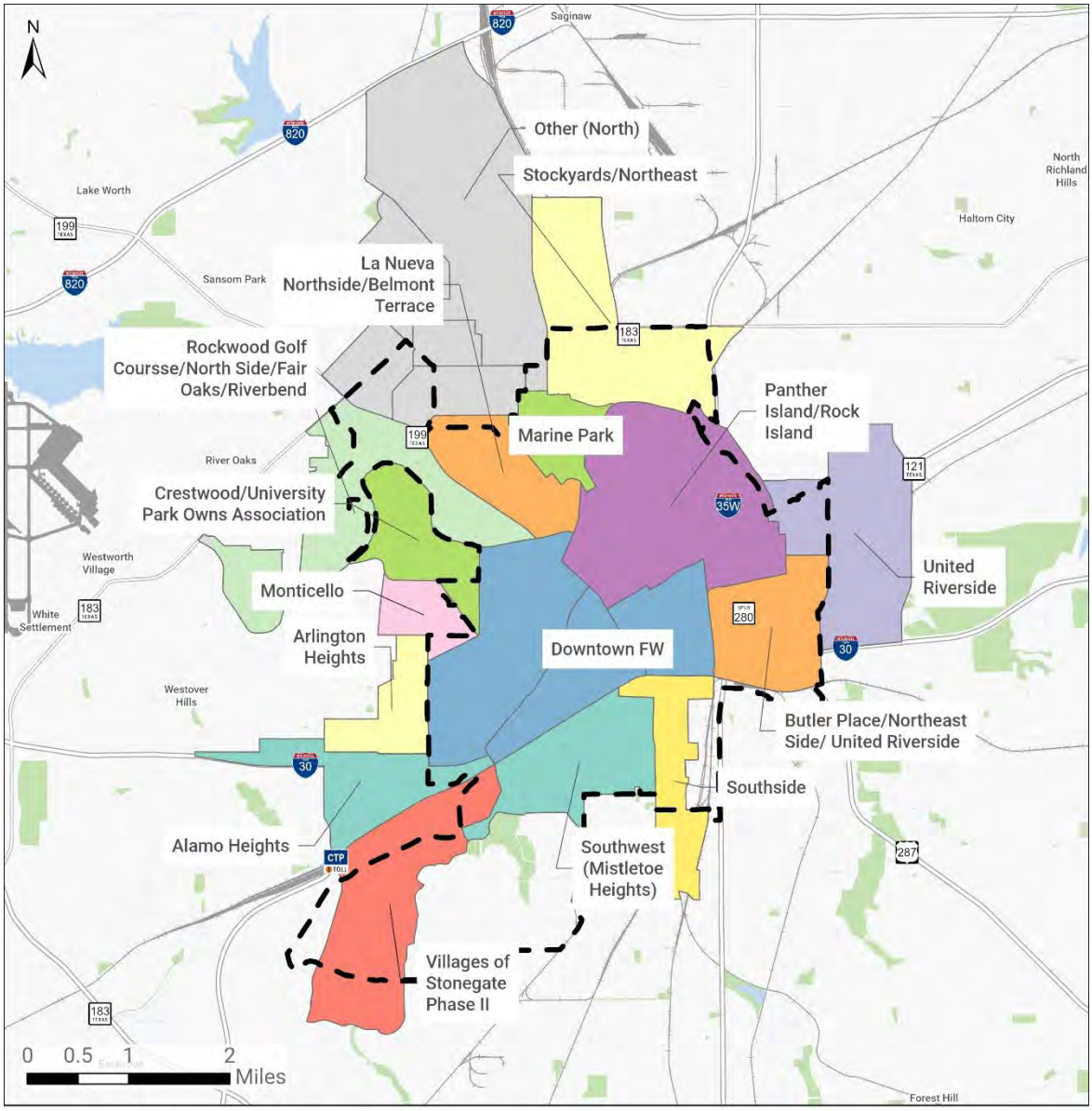
Figure 2: Acting Our Size (AOS) TAZ allocation



4.1 Analysis Geographies

The geographic units used in the analysis for the Core Area are shown in Figure 3 (Census tracts) and Figure 4 (TAZs). Historic trend data were based on Census geographies (tracts) that most closely aligned with the study area boundaries. Future allocations were done based on TAZs aligned with the Central/Core Area neighborhood.

Figure 3: Census Tracts by Central Area Neighborhoods

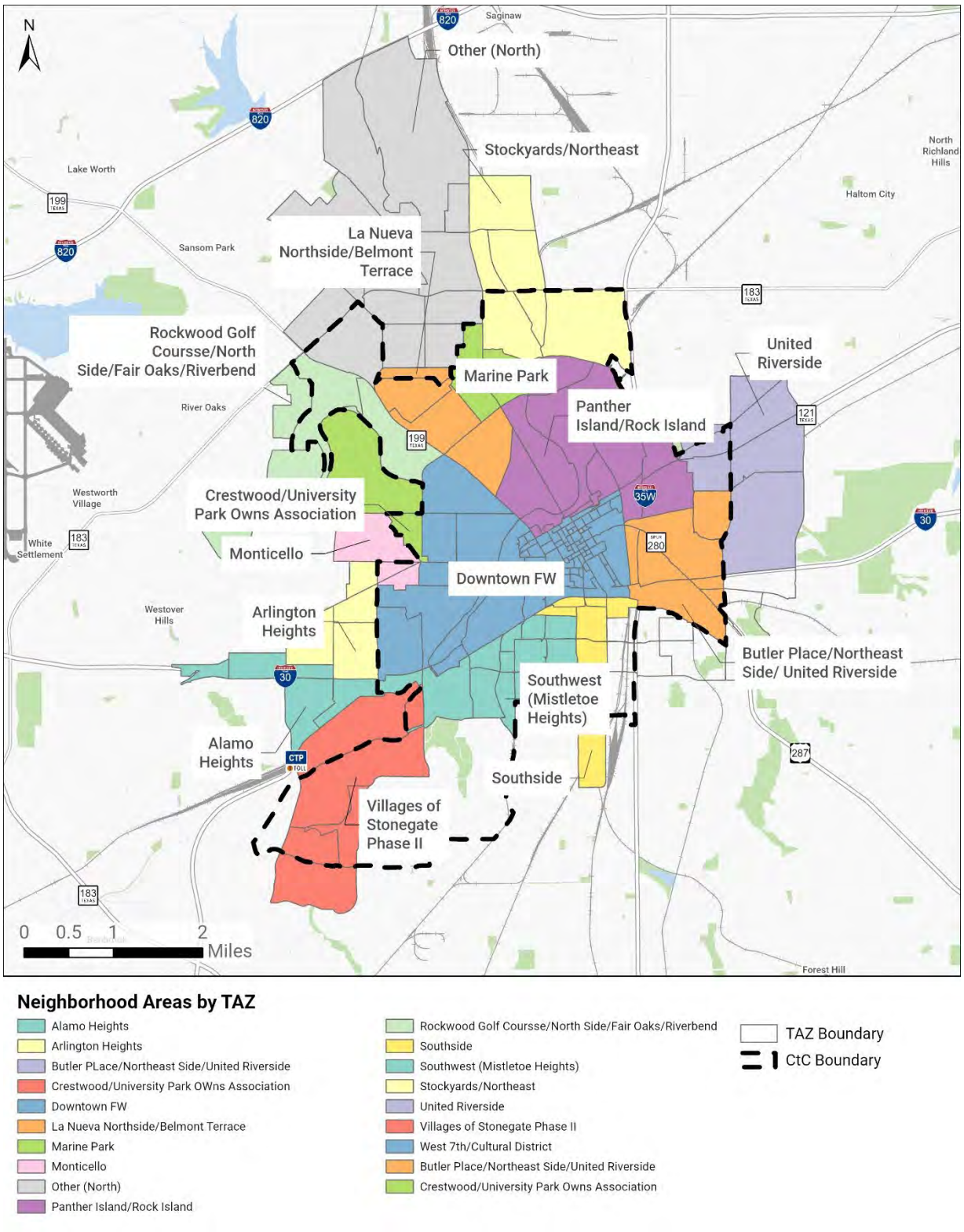


Neighborhood Areas by Census Tract

- Alamo Heights
- Arlington Heights
- Butler PLace/Northeast Side/ United Riverside
- Crestwood/University Park OWns Association
- Downtown FW
- La Nueva Northside/Belmont Terrace
- Marine Park
- Monticello
- Other (North)
- Panther Island/Rock Island
- Rockwood Golf Coursse/North Side/Fair Oaks/Riverbend
- Southside
- Southwest (Mistletoe Heights)
- Stockyards/Northeast
- United Riverside
- Villages of Stonegate Phase II
- West 7th/Cultural District
- Butler Place/Northeast Side/ United Riverside
- Crestwood/University Park Owns Association

Census Tract Boundary
CtC Boundary

Figure 4: TAZs by Central Area Neighborhoods

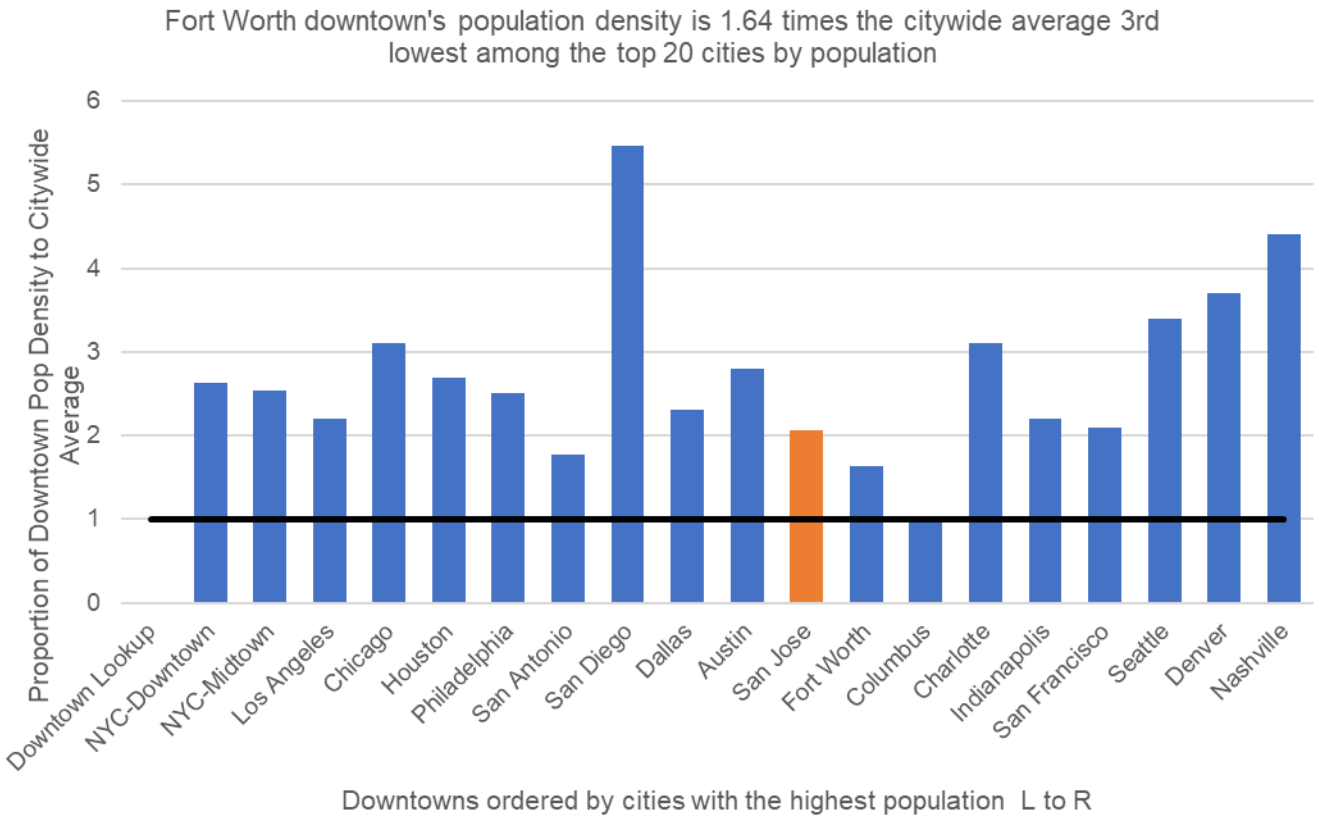


4.2 Downtown Benchmarking

The national and regional benchmarking exercise was focused on two main geographies: the City and the downtown. This is because comparative downtown geographies and related Census tract based data are readily available. The national and regional benchmarking exercise aimed to compare growth trends in the City and the downtown with other comparable downtowns. Key findings from the benchmarking exercise are summarized below:

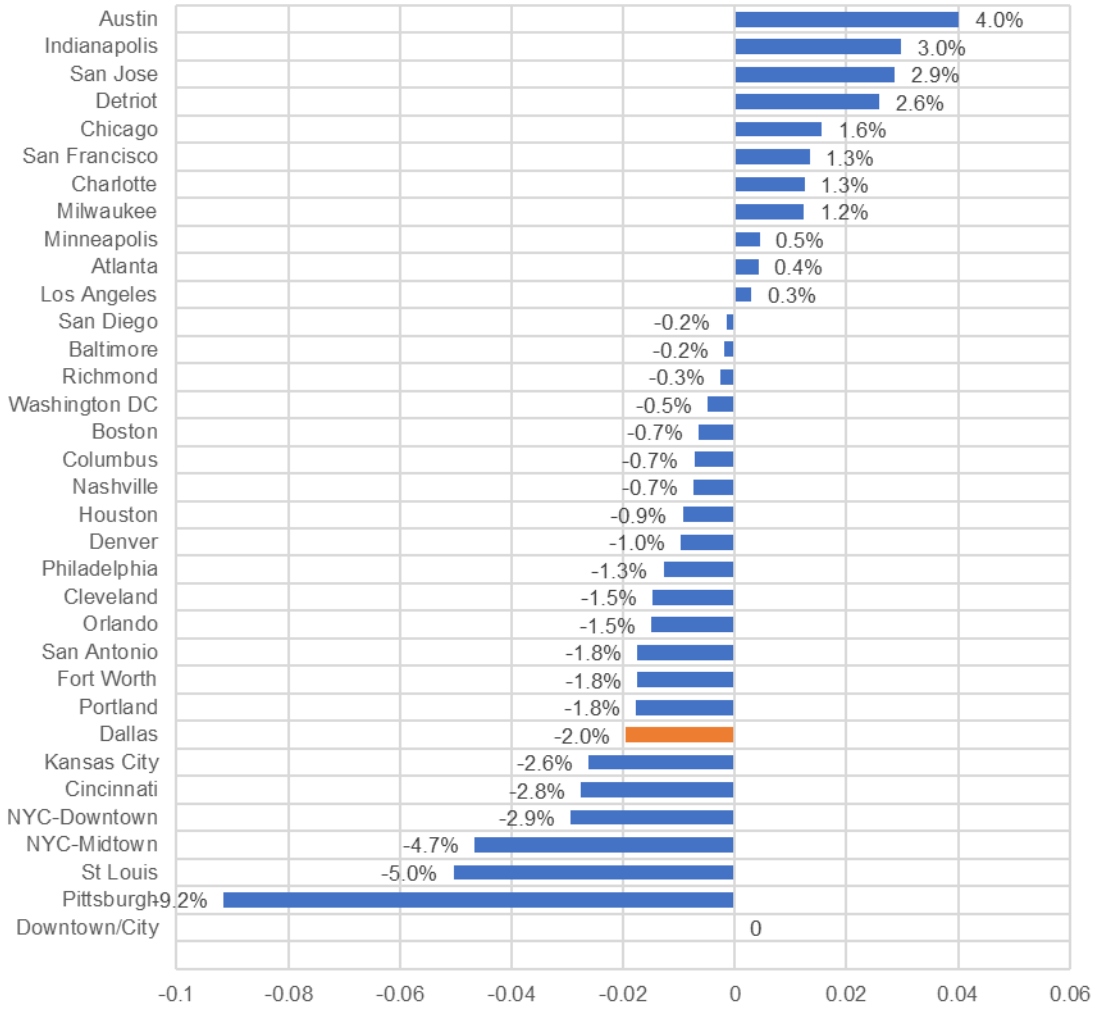
- Among the top 35 metro areas nationally, the City of Fort Worth ranks 11th by population and 22nd in terms of employment. The City's downtown, however, ranks significantly lower compared to other downtowns nationally at 34th for population and 28th for employment.
- Downtown Fort Worth has a relatively low share of the City's population (0.5% -1% compared to 2%-8% for the national sample). Despite steady population growth since 2010, overall population density in downtown Fort Worth remains lower than national benchmarks (Figure 5).

Figure 5: Downtown Population Density Premium, 2022



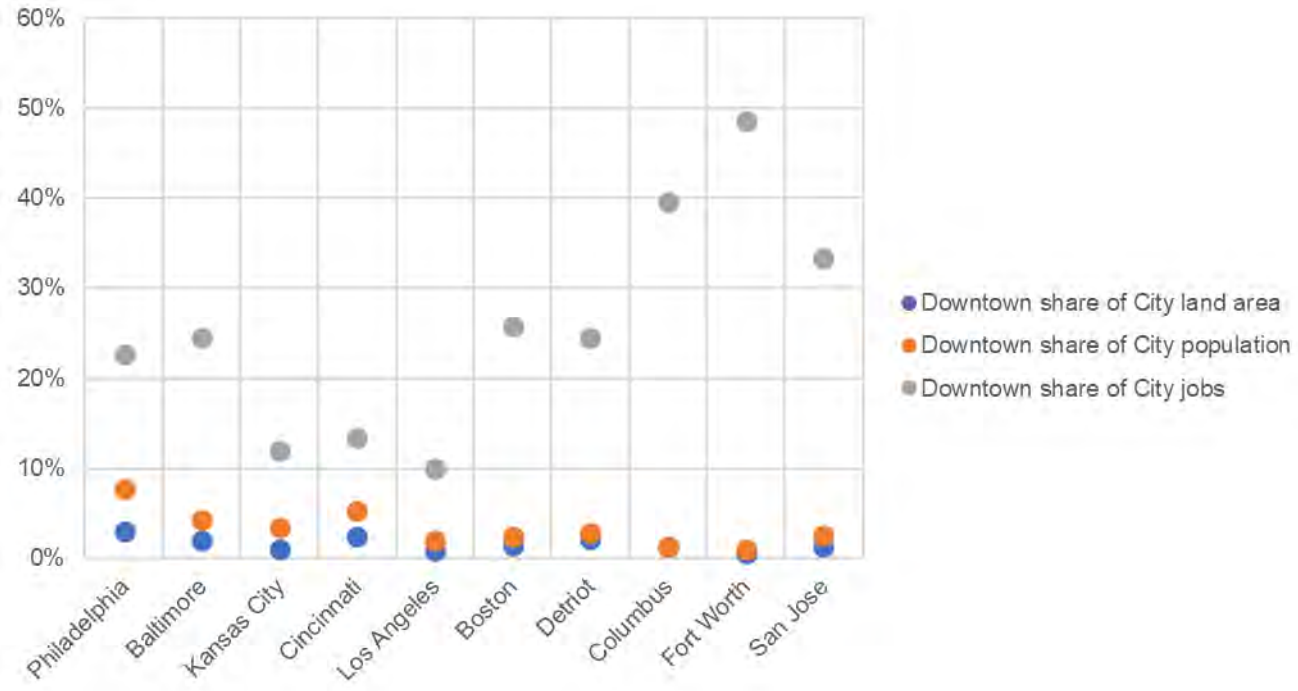
- Majority of the City's employment growth has been outside of the City's downtown, reducing the downtown share of the City's total jobs (Figure 6).

Figure 6: Difference in each Downtown's Share of City Jobs (2001 vs 2023)



- Among downtowns with comparable city area share, downtown Fort Worth has the lowest share of the City's population and one of the lowest shares of City employment among the peer downtowns shown in Figure 7. Dallas is not shown in Figure 7 because its downtown geography represents a substantially larger share of city land area and is not directly comparable to the other downtowns included.

Figure 7: Select Downtowns by Area, Employment, and Population Share



- Compared to other regional downtowns, the downtown Fort Worth has a smaller population than the downtowns of Dallas, McKinney, Irving, and Plano, even though Fort Worth is the second most populous city in the Dallas-Fort Worth region.

Overall, the benchmarking exercise highlighted relatively low residential presence and slower employment growth in downtown Fort Worth compared to national and regional benchmarks.

4.3 Growth Distribution in Central Area Neighborhoods

In addition to the downtown benchmarking exercise which informed downtown growth for the alternative future scenario, growth allocation for other Central area neighborhoods is informed by the following:

1. Planned and proposed developments by neighborhood
2. Major Planning initiatives for respective neighborhoods
3. Citywide Future Land Use Map for Central Area

4.3.1 Planned and proposed developments by neighborhood

Planned development activity in Central Area Neighborhoods were summarized to compare with NCTCOG regional allocations. Key neighborhoods such as West 7th and Southside (among other neighborhoods) in addition to downtown Fort Worth have significant planned and proposed development that were first compared to the NCTCOG 2050 allocation. If found to be relatively lower than the footprint of respective planned development activity in these neighborhoods, the higher levels of planned development were used to inform the alternative AOS scenario.

4.3.2 Major Central Area Planning Initiatives

In addition to the individual projects, major redevelopment efforts in Central Area neighborhoods such as Stockyards, Panther Island, Southside, and Butler Place were summarized at TAZ level to compare with NCTCOG 2050 allocation. Similar to development pipeline comparison, the AOS scenario assumes higher growth in these areas. Information from the planning initiatives was first mapped and quantified using Urban Footprint and then summarized at parcel level to generate future development square footage (SF). Default multipliers were used to convert SF to jobs and housing units.

4.3.3 Citywide Future Land Use Map Allocation

The City's Future Land Use Map (FLUM) was used as a framework to validate allocation for the Central Area neighborhoods. The population, housing unit, and employment densities from the FLUM were used as a reference range for the allocation to check if the City's Future land use framework is aligned with the alternative scenario allocations. Any major deviations such as areas with future allocations for higher densities but not seeing that level of growth in 2050 baseline from NCTCOG were noted and included for higher allocation for AOS scenario. The FLUM exercise was conducted at a high level and served only to validate allocations; it did not guide future scenario allocations. The downtown benchmarking, development pipeline, and major planning initiatives were used as major drivers for the alternative scenario.

4.4 Growth Scenarios

The benchmarking exercise combined with the inventory of planned and proposed developments and planning initiatives helped develop future Citywide growth share targets for the Central Area. Overall, a downtown population share of 1%-2% and employment share of above 10% was set for AOS scenario. Table 1 shows the existing (2023), 2050 baseline, and 2050 AOS scenario population and employment shares for the downtown.

Table 1: Target population and employment share for the Downtown Fort Worth

Scenario	Downtown Population Share	Downtown Employment Share
Existing 2023	0.45%	8.88%
Baseline 2050	0.48%	5.97%
Acting Our Size 2050	1.50%	11.36%

Using the downtown benchmarks and the information for other Central Area neighborhoods, AOS growth scenario for the Central Area shows an increase of 5% in population and 15% in employment compared to baseline scenario as summarized in Table 2 and Table 3.

Table 2: Central Area Population scenarios, 2050

Scenario/Year	Total Population	Added	% of City
Existing-2023	74,300	-	6.2%
Baseline-2050	99,100	-	5.4%
Acting Our Size 2050	**195,700**	**96,500**	**10.7%**

Source: AECOM analysis

Table 3: Central Area Employment scenarios, 2050

Scenario/Year	Total Employment	Added	% of City
Existing-2023	196,400	-	25.2%
Baseline-2050	211,300	-	16.6%
Acting Our Size 2050	**399,400**	**188,000**	**31.3%**

Source: AECOM analysis

It is important to note that the AOS scenario represents a vision-based scenario that redistributes the City's 2050 growth to allocate higher share to the Central Area and downtown. The exercise is intended to be input into the regional travel model to identify the level of investment needed to realize the scenario.

5 Primary Road Gap Projects

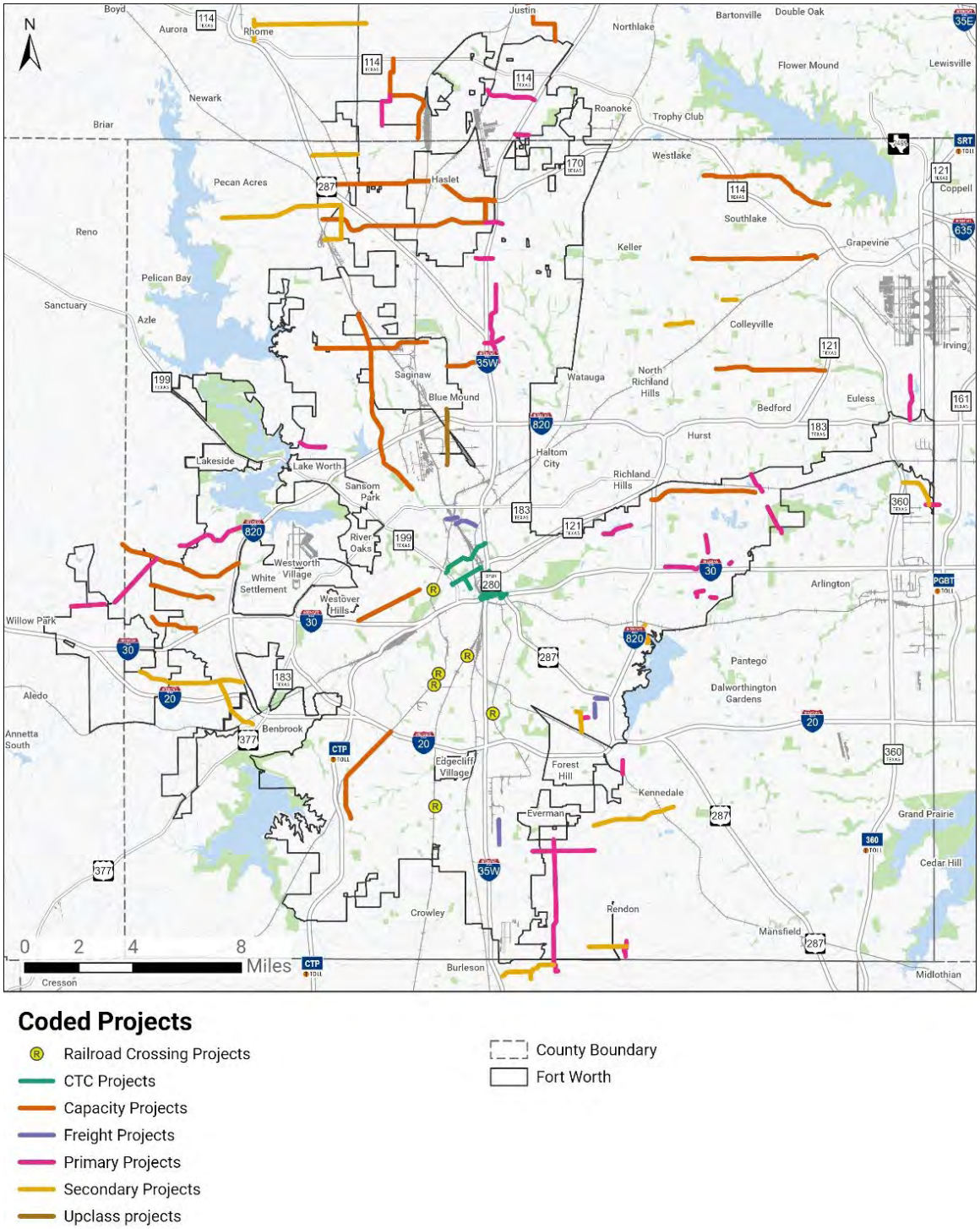
5.1 M1M Gap Analysis

The Gap Analysis in a previous task for M1M, produced a set of roadway projects that would improve mobility and connectivity throughout the city. The implementation of these projects is included in the 2050 M1M roadway primary road gaps network (see Figure 8). There are four categories of projects that were incorporated:

- Roadway Gap Analysis: A total of 53 projects were included in the TDM network to improve connectivity in collectors and arterial roads. These were coded as additional links in the network, with the appropriate characteristics of the roadways given the identified facility type (i.e., free-flow speed, capacity, etc.).
- Capacity Projects: A total of 15 projects were included in the TDM network to improve capacity on highly utilized and at-capacity corridors. These were coded as additional lanes on the selected locations.

- Freight Gap Analysis: A total of 6 projects were included in the TDM. These were coded as additional links following the same strategy as the roadway gap projects.
- Railroad Crossings: A total of 7 railroad crossing improvements were included in the TDM network. These projects involved removing the at-grade crossing, which essentially removes the delay on the link due to such crossing. To reflect this improvement, the capacity of the links immediately adjacent to the railroad crossing was increased by an average of 9%. This value was estimated based on the expected time savings resulting from the removal of an at grade railroad crossing. Using the gate-down time, i.e. the minutes during which the crossing is closed for train movements, the corresponding increase in available vehicle operating time was converted into an equivalent hourly capacity change for each crossing.
- CtC Priority Projects: A total of five projects were included in the network, corresponding to the priority projects identified through the CtC needs assessment and prioritization process described in Section 5.2.3. These projects reflect key mobility needs within the Core and are discussed in further detail in the following section.

Figure 8: M1M Primary Road Gaps Projects



5.2 CtC Needs Assessment

The Core Area constitutes a geography of focus for scenario planning to prioritize roadway capacity investments that address existing network capacity and physical barrier constraints but also anticipate additional capacity issues related to the Acting Our Size long-term demographic growth scenario described in Section 3. This focused analysis was conducted under the Connecting the Core (CtC) study.

The CtC Needs Assessment identifies priority growth corridors that will see significant increase in trip volumes and constrained capacity with future growth, particularly in the Core Area. This analysis followed these general steps, using the demographic growth scenarios described in Section 3.4.

1. Identify capacity and physical connectivity needs under existing conditions (2023). This analysis revealed immediate needs that limit or constrain mobility and ongoing development in the Core. Addressing these barriers is critical to supporting planned growth, improving regional connectivity, and enhancing the vibrancy and accessibility of Fort Worth's cultural districts and employment hubs.
2. Evaluate additional future needs (2050) to support future growth in the Core Area (Acting Our Size demographic scenario). Section 8.3 discusses the TDM analysis results of AOS 2050 scenario.
3. Consolidate priorities for each of the five sub-areas in the Core in a total of fifteen need statements and priority corridors, and propose potential feasible solutions to address the needs.
4. Prioritize projects: five projects were selected for inclusion in the M1M unconstrained network (Section 4.1), based on stakeholder review, feasibility, and potential impact.

5.2.1 Key Growth Corridors

Through the future growth scenario and TDM analysis, key corridors have been identified as potential candidates for capacity improvements. These include corridors expected to experience congestion under the NCTCOG 2050 baseline scenario, reflecting regional growth trends, as well as those impacted by the AOS scenario. The combination of baseline demand and additional traffic attracted by a strengthened Core highlights the need for targeted investments to preserve mobility and enable sustainable urban growth.

5.2.2 Needs analysis and potential project alternatives

Constrained roadway and bridge capacity, limited integration of high-capacity transit, and safety and operational inefficiencies at major intersections represent challenges within the Core Area. These issues are further compounded by physical constraints such as floodplains and rail corridors, which introduce additional engineering and constructability considerations. The cross-cutting needs identified through the CtC assessment include:

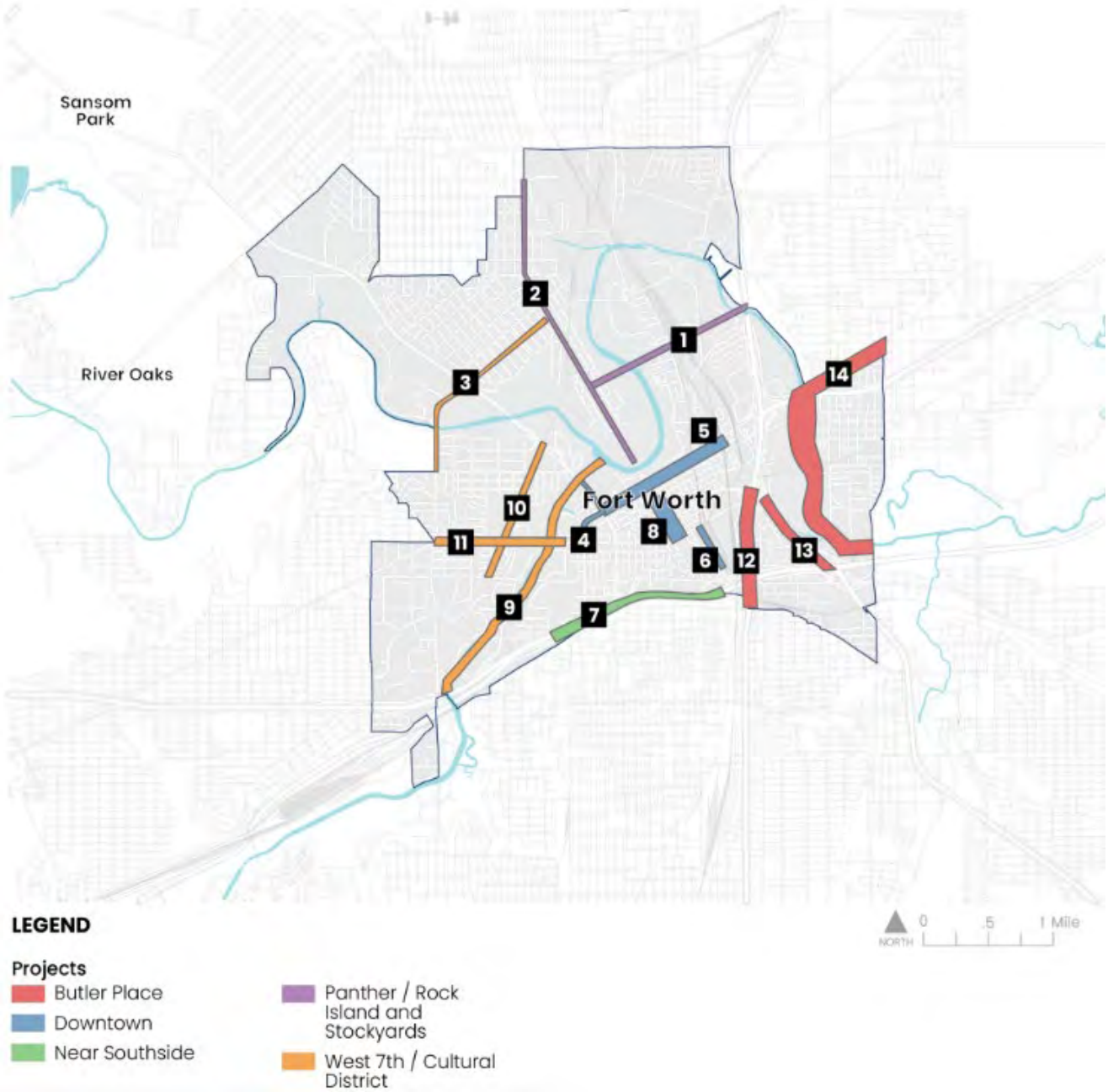
- **Capacity & Connectivity:** Bridges, underpasses, and corridors act as bottlenecks for vehicles and transit.
- **High-Capacity Transit Integration:** Several areas require dedicated right-of-way or new facilities for high-capacity transit.
- **Safety & Operational Efficiency:** Intersection geometry and circulation patterns need redesign to

improve multimodal safety.

- **Floodplain & Rail Challenges:** Proposed solutions face engineering risks due to floodway and rail alignments.
- **Public Realm & Vibrancy:** Opportunities exist to enhance pedestrian spaces and integrate transit hubs with urban design.

A shortlist of fifteen needs was developed, focusing on key growth corridors and grouped by neighborhood geography. These needs are listed below and illustrated in Figure 16. They summarize priorities and potential ideas currently being evaluated for feasibility and do not represent proposed solutions. The needs synthetize more granular issues that were identified through field observations, targeted data analysis, and stakeholder discussions, and documented in the **CoFW Issues and Needs** ArcGIS Online (AGOL) Experience Builder (not made public).

Figure 9: CtC Needs



5.2.2.1 Panther / Rock Island to Stockyards

Improving connectivity between Panther Island, Downtown, and the Stockyards requires alternatives to the heavily congested 28th Street and Main Street corridors. Key strategies include creating new Trinity River crossings, separating railroad grades to reduce delays, extending roadways, and enhancing I-35W access with improved exits and frontage roads. Dedicated transit rights-of-way could further support high-capacity transit and reduce reliance on single-occupancy vehicles.

5.2.2.2 West 7th / Cultural District to Downtown and Panther Island / Stockyards

Access between the Cultural District, Downtown, and Panther Island is constrained by limited river crossings and rail congestion. Solutions focus on adding new river and rail crossings, reconfiguring or extending roadways, and introducing dedicated transit corridors. These improvements aim to relieve pressure on West 7th Street while providing multimodal options for residents and visitors.

5.2.2.3 Downtown Access

Downtown Fort Worth faces operational challenges at key intersections such as Henderson and Belknap/Weatherford, impacting safety and travel times. Proposed improvements include reconfiguring these gateways, creating a multi-modal transit mall, and pedestrianizing Main Street to enhance walkability. A central transit hub and upgraded public spaces would support high-capacity transit and foster a vibrant urban core.

5.2.2.4 Butler Place & United Riverside

Enhancing access to Butler Place and United Riverside involves right-sizing regional connections and creating multimodal gateways to the Trinity River. Potential projects include reconstructing roadways into multimodal boulevards, adding bridges or tunnels for improved connectivity, and developing riverfront gateways to strengthen neighborhood integration with open spaces.

5.2.3 CtC Projects

Five projects were prioritized for inclusion in the long-term plan, as illustrated in Figure 9 and summarized in Table 4. These were selected in collaboration with stakeholders, based on their scope and were coded into the travel demand model network to assess their potential impact under future conditions.

Figure 10: CtC Priority Projects

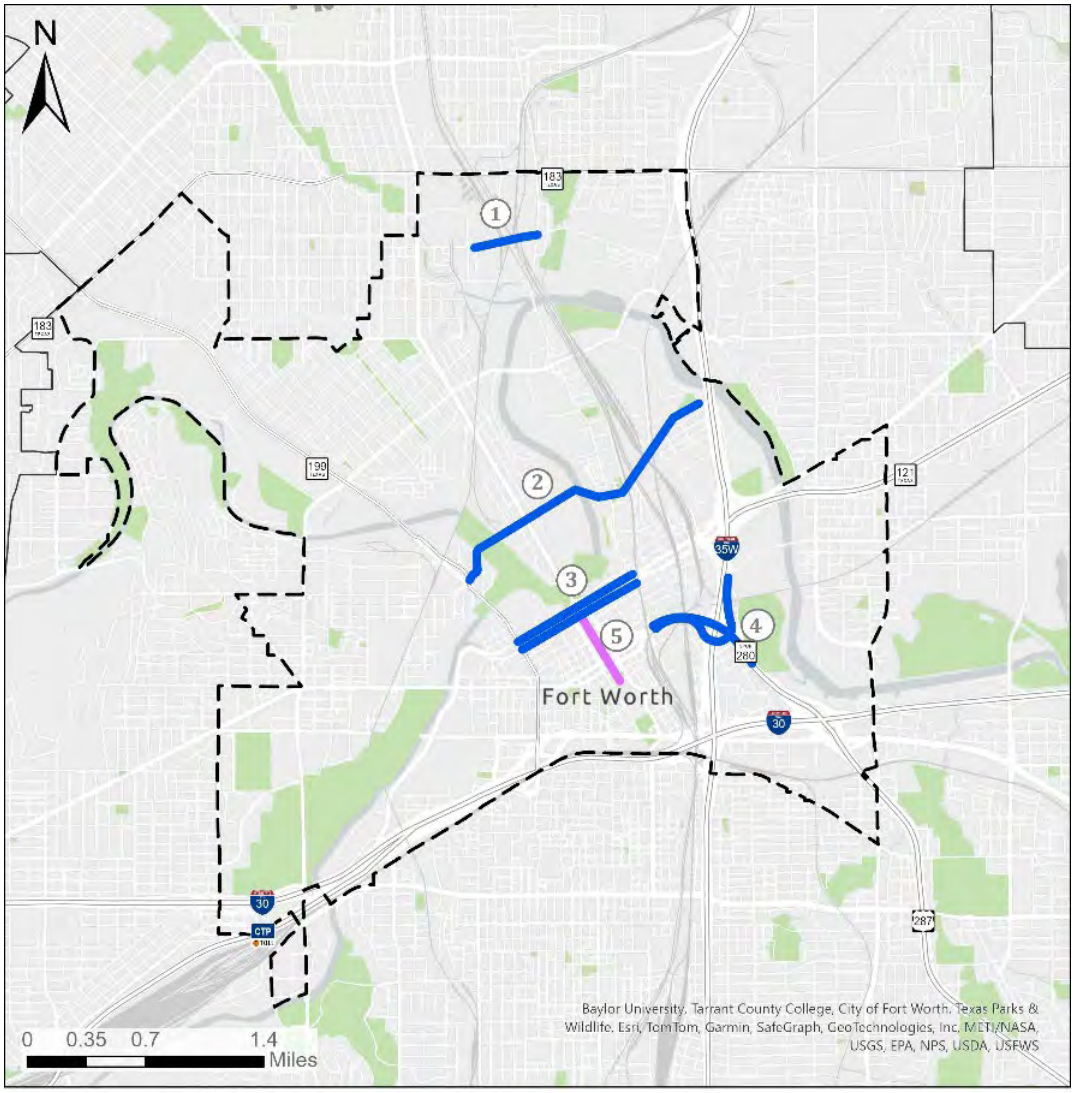


Table 4: CtC Priority Projects Description

No.	Project Details
1	Stockyards new eastern access • Facility extension: Brennan Avenue to E Exchange Ave • New grade-separated railroad crossing • Project previously identified by NCTCOG as potential priority
2	Connection to I-35 from Rock Island, over Panther Island • Leveraging IH-35 project to create new frontage roads, create a new connection to reconfigured Cold Springs Rd, including new grade-separated railroad crossing. • New bridge crossing to east side of Panther Island and tie in to this new facility • Project previously identified by NCTCOG as potential priority
3	Belknap and Weatherford tunnel connection • Approximately between portal at IH-35 / US- 121 and N Henderson St / Forest Park Blvd / Summit Ave area • Dedicated to through-traffic from IH35 • Maintain surface access to downtown, Rock Island and Panther Island for multimodal access • Requires further considerations for buildings foundations and fire-life safety requirements
4	US 287/280 redesign • Between IH-30 and US280 Spur to downtown Fort Worth • Reconfiguration to a multimodal thoroughfare, prioritizes slower speeds and a more urban street experience as Spur 280 enters Downtown • US-287/I-35 northbound connector ramp would be relocated to the I-35/I-30 interchange at the southwest corner of Butler Place. • Project prioritized through Access Butler Place Plan process
5	Main St Pedestrian Zone • Reconfiguration, closing street to traffic for a pedestrian and transit mall • Vehicular access limited to transit service • Flexible curb management could maintain limited vehicular access for uses such as local businesses (deliveries), taxi and drop-offs.

6 Transit Strategy

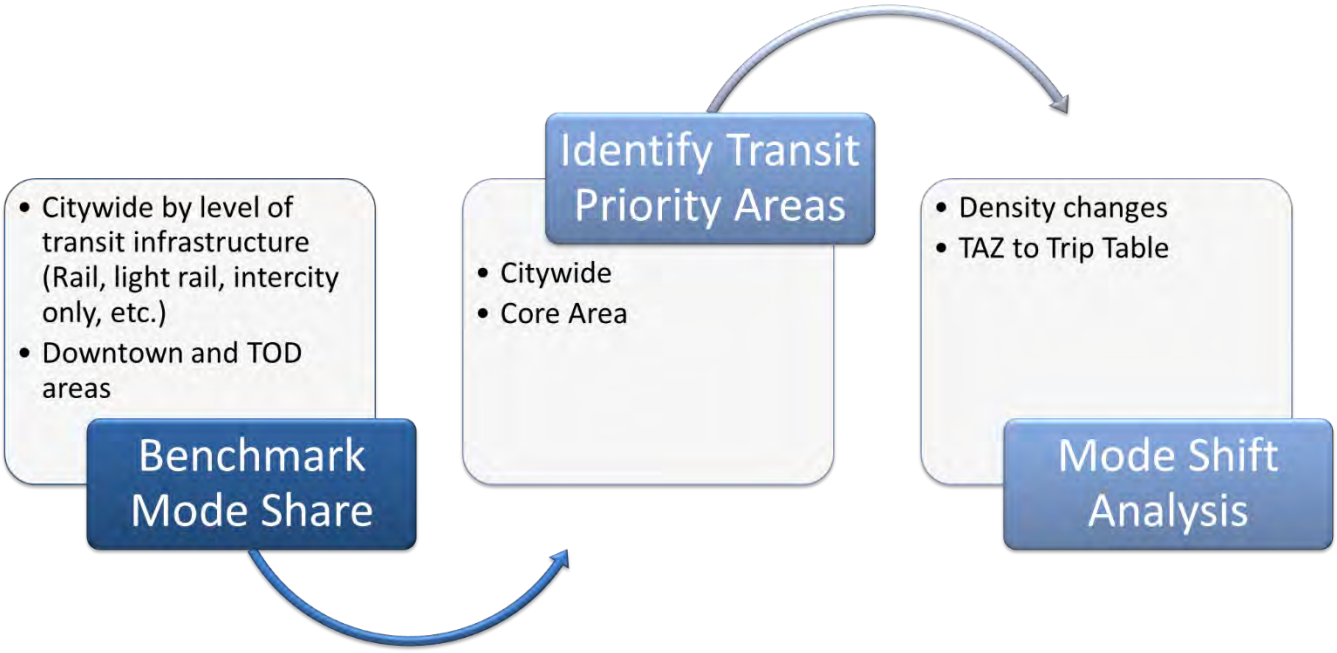
NCTCOG Transit 2.0 is a forward-looking initiative by NCTCOG to reshape the public transit landscape across North Central Texas by mid-century. Through strategic planning, legislative efforts, and regional collaboration, it aims to support growing communities that have equitable, efficient, and sustainable transit options while aligning with broader growth, environmental, and quality of life goals.

In terms of specific assumptions, on the transport demand side, transit-oriented development around high-capacity stations was considered; while on the transport supply side, high-capacity rail lines, as

well as significant improvement of traditional transit services were assumed. These strategies are expected to increase transit usage across the region.

In alignment with this philosophy and specific to the Scenario Planning analysis, a Transit Strategy is proposed that considers prioritization of transit corridors for key connections in the city, where a possible high-capacity transit could be prioritized. The strategy also includes heavy investments in transit and active transportation improvements within the Core, where the highest density of population and employment is expected under the AOS scenario. To reflect these assumptions, a mode shift (out of private vehicles) methodology is proposed (see Figure 10), with each step described in the following sections.

Figure 11: Mode Shift Methodology



6.1 Transit Mode Share Benchmark

A benchmark review of transit commute share was conducted across US cities with downtowns comparable in size to Fort Worth[4], categorized by the type of transit service available. A total of 18 cities were selected (see Figure 11). The type of rail service was grouped into the following categories:

- Heavy Rail (or Subway)
- Light Rail
- Intercity, Commuter, Heavy Rail
- Intercity, Commuter, and Light Rail

[4] In terms of the downtown land-area share out of the whole city.

Figure 12: Benchmark Downtown Densities and Mix by Rail Service

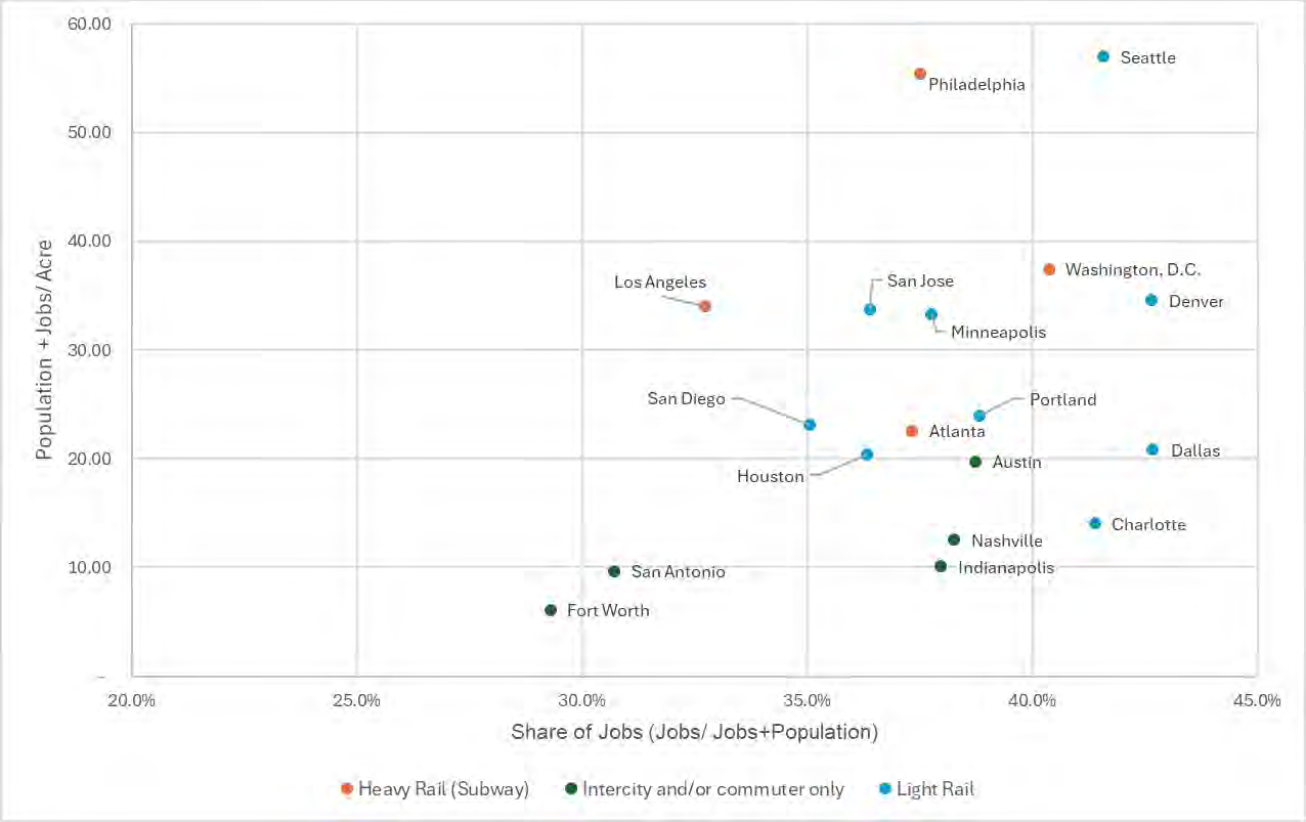
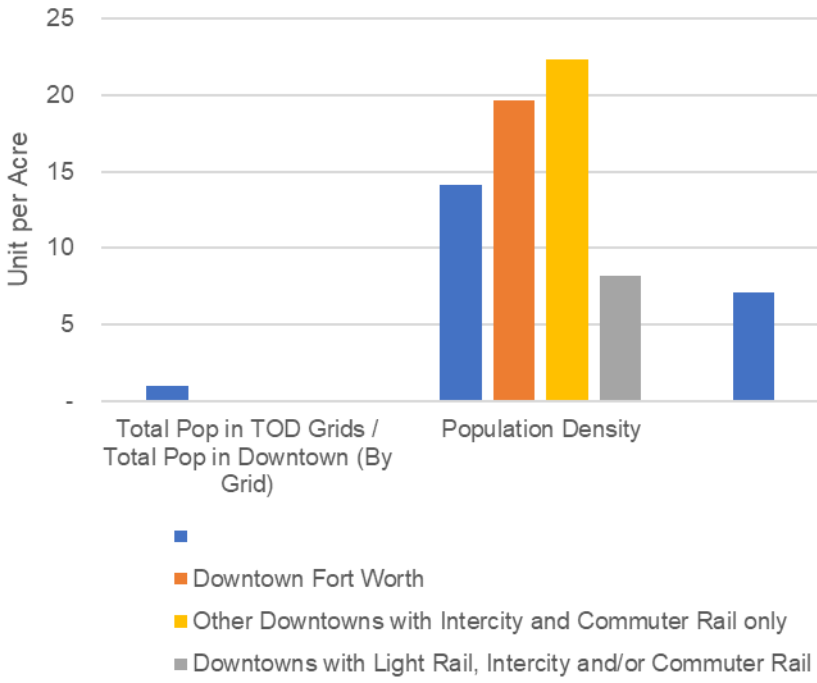
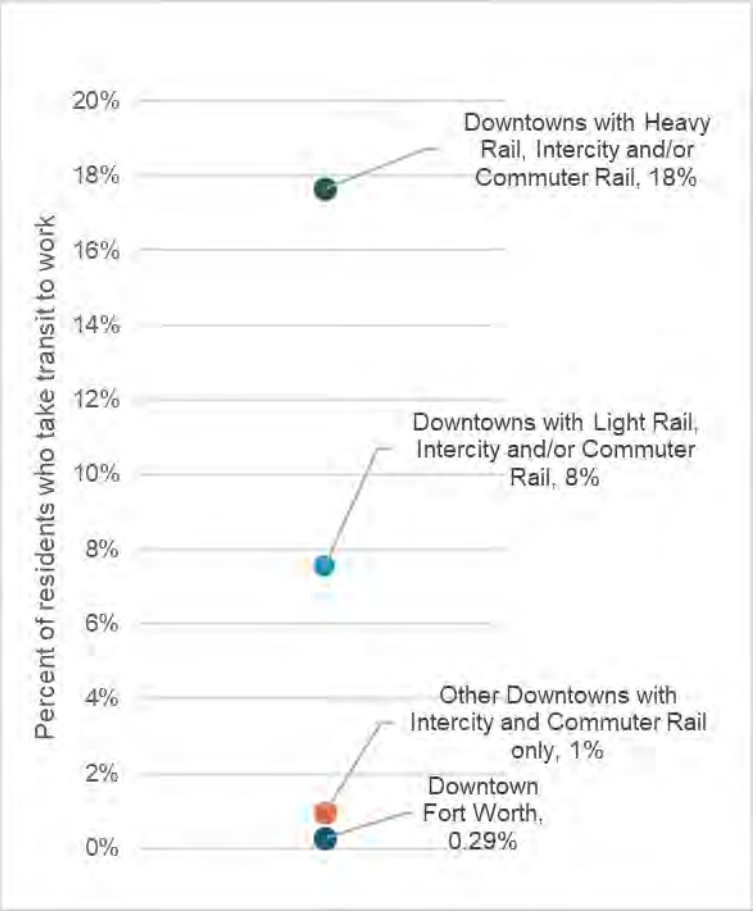


Figure 13: Development Density by Rail Service – Downtowns



The resulting share of transit commute for the Downtown areas is shown in Figure 13Downtowns with more high-capacity transit reached a transit share of ~18%, while downtowns with intercity and commuter rail only, had a transit share of 1%. However, Fort Worth's transit share is significantly below that target, with 0.29% of the transit share currently.

Figure 14: Transit Commute Share – Select Downtowns



The transit service provided in a city's downtown or Core Area is reflected in its citywide commute patterns. Regions served primarily by infrequent commuter or intercity rail tend to exhibit low transit commute shares, while cities with high-frequency, dedicated right-of-way services such as light/heavy rail consistently demonstrate higher citywide transit mode shares.

Table 5 summarizes these citywide mode splits by type of rail service. As shown, cities with limited, low-frequency commuter rail generally maintain transit shares near 1-2%, whereas cities with more robust high-capacity transit options achieve substantially higher transit mode shares. This pattern reinforces that the level of development envisioned in the CtC/AOS scenario would be most effectively supported by higher-frequency, high-capacity transit investments. The final targets are shown in Table 6 .

Table 5: Transit Commute – Citywide

Rail Service	City	Commute Transit Mode Share
Intercity and/or commuter only	Fort Worth	0.5%
Intercity and/or commuter only	Indianapolis	1.4%
Intercity and/or commuter only	Nashville	1.6%
Intercity and/or commuter only	San Antonio	2.1%
Intercity and/or commuter only	Austin	2.2%
Light Rail	Charlotte	2.2%
Light Rail	Dallas	2.3%
Light Rail	San Jose	2.8%
Light Rail	San Diego	3.0%
Light Rail	Houston	3.3%
Light Rail	Denver	4.5%
Light Rail	Portland	7.3%
Light Rail	Minneapolis	7.5%
Light Rail	Seattle	13.9%
Heavy Rail (Subway)	Atlanta	6.3%
Heavy Rail (Subway)	Los Angeles	6.7%
Heavy Rail (Subway)	Philadelphia	17.9%
Heavy Rail (Subway)	Washington, D.C.	22.3%
Source: ACS 2023 Estimates		

Table 6: Transit Share Targets per Type

Type	Description	Transit Share
Core - High	Downtowns with Intercity, Commuter, Heavy Rail	18%

Type	Description	Transit Share
Core - Medium	Downtowns with Intercity, Commuter, and Light Rail	8%
Core - Low	Other Downtowns with Intercity and Commuter Rail only	3%
Citywide - High	Cities with Intercity, Commuter, Heavy Rail	16%
Citywide - Medium	Cities with Intercity, Commuter, and Light Rail	6%
Citywide - Low	Other Cities with Intercity and Commuter Rail only	1%

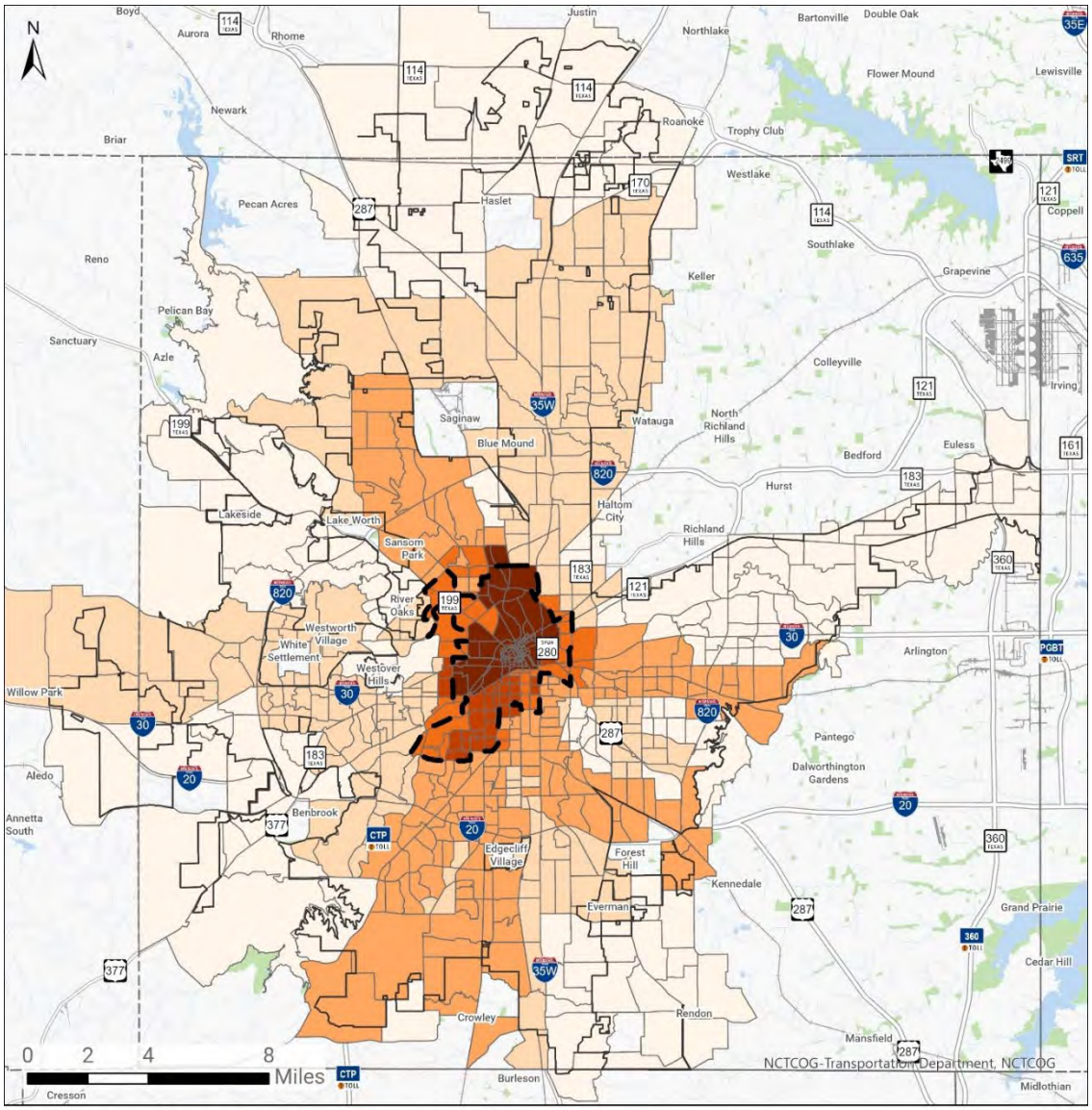
6.2 Identification of Priority Areas

The next step in the transit strategy is the identification of the areas where transit is expected to be prioritized. Depending on the level of prioritization different transit targets would be applied. Prioritization was developed as a tiered exercise, to follow the benchmark analysis:

- **Citywide analysis**: A review of the citywide priority took place using the Transit Supportive Index (TSI) developed as part of the M1M analysis, prioritizing areas with the highest TSI to capture growth and land use. It was then complemented with the identification of the highest priority origin-destination (OD) pairs using the trip table results from the AOS scenario run, to capture the strongest OD pairs, where high-capacity transit would be beneficial. Finally, TAZ with high internal trips were also given additional priority, as local transit improvements could boost transit usage.
- **Core Area analysis**: Using the FLUM Lite analysis and review of local plans, neighborhoods from the Core Area were classified into the high, medium, and low categories in terms of transit priorities.

The result of this initial prioritization was then shared with Trinity Metro and the City to conduct a final review of the priority areas. Based on discussions with Trinity Metro, additional TAZs along East Lancaster Avenue were identified as transit-priority areas and were incorporated into the final definition of transit priority areas (see Figure 14).

Figure 15: Transit Priority Areas



6.3 Transit Share Estimation

The final transit share estimation is done by comparing the benchmarked target (Table 6) for each OD pair and selecting the minimum value between the two TAZs. This approach ensures that trip adjustments would only go as far as the least level of transit investment between each OD pair (see example in Table 7). A final check confirms that estimated transit trips are not lower than existing[5] transit trips (see second example in Table 7) and that total trips remain unchanged.

Table 7: Trip Adjustment Calculation Example

OD pair	Commute trips by auto for OD pair	Commute trips by transit for OD pair	Total trips for OD pair	Transit target TAZ 1	Transit Target TAZ 2	OD transit target	New commute trips by transit for OD pair	New commute trips by auto for OD pair
TAZ 1 vs TAZ 2	**1,000**	**5**	**1,005**	**2%**	**10%**	**2%**	**20**	**985**
TAZ 3 vs TAZ 4	**1,000**	**200**	**1,200**	**2%**	**10%**	**2%**	**20**	**1,000**

Using this methodology the total trips before and after adjustment can be found in Table 8. Table 8 summarizes total daily auto and transit trips under the NCTCOG 2050 baseline, the Acting Our Size (AOS) demographic scenario, and AOS with the transit strategy applied. The results highlight how redistributing population and employment towards Fort Worth's Core changes where trips are generated and attracted.

Under the AOS scenario, total daily trips within the City of Fort Worth increase relative to the baseline, with the majority of this increase occurring in the Core Area. Both auto and transit trips rise substantially in the Core, reflecting the higher concentration of residents and jobs. At the same time, trips outside the Core decline, indicating that travel activity is being shifted inward from outlying areas rather than added uniformly across the region.

With the transit strategy applied, total trips remain essentially unchanged, while a portion of auto trips, particularly shorter Core-based trips shift to transit. This further concentrates travel activity within the Core and reinforces its role as the primary focus of citywide travel demand.

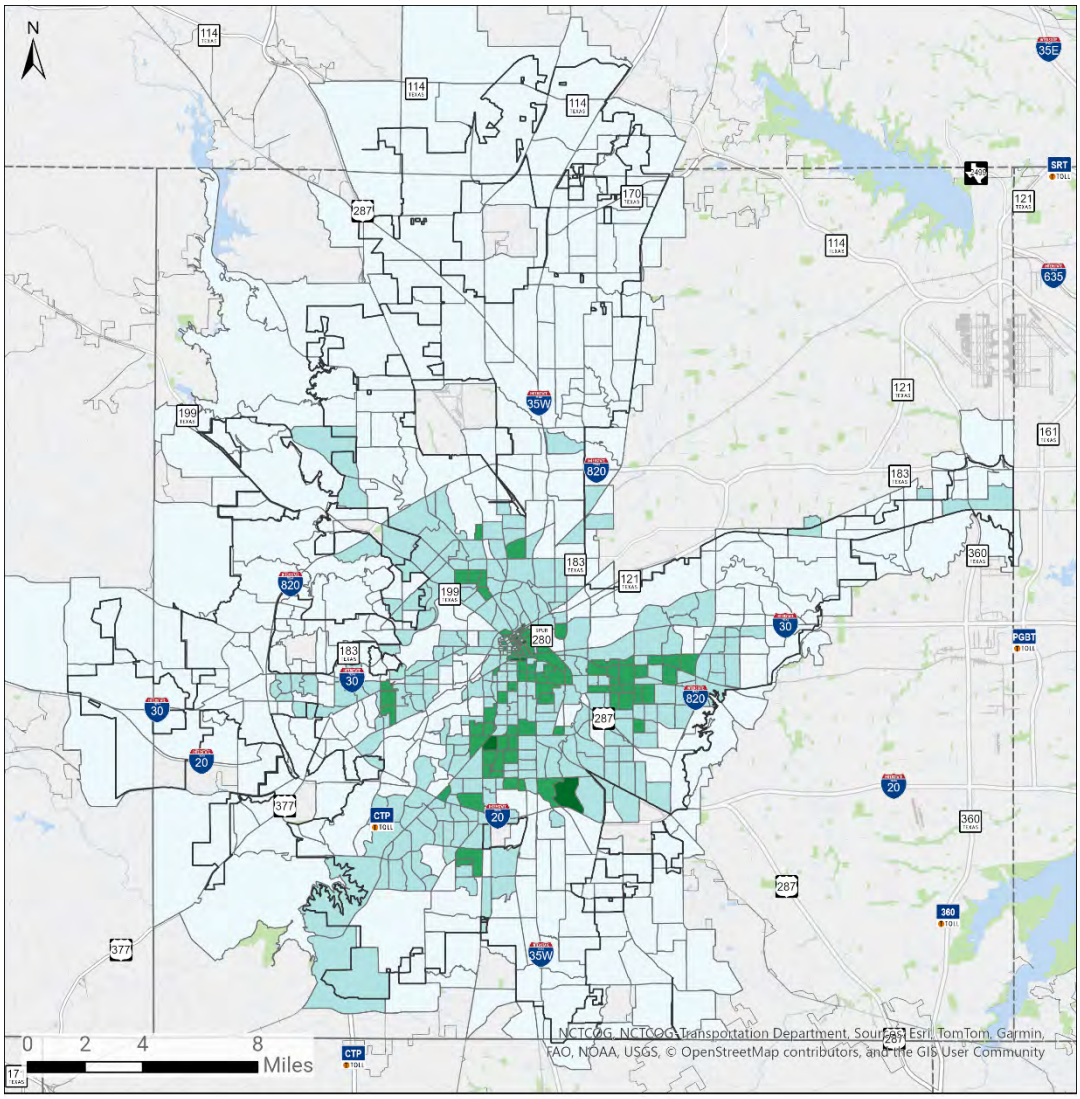
[5] Existing transit trips are based on the AOS transit share

Overall, Table 8 demonstrates that AOS primarily reallocates trips spatially, drawing activity from outside the Core and concentrating it in Fort Worth's center, consistent with the intent of the growth strategy. The final transit share distribution per TAZ is shown in Figure 15.

Table 8: Total Trips Summary

Trips	NCTCOG		City of Fort Worth		Core Area		Outside Core		Change in Trips Outside Core	
	Auto	Transit	Auto	Transit	Auto	Transit	Auto	Transit	Auto	Transit
Total Daily Trips 2050 NCTCOG	41,901,467	440,121	7,075,934	45,014	1,154,648	18,814	5,921,286	26,200	-	-
Total Daily Trips 2050 AOS	41,819,319	446,297	7,649,072	56,970	1,915,856	34,582	5,733,216	22,388	-188,070	-3,812
Total Daily 2050 AOS + Transit Strategy	41,810,581	455,035	7,640,334	65,708	1,913,644	36,794	5,726,690	28,914	-6,526	6,526

Figure 16: Transit Share with AOS Adjustment



7 Future Scenarios

The scenario planning exercise evaluates how changes in growth distribution, roadway investment, and transit usage may shape Fort Worth's long-term mobility outcomes. To anchor this analysis, a 2050 Baseline condition was developed using NCTCOG's Mobility 2050 demographic and network assumptions. This Baseline serves as the reference case for understanding how the transportation system performs under current regional projections without additional policy or infrastructure changes by the City.

Building from this Baseline, three future scenarios were designed, each layering in one or more strategic interventions. These scenarios allow the city to compare the effects of concentrating growth, implementing targeted roadway improvements, and increasing transit mode-share in a stepwise and transparent manner:

1. **Future Scenario #1 – Acting Our Size (AOS):** Tests the impact of shifting a greater share of population and employment to the Core while keeping the regional network and mode share assumptions unchanged.
2. **Future Scenario #2 – AOS + M1M Network:** Adds the M1M/CtC primary road gaps network to evaluate how targeted connectivity and capacity improvements influence travel patterns under the AOS growth distribution.
3. **Future Scenario #3 – AOS + M1M Network + Transit Strategy:** Incorporates the mode-shift adjustments reflecting higher transit usage in priority corridors, testing how strengthened transit investments could reduce roadway congestion when combined with AOS growth and M1M roadway improvements.

Table 9 summarizes the defining inputs for each scenario and illustrates how the interventions build upon one another. This structure provides a clear framework for interpreting differences in travel demand, congestion, and system performance across the scenarios.

Table 9: Scenarios

Scenario	Demographic Scenario	Network	Transit Strategy
Baseline 2050	NCTCOG 2050 Mobility Plan Demographic Projections	NCTCOG 2050 Mobility Plan	NCTCOG 2050 Mobility Plan
Future Scenario #1	Acting Our Size	NCTCOG 2050 Mobility Plan	NCTCOG 2050 Mobility Plan
Future Scenario #2	Acting Our Size	Constrained Network – M1M Gap Analysis	NCTCOG 2050 Mobility Plan
Future Scenario #3	Acting Our Size	Constrained Network – M1M Gap Analysis	Mode shift on transit priority corridors

Together, these four cases provide a comprehensive basis for evaluating how Fort Worth's transportation system responds to alternative land use patterns and infrastructure strategies.

7.1 Travel Demand Summary

Table 10 summarizes the total number of trips occurring within the City of Fort Worth and within the Core Area for each scenario by time period. These values include all internal and external trips assigned to the network during the AM peak, PM peak, and off-peak (OP) periods.

Table 10: Total Trips in City of Fort Worth and Core Area by Scenario and Time Period

Scenario	City of Fort Worth			Core Area		
	AM	PM	OP	AM	PM	OP
Baseline 2050	1,504,298	2,437,051	3,134,585	235,835	395,315	523,498
Future Scenario #1	1,620,331	2,632,235	3,396,506	393,469	655,396	866,991
Future Scenario #2	1,620,331	2,632,235	3,396,506	393,469	655,396	866,991
Future Scenario #3	1,616,091	2,627,737	3,396,506	392,377	654,276	866,991

Compared to the Baseline 2050, implementation of the AOS growth strategy (Scenario 1) results in a noticeable increase in total trips within both the City and the Core Area across all time periods. While overall citywide trips increase, a substantially larger share of travel activity is concentrated within the Core, reflecting the intended outcome of compact, higher-density development patterns.

Scenarios 2 and 3 maintain nearly identical total trip levels to Scenario 1, as no additional demographic growth is introduced. Minor reductions in citywide and Core-area trips in Scenario 3 reflect the applied transit mode-shift assumptions, which reallocate a portion of auto trips to transit in priority corridors rather than eliminating travel demand altogether.

7.2 Roadway Network and Lane Mileage

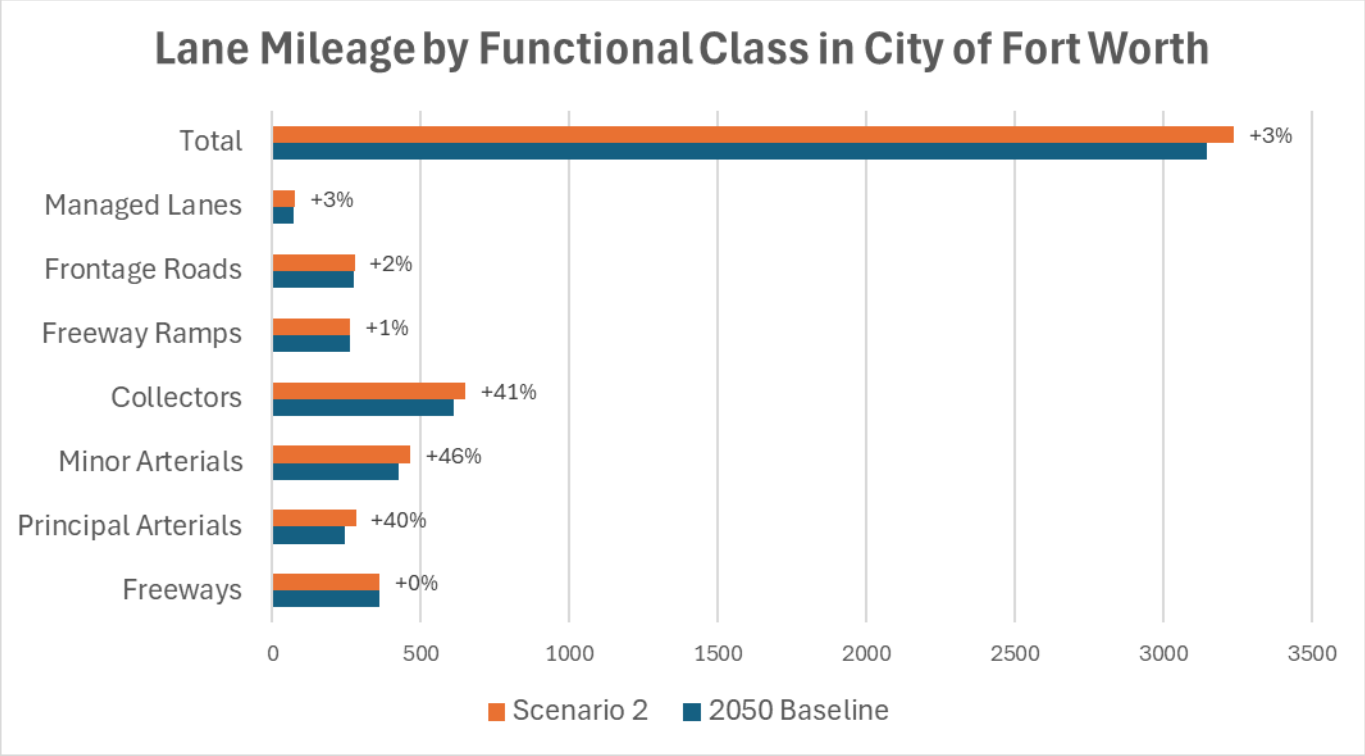
Changes in roadway lane mileage across scenarios reflect the coding of additional projects included in the M1M/CtC network. Figure 16 presents lane mileage change within the City of Fort Worth for Scenario 2 as compared to Baseline (Mileage remains same in Baseline and Scenario 1, and Scenario 2 and Scenario 3; since new projects were coded in Scenario 2 only which were then carried over in Scenario 3- yielding an increased mileage in Scenario 2 onwards).

Overall, the majority of added lane mileage occurs on collectors, minor arterials, and principal arterials, consistent with the intent of the M1M program to improve local and sub-regional connectivity rather

than expand freeway capacity. A limited amount of managed lane mileage was added within downtown Fort Worth to extend the continuity of managed lanes along I-35W.

A detailed list of the roadway projects coded into the M1M network, along with corresponding maps illustrating their locations, is provided in **Appendix 1**. This appendix documents the scope of network changes and supports interpretation of differences in congestion and travel patterns observed between Scenarios 1 and 2.

Figure 17: Lane Mileage Change in City of Forth Worth in Scenario 2



Together, the Baseline 2050 and three future scenarios provide a structured and transparent framework for evaluating how Fort Worth's transportation system responds to alternative land use strategies, roadway investments, and transit enhancements. By layering each intervention incrementally, the analysis clarifies not only what changes occur, but why they occur—supporting informed decision-making regarding future mobility investments and policy direction.

8 Results

8.1 Key Performance Indicators

The following key performance indicators (KPIs) are reported to evaluate system performance across scenarios:

- CoFW Daily Vehicle Miles Traveled (VMT)
- CoFW Daily Vehicle Hours Traveled (VHT)
- CoFW Average Travel Time
- CoFW AM Speed
- CoFW PM Speed
- CoFW OP Speed
- CoFW Daily Travel Time Index (TTI)
- Summary of percentage mileage change between scenarios
- Summary of percentage change in miles of roadway with LOS F by facility type and scenario

These KPIs are used to assess changes in travel demand, congestion, and operational performance as land use, roadway, and transit assumptions are layered across scenarios. Detailed KPI results and comparisons are presented in Section 8.6.1.

8.2 Baseline 2050 Scenario

Figure 17, Figure 18, and Figure 19 show the AM, PM, and Daily volumes on the network for the 2050 Baseline scenario. As expected, PM volumes are higher overall, with I-35W, I-820, and I-30 carrying significant portion of the demand (20,000 vehicles) during AM and PM periods. Daily volumes reflect a similar pattern, highlighting sustained activity on I-35 and I-820, and the northern region above I-820 being a major hotspot for activity at a daily level.

Figure 20 and Figure 21 show the AM and PM V/C ratios for the Baseline scenario. Congestion is primarily concentrated in the northern part of the city along I-35W, as well as in the northeast within I-820 on facilities such as SH199 and along I-20.

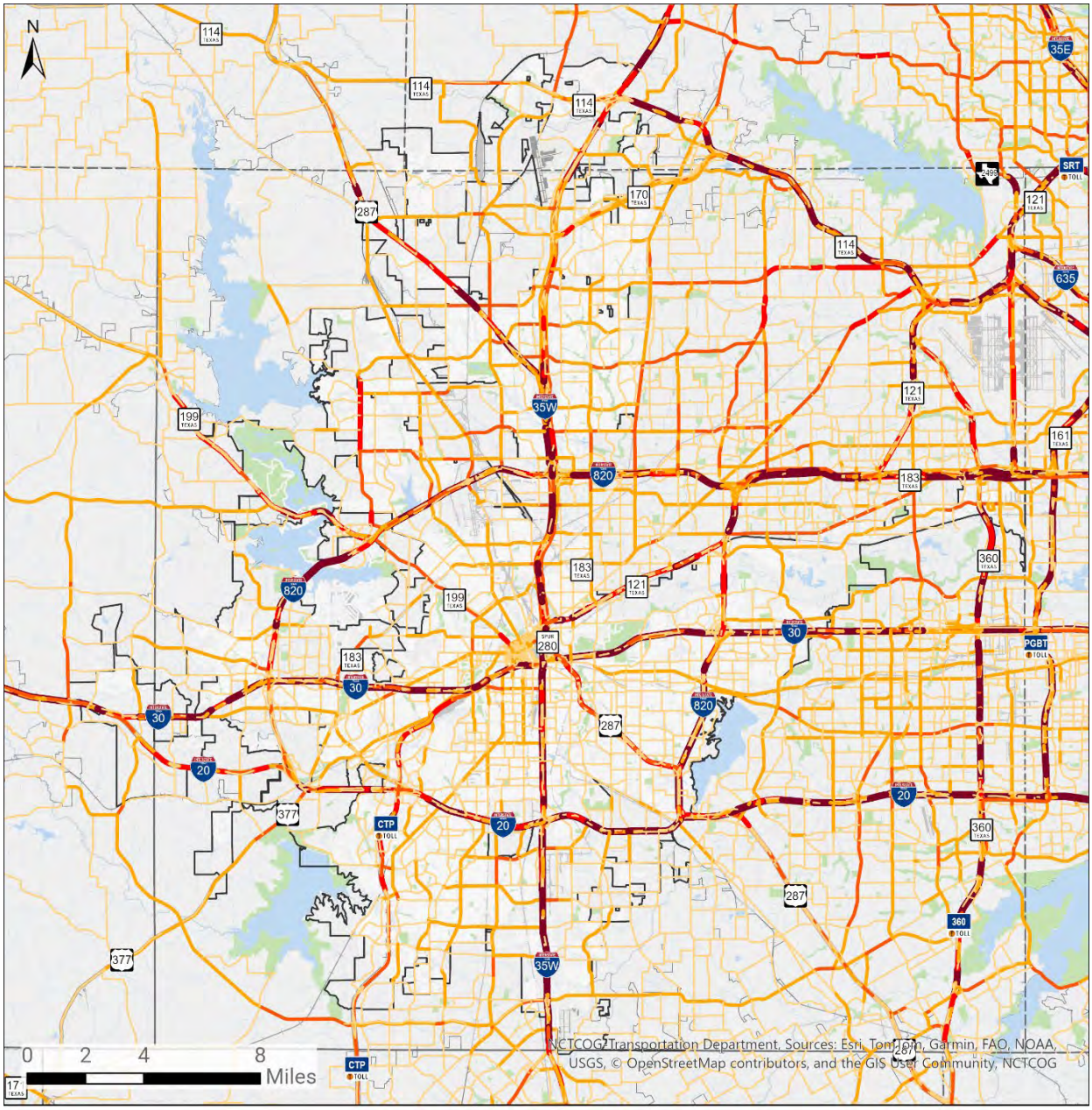


Figure 18: AM Volumes for Baseline 2050

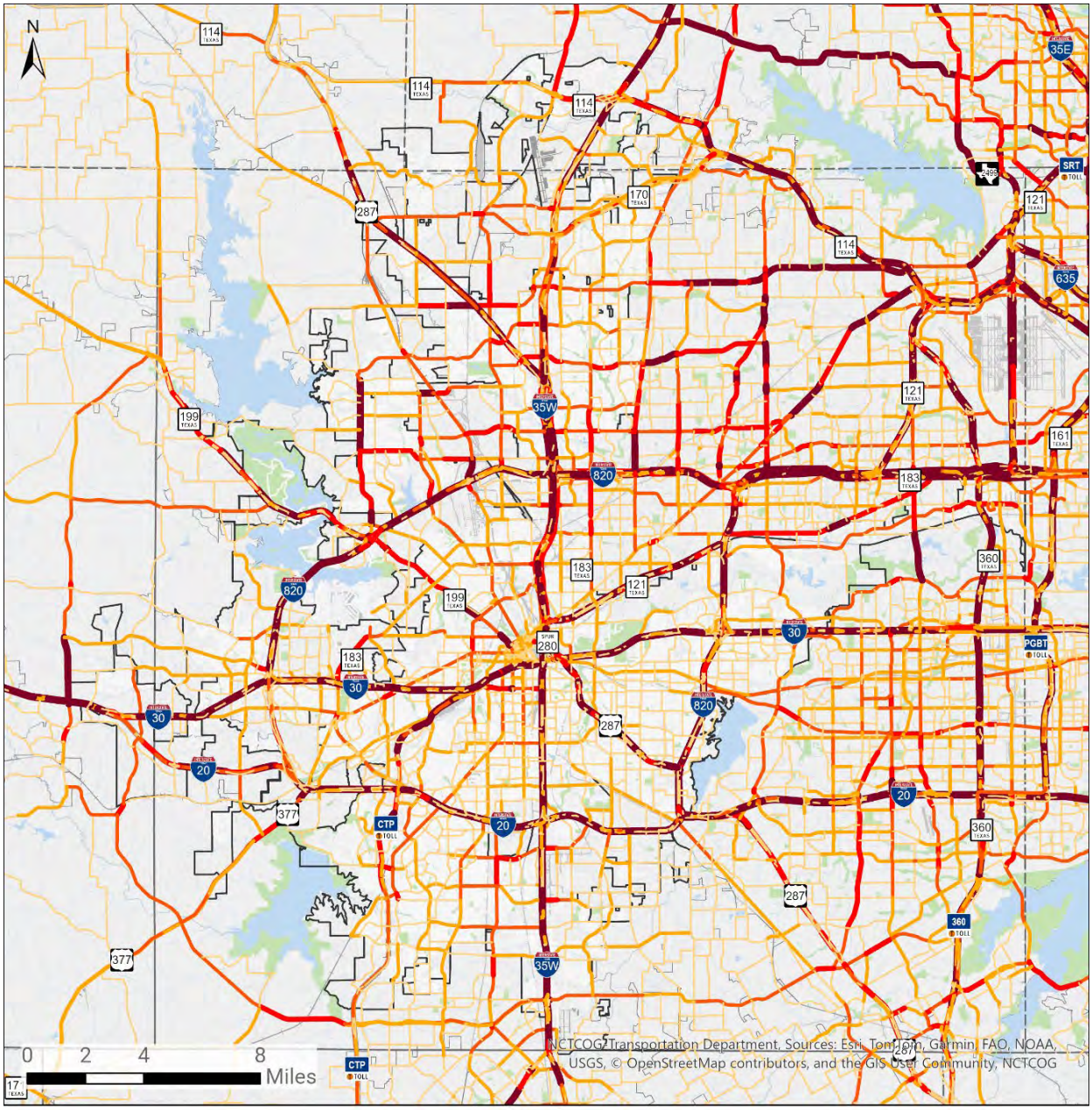


Figure 19: PM Volumes for Baseline 2050

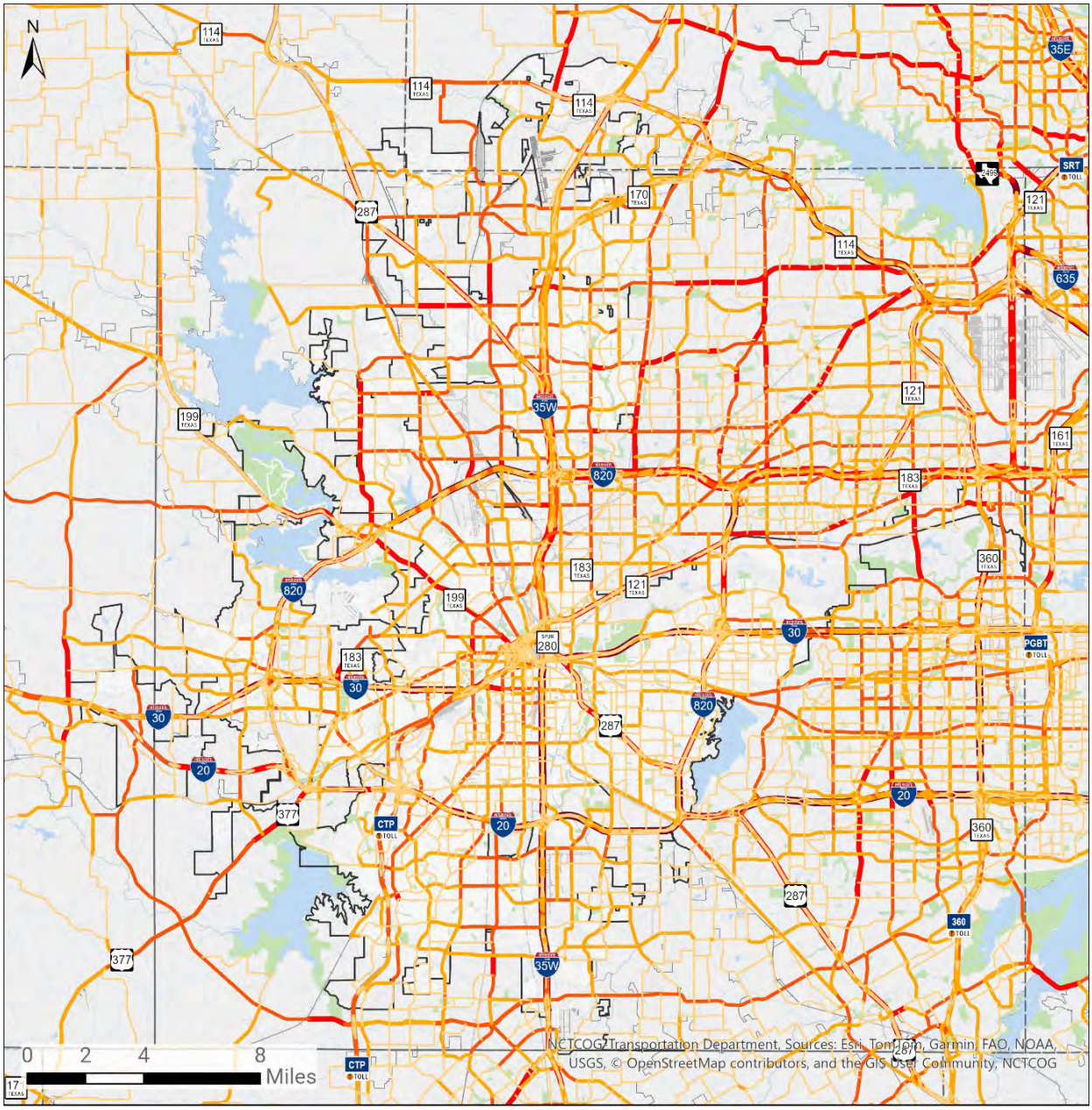


Figure 20: Daily Volumes for Baseline 2050

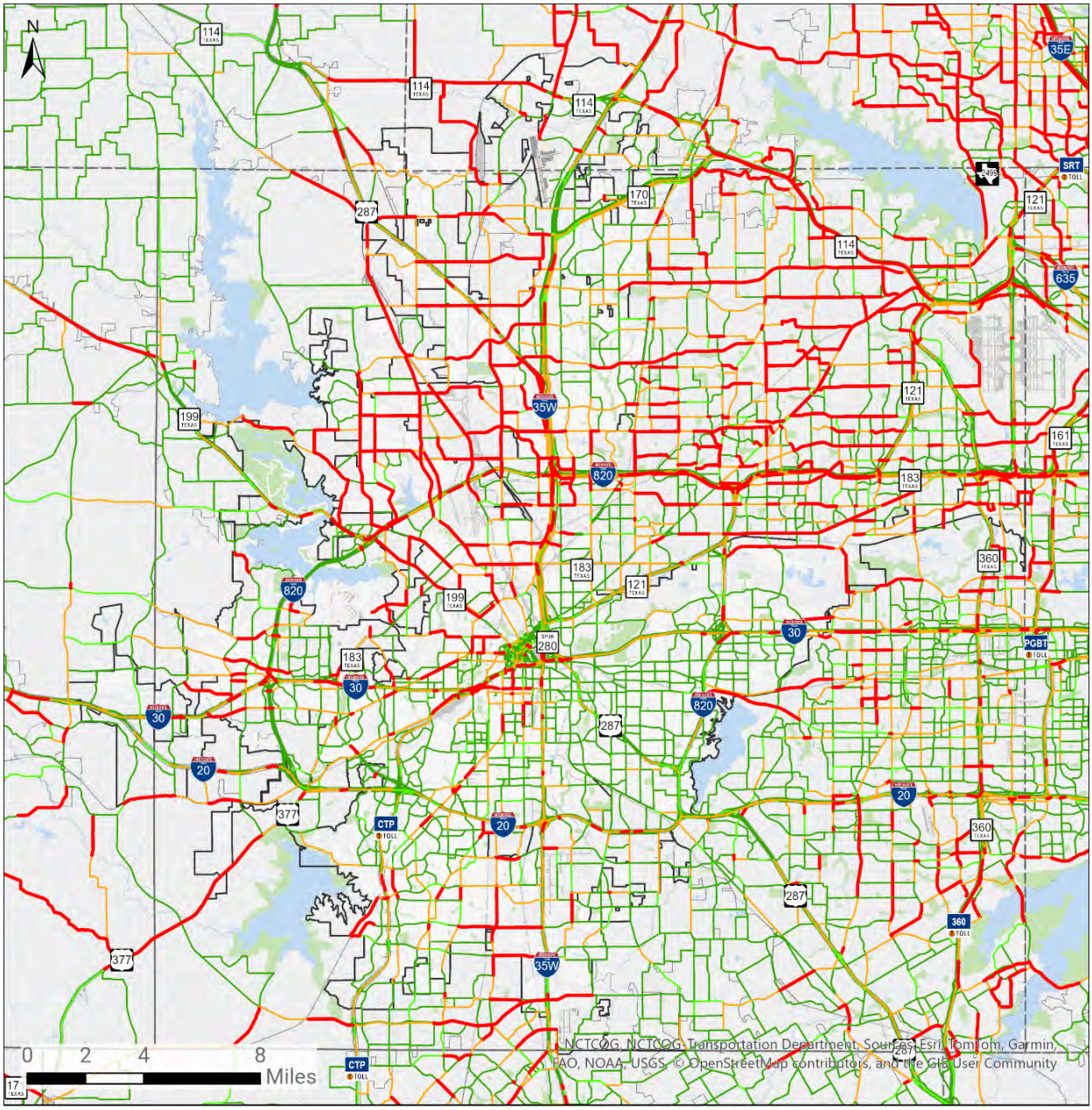


Figure 21: AM V/C for Baseline 2050

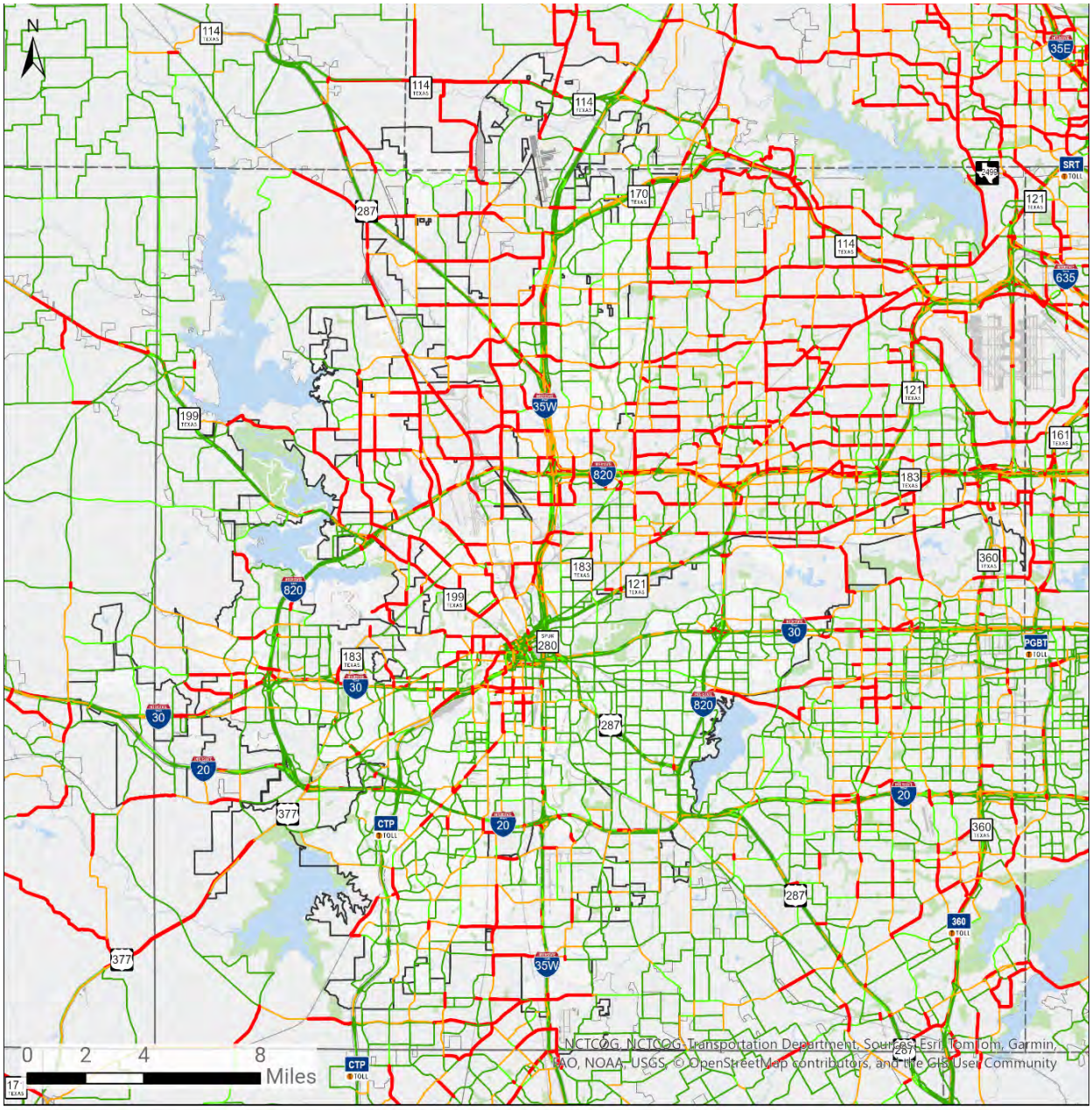


Figure 22: PM V/C for Baseline 2050

8.3 Future Scenario #1 (AOS)

Figures 22, 23, and 24 illustrate the AM, PM, and daily traffic volumes on the network for Scenario 1. Compared to the Baseline scenario, traffic volumes increase primarily in the city Core due to the redistribution of population and jobs towards that area. Figure 25 and Figure 26 present the AM and PM V/C ratios for Scenario 1. The V/C ratio increases on I-35W, I-820, SH 183, SH121, SH199, US287, US377 especially in PM. Several facilities within the Core also experience higher congestion in Scenario 1, which is expected due to the increased activity in that area. These trends overall show that not only is activity increasing inside the Core, but it also attracts some trips from the nearby suburbs, possibly due to the influx of jobs in the Core.

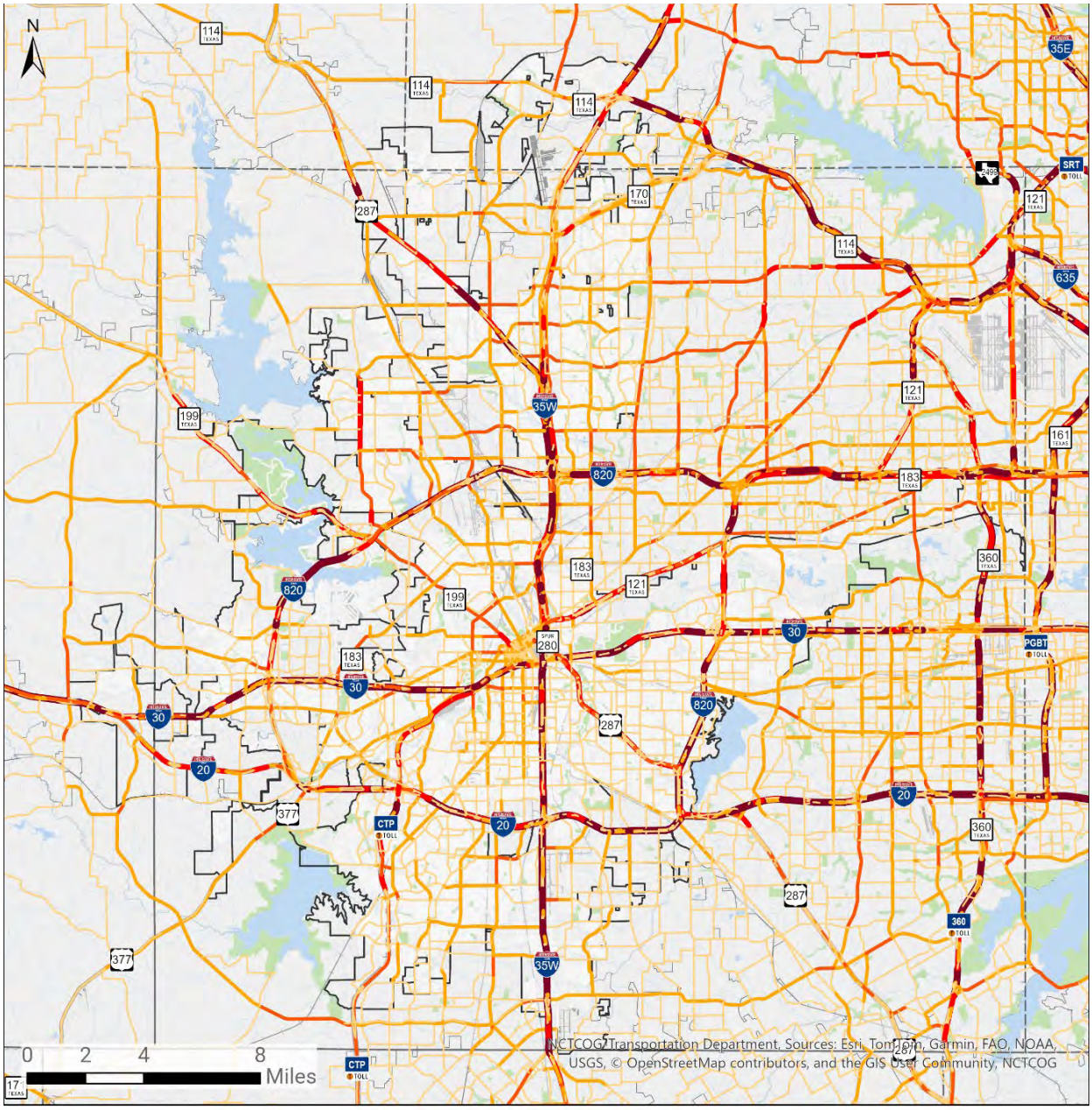


Figure 23: AM Volumes for Scenario 1

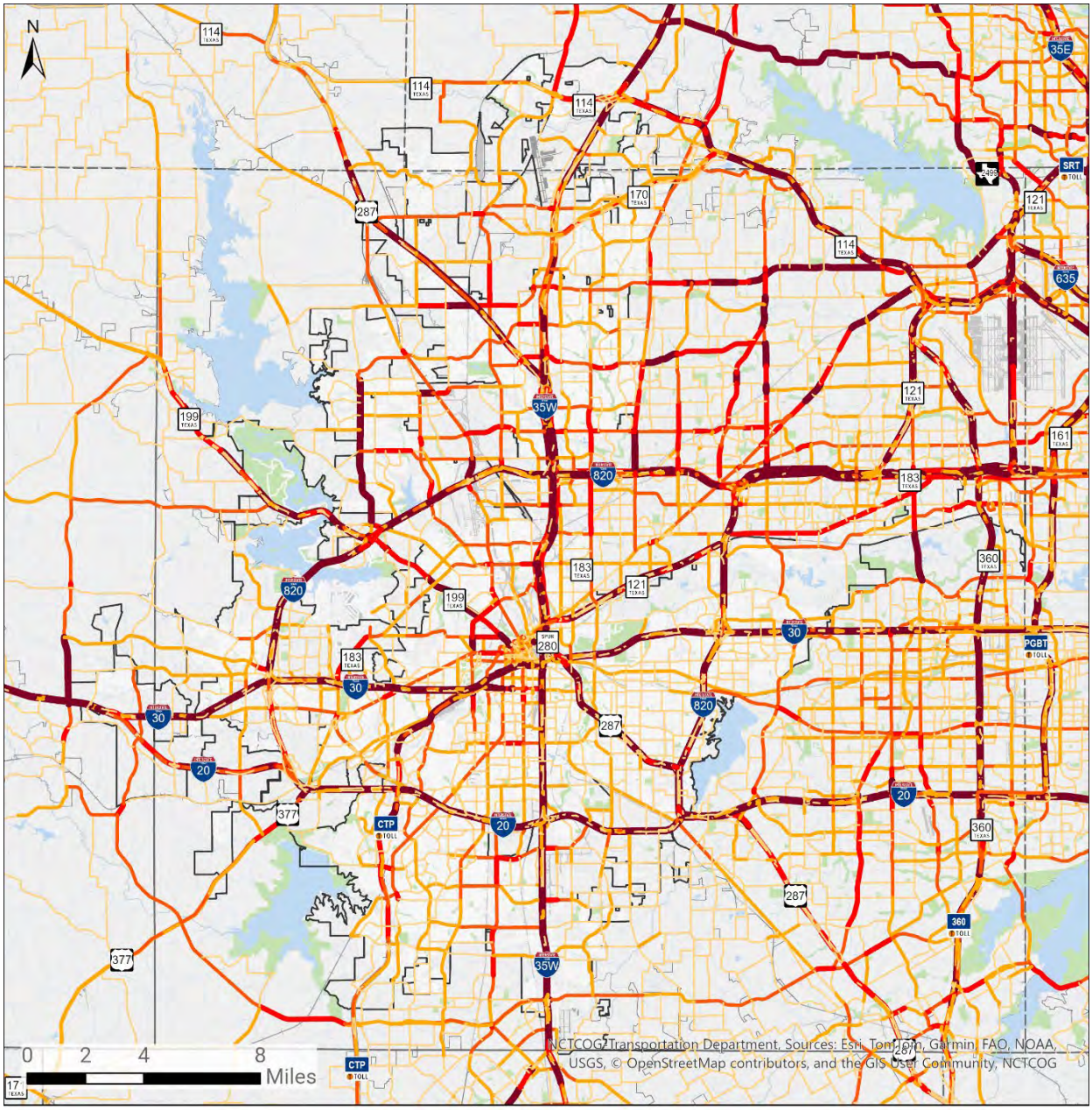


Figure 24: PM Volumes for Scenario 1

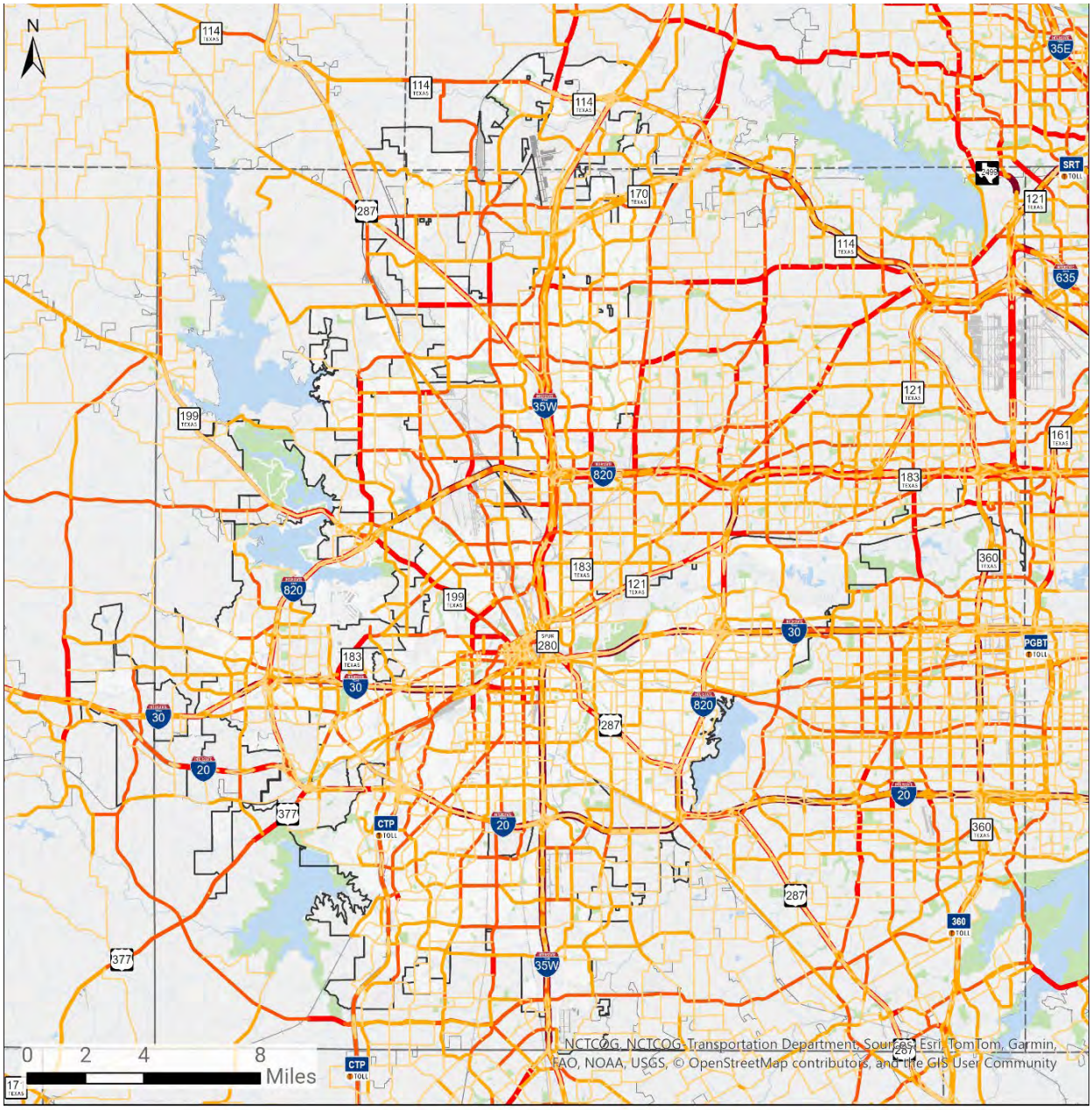


Figure 25: Daily Volumes for Scenario 1

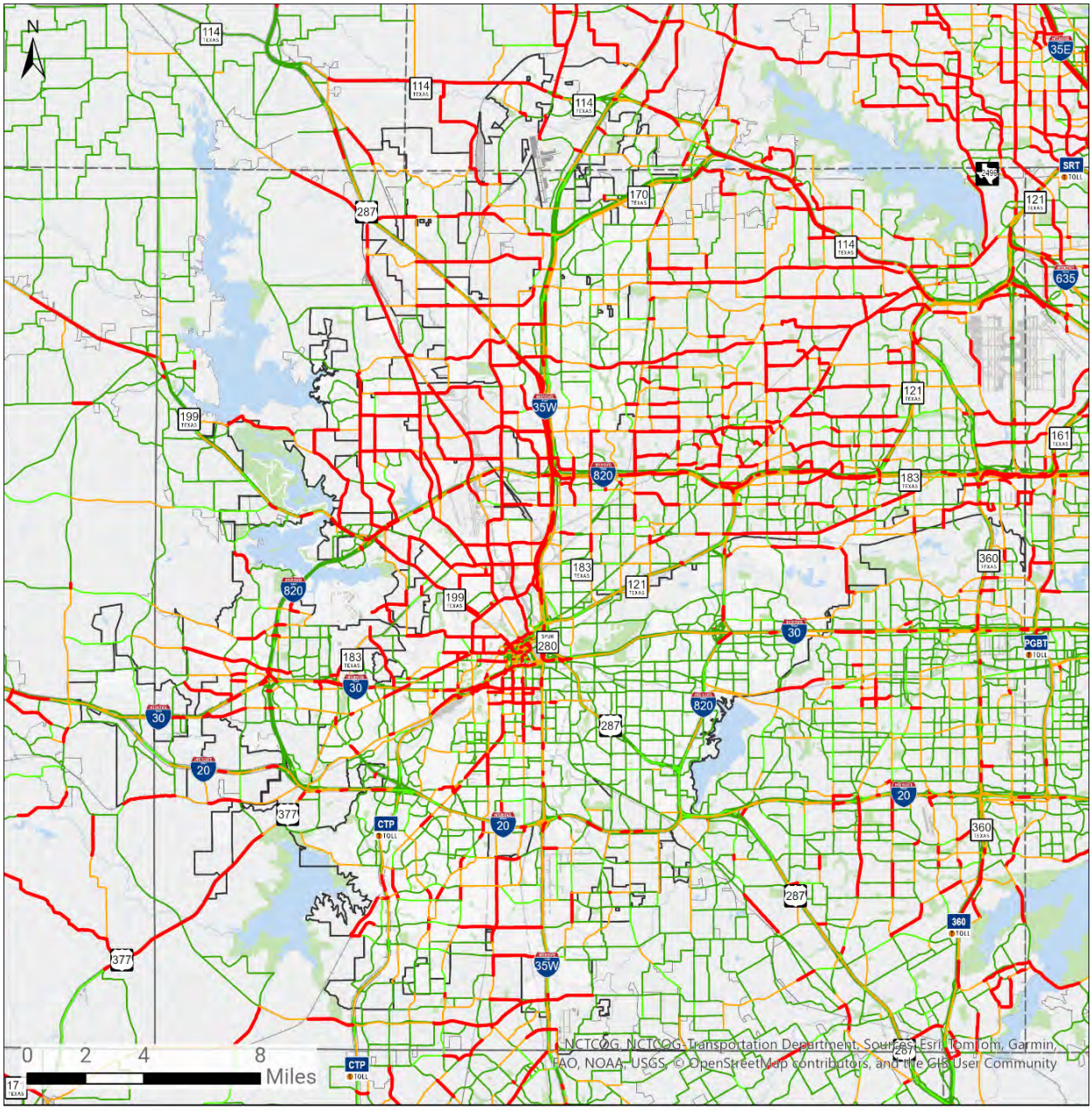


Figure 26: AM V/C for Scenario 1

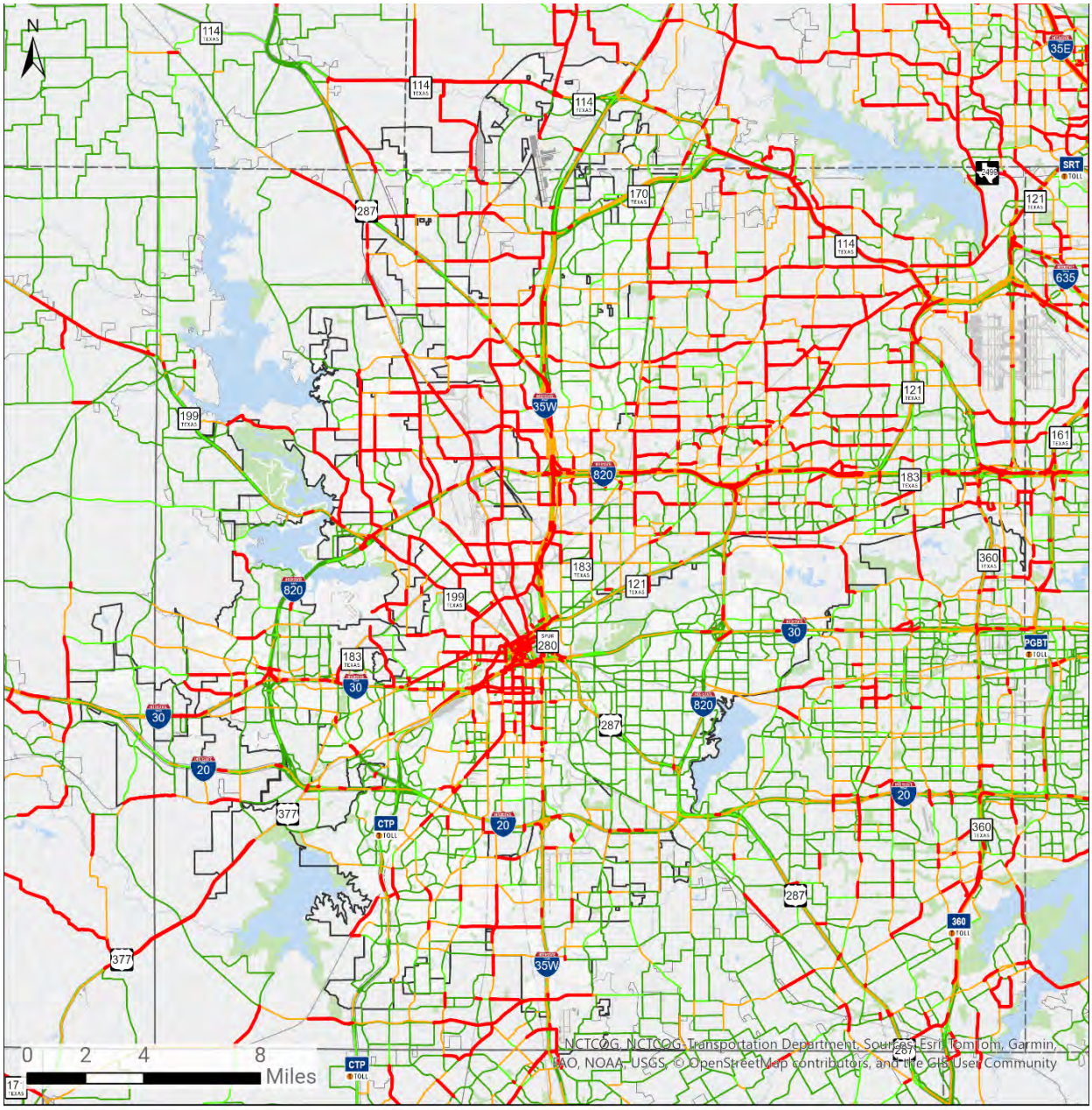


Figure 27: PM V/C for Scenario 1

8.4 Future Scenario #2 (AOS + M1M)

Figure 28 and Figure 29 present AM and PM volumes for Scenario 2. The new links added to the network from the M1M gap analysis (discussed in Section 5.1) show added volumes to the network. These projects improve connectivity and address network gaps, resulting in a more balanced distribution of traffic. Figure 30 shows the daily volumes for Scenario 2, indicating that most major freeways and principal arterials experience higher volumes, reflecting an influx of trips due to the added connections from the projects. Facilities such as I-35W, I-820, I-20, I-30, SH114, SH121, and SH183 show notable increases in traffic.

Figure 31 and Figure 32 show AM and PM V/C for Scenario 2. The added projects improve connectivity and address network gaps, providing relief by distributing volumes more evenly around the network, particularly near the western section of I-30 and along portions of FM1220, SH 199, SH114, and US287. However, roadways near I-820 in Saginaw continue to exhibit high V/C ratios in Scenario 2, indicating the need for further improvements.

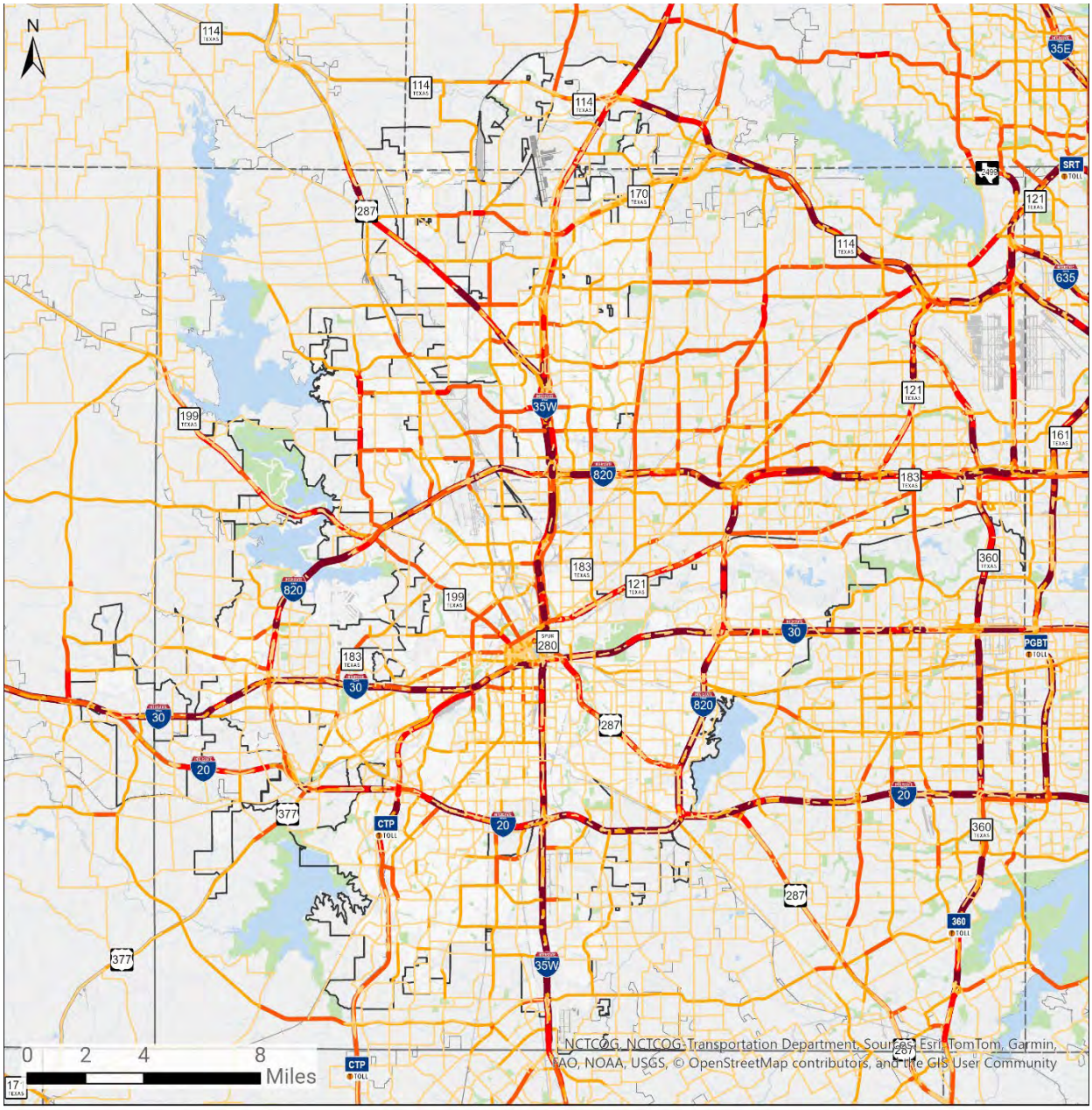


Figure 28: AM Volumes for Scenario 2

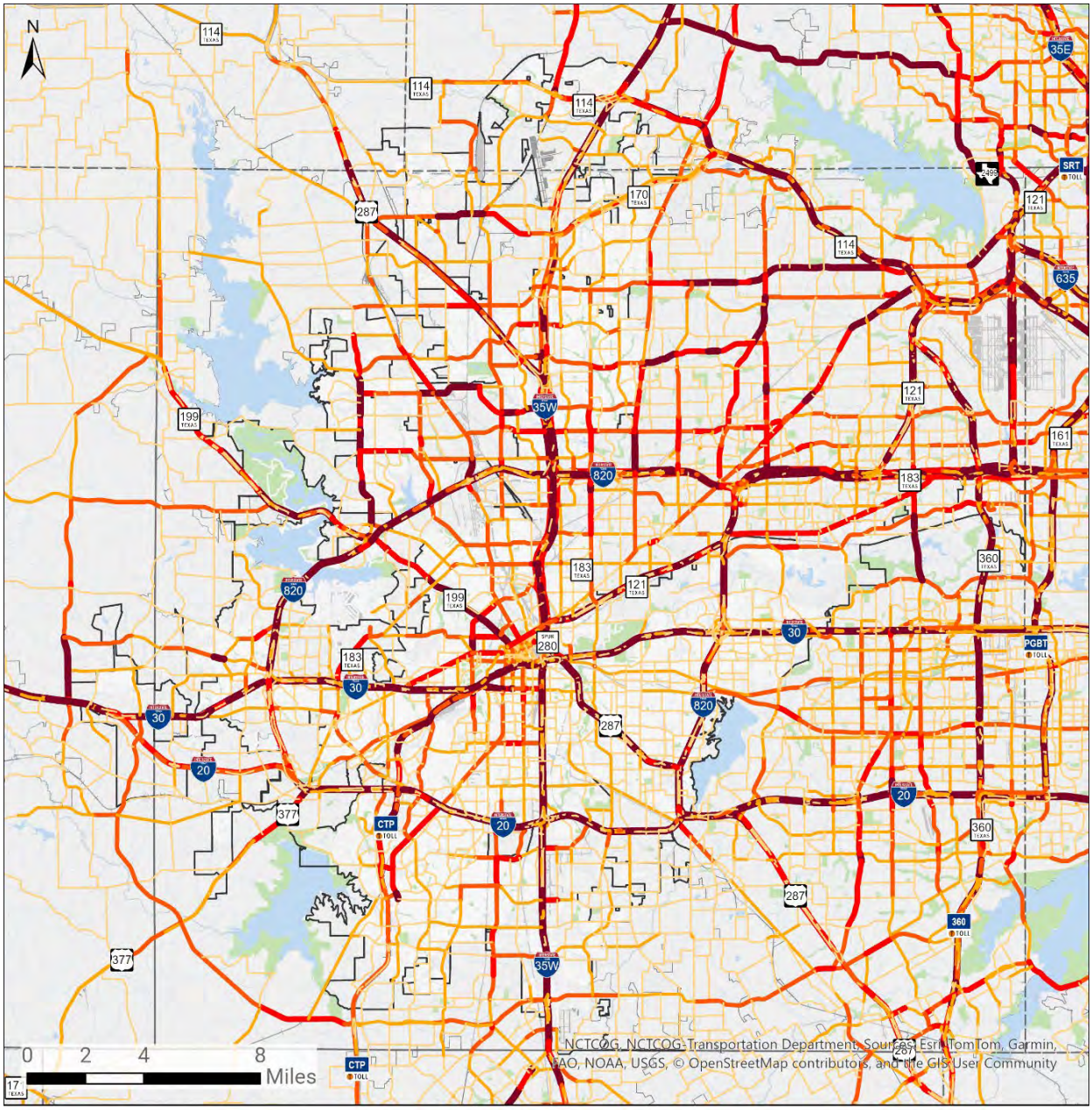


Figure 29: PM Volumes for Scenario 2

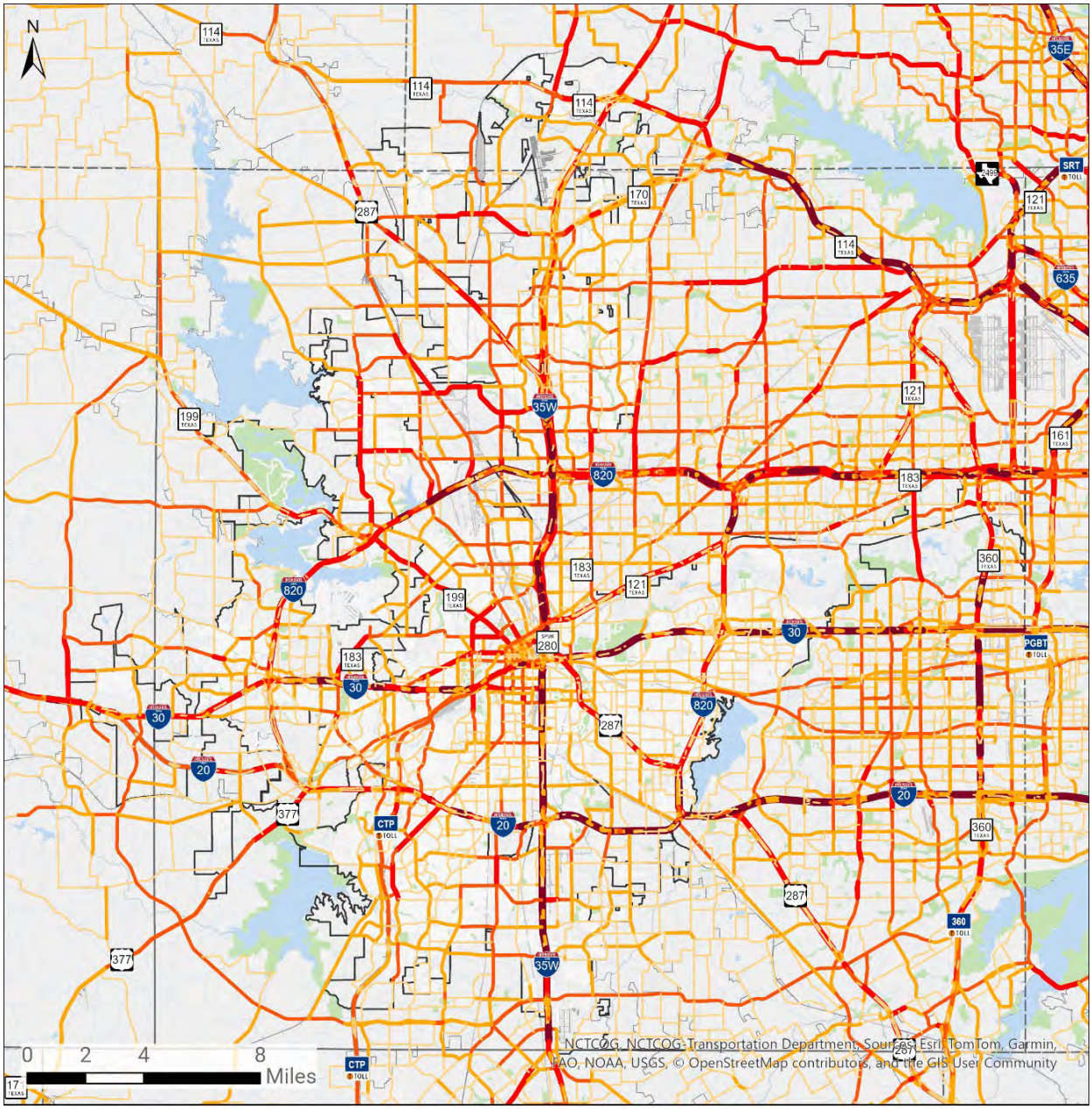


Figure 30: Daily Volumes for Scenario 2

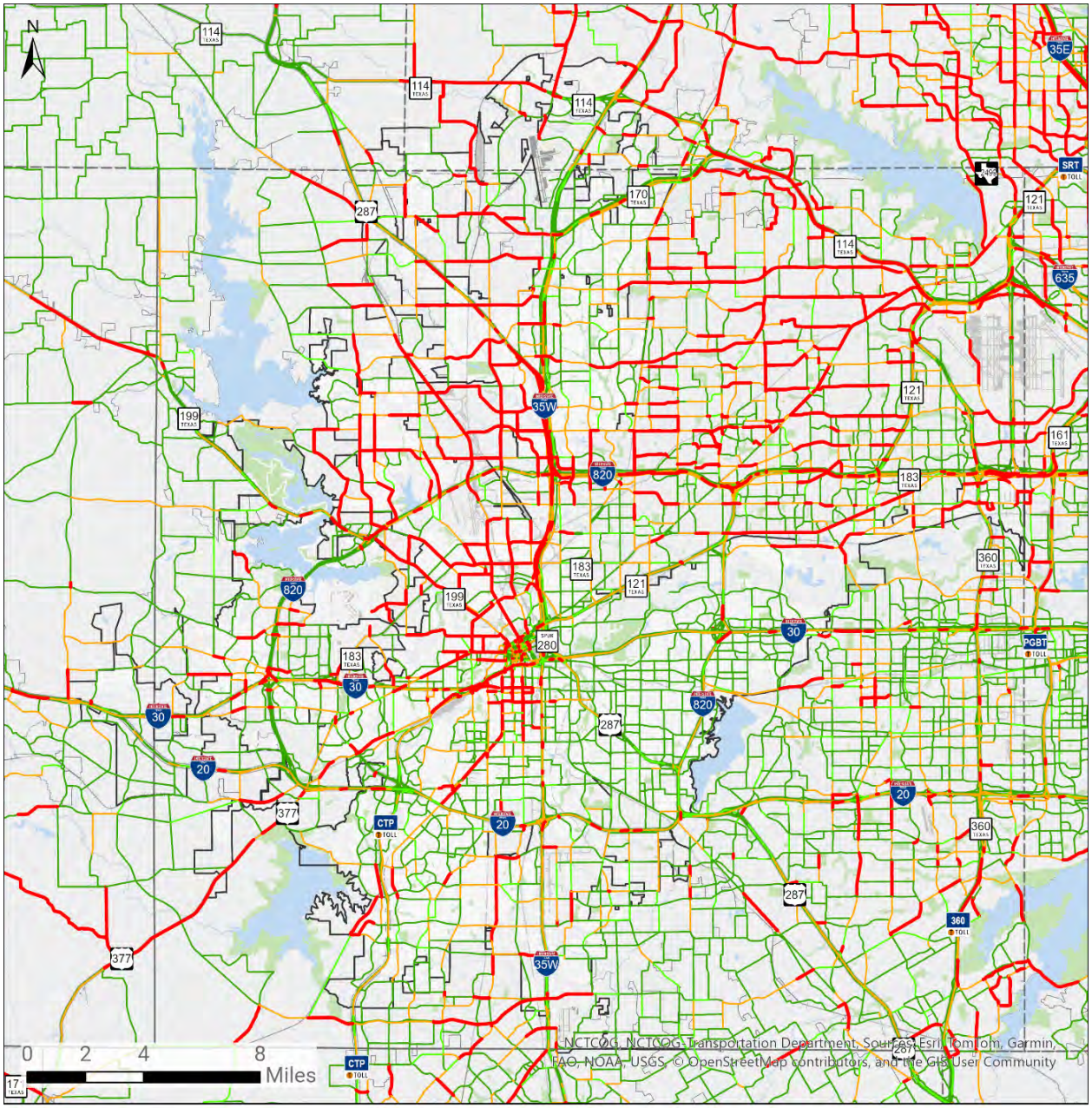


Figure 31: AM V/C for Scenario 2

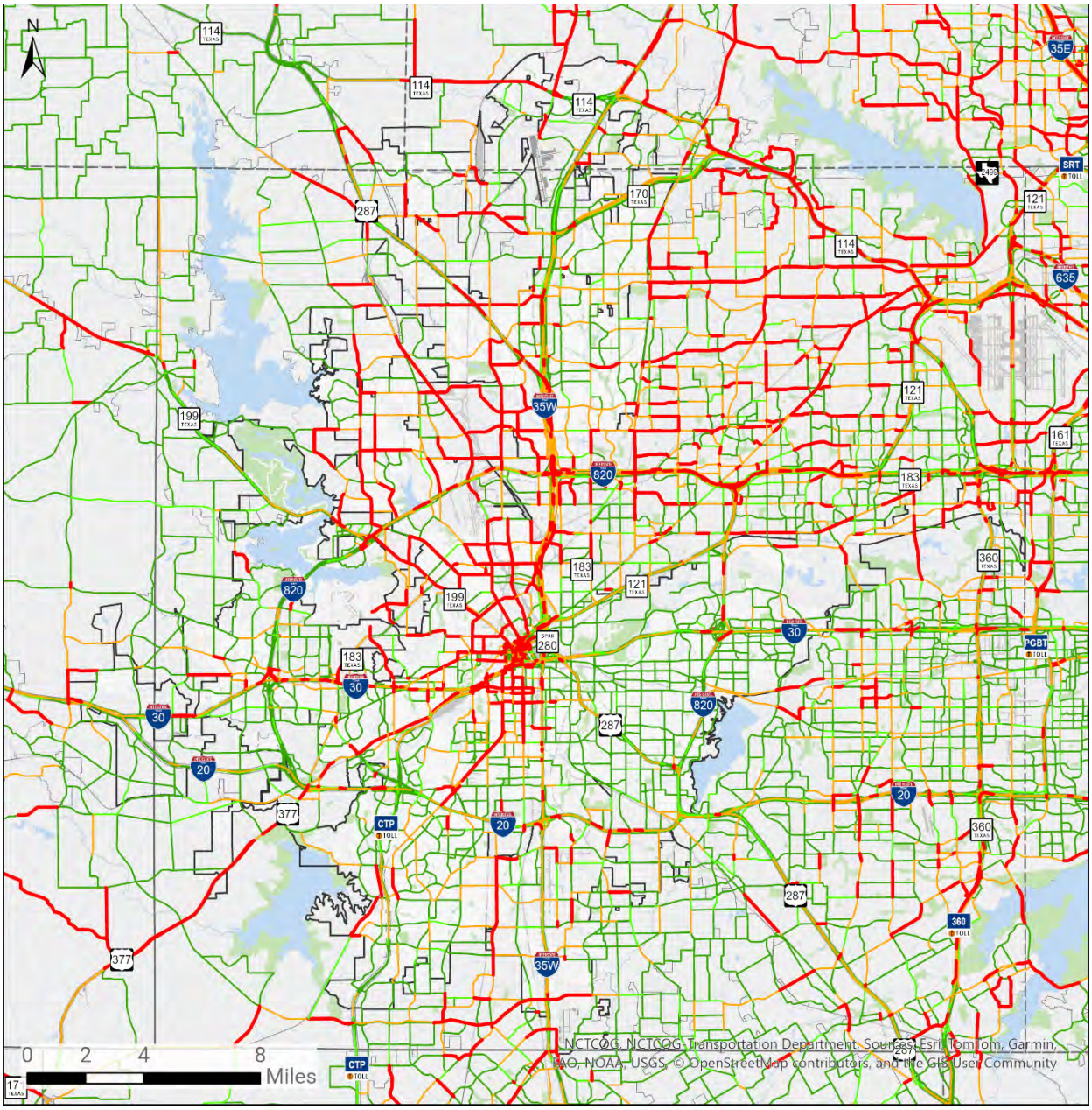


Figure 32: PM V/C for Scenario 2

8.5 Future Scenario #3 (AOS + M1M+ Transit)

Figure 32, Figure 33, and Figure 34 show AM, PM, and daily volumes for Scenario 3, which applies a planning level transit mode shift to Scenario 2. Compared to Scenario 2, general-purpose lane volumes on I-820 and I-35W decrease, while managed lanes show corresponding increases.

Figure 35 and Figure 36 present the AM and PM V/C ratios for Scenario 3. Improvements are observed on several collectors and minor arterials, particularly in the northeast of the city, reflecting the reduced auto demand associated with the transit shift. At the same time V/C ratios increase on managed lanes along I-820 and I-35W.

The observed shifts in traffic volumes under Scenario 3 reflect route choice dynamics within the traffic assignment process. The applied transit strategy primarily reduces shorter, Core-based Home-Based Work (HBW) trips that previously used general-purpose facilities, while longer commuter trips (often from/to suburbs), remain and increasingly favor managed lanes due to their travel time advantages. Because traffic assignment re-optimizes routes for all remaining vehicles, relatively small changes in auto demand can result in noticeable rebalancing between managed and general-purpose lanes. Scenario 3 should therefore be interpreted as a directional policy sensitivity test, intended to evaluate the potential influence of increased transit usage on roadway performance. A full regional model run with explicit transit assignment would be required to fully capture traveler behavioral responses to transit investments.

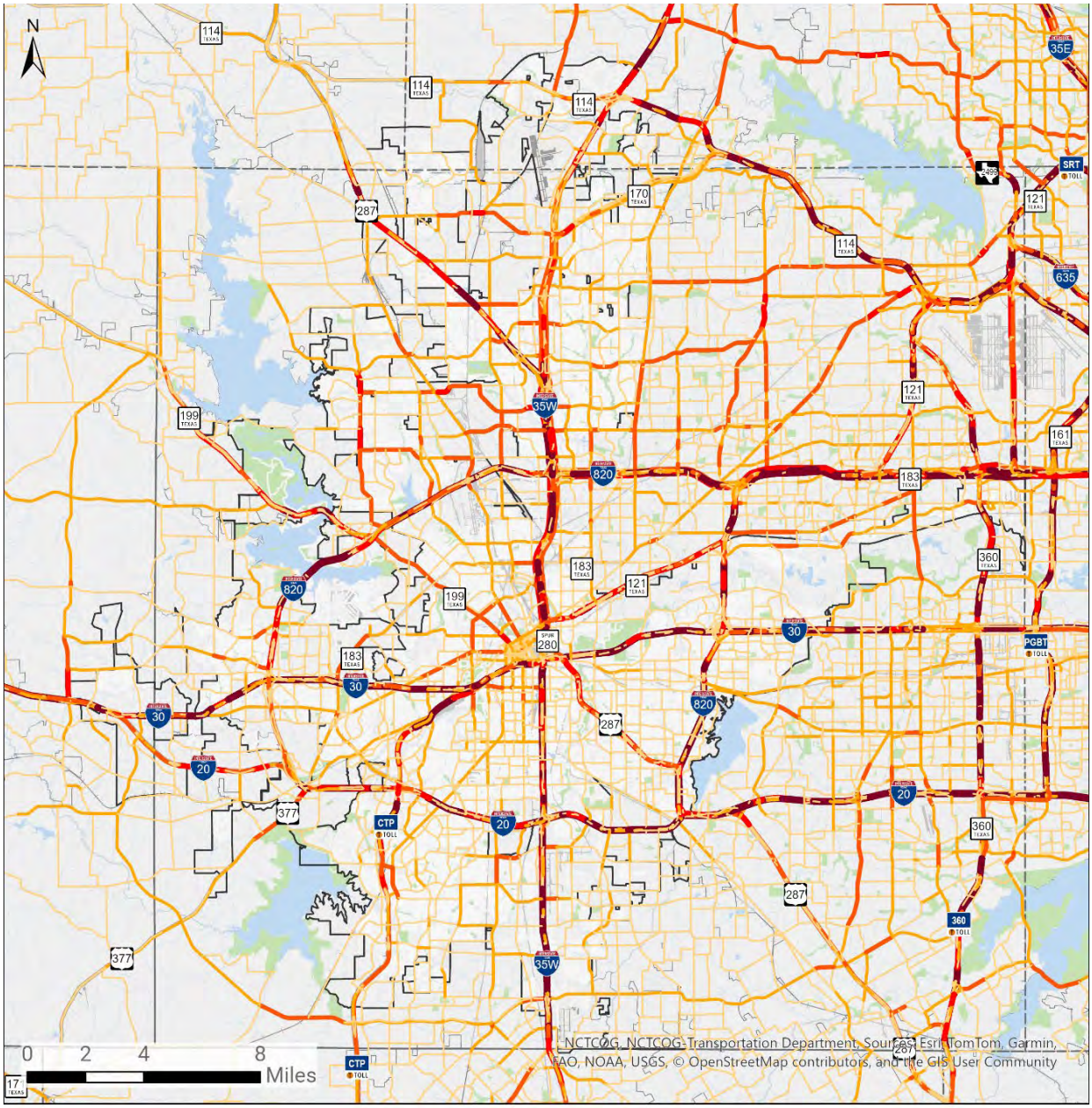


Figure 33: AM Volumes for Scenario 3

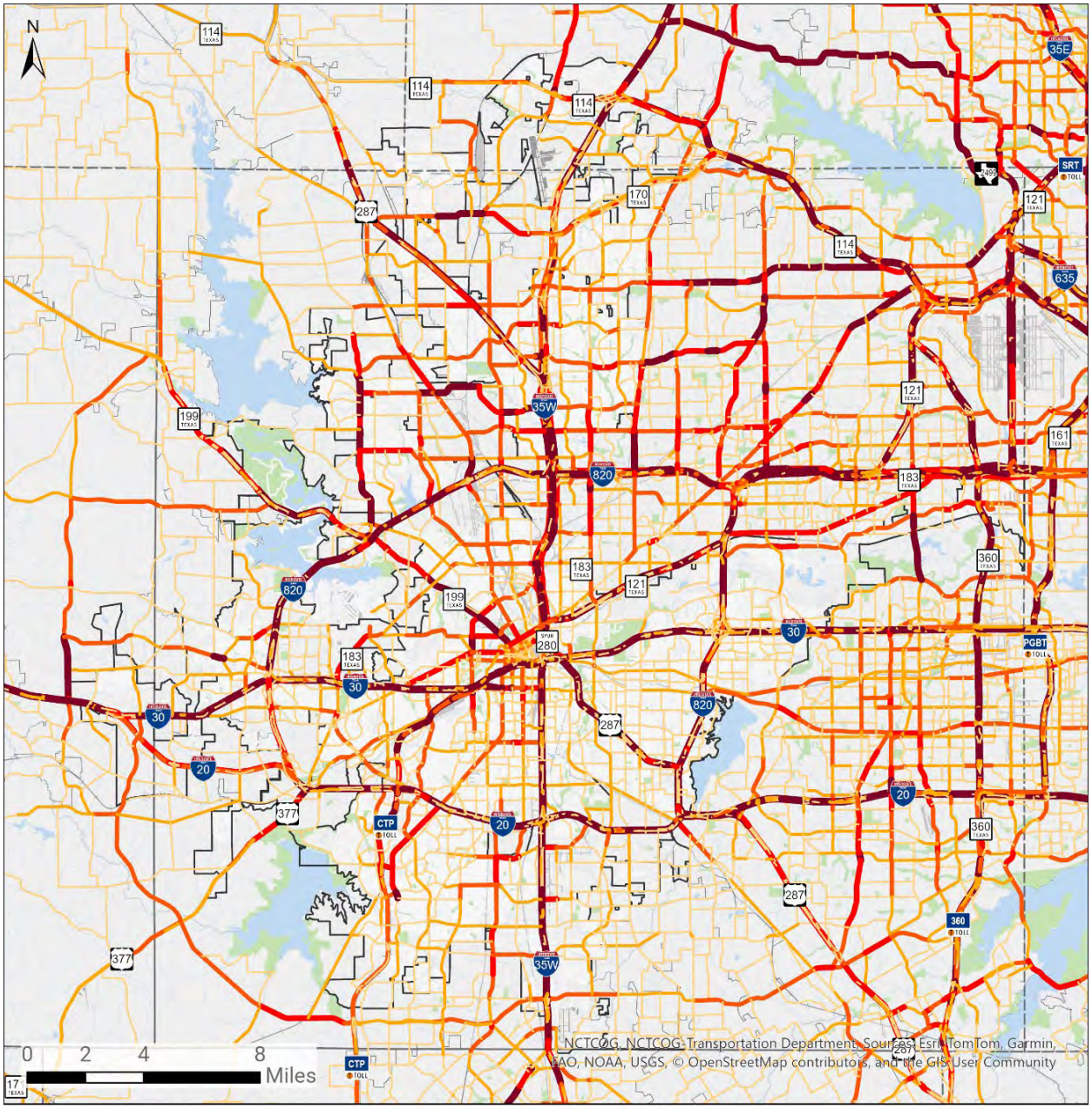


Figure 34: PM Volumes for Scenario 3

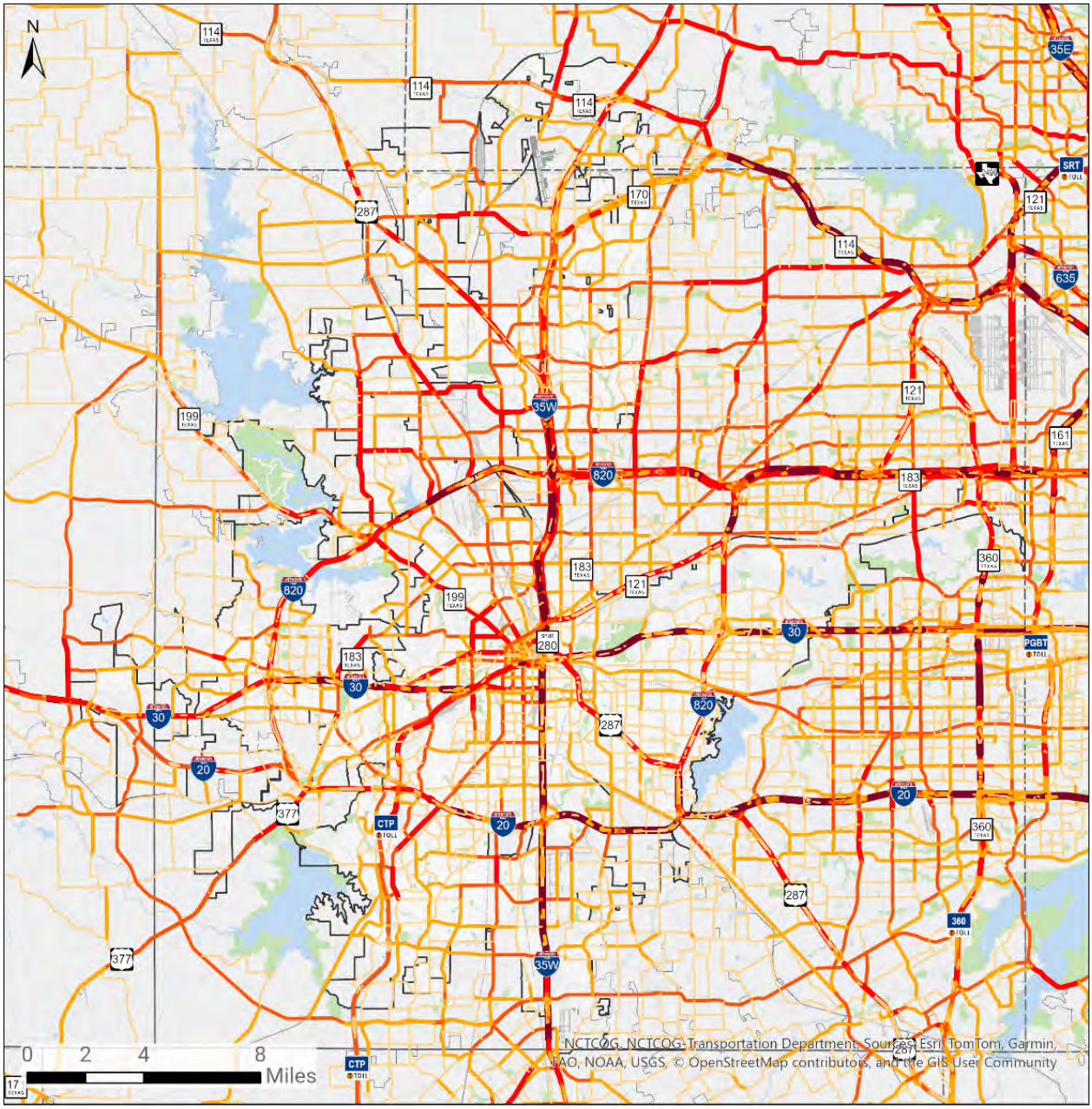


Figure 35: Daily Volumes for Scenario 3

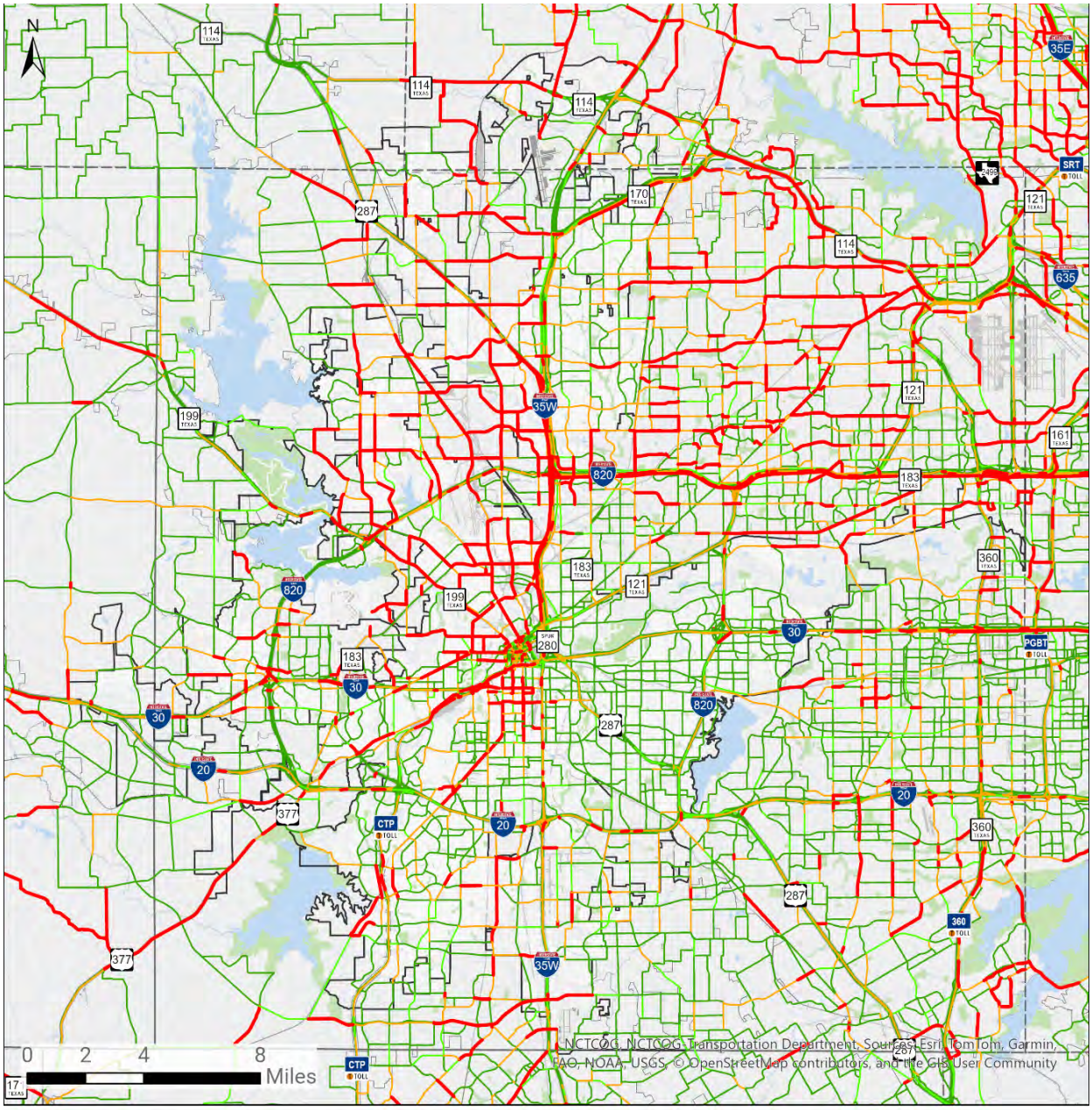


Figure 36: AM V/C for Scenario 2

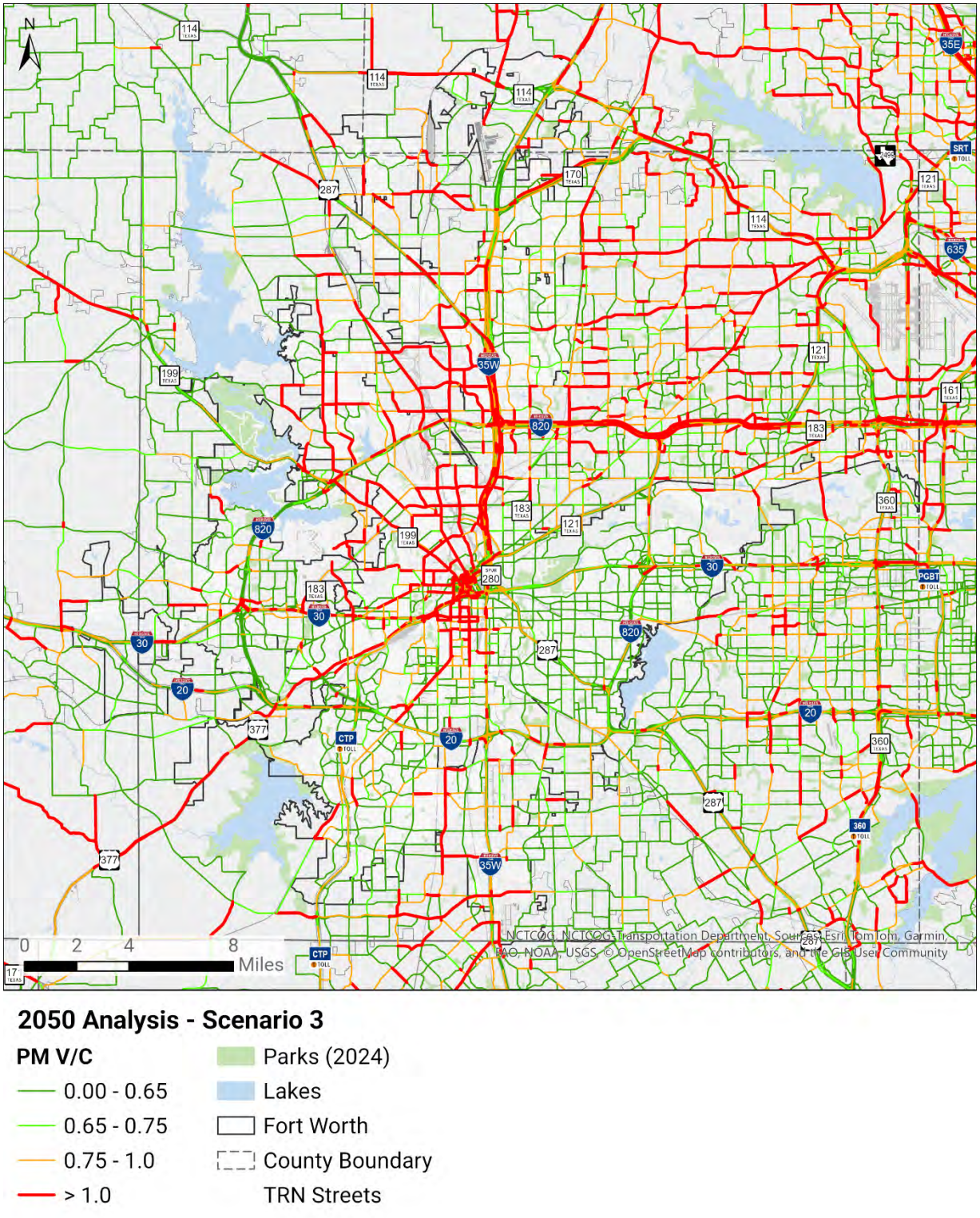


Figure 37: PM V/C for Scenario 2

8.6 Comparative Analysis

Figure 37 and Figure 38 compare daily traffic volumes between Scenario 1 and the Baseline for the City of Fort Worth and the Core Area. The results show significant volume increases within the Core and on key regional corridors, reflecting the redistribution of population and employment toward central Fort Worth. Volume increases of approximately 2,500 to 10,000 vehicles per day are observed along I-35W and portions of I-820 near Saginaw. Increases exceeding 10,000 vehicles per day occur on Core corridors such as SH 199, I-35W, I-30, Main Street, North Henderson Street, East 6th and 7th Streets, Hemphill Street, West Lancaster Avenue, East Belknap Street, West Weatherford Street, Forest Park Boulevard, and portions of East Northside Drive and North University Drive.

Figure 39 and Figure 40 present V/C ratios and AM Travel Time Index (TTI) between the Baseline and Scenario 1 within the Core. Interstate ramps and frontage roads experience higher V/C, leading to longer queues and increased delays. Key downtown corridors, including Main Street, North Henderson Street, Samuels Avenue, and West 7th Street, are projected to experience travel time that are double or more compared to Baseline conditions.

Overall, Scenario 1 demonstrates that concentrating growth in the Core substantially increases traffic demand on central corridors and access facilities. While this redistribution reduces growth pressure in outlying areas, it shifts congestion toward the Core and eastern corridors such as I-820, I-35W, SH 199, and the Chisholm Trail Parkway (CTP). Without targeted transportation investments, operating conditions are expected to deteriorate, particularly in Downtown and North Henderson, where major redevelopment initiatives such as Panther Island and Rock Island will further strain the roadway network. These findings highlight the need for complementary roadway and multimodal improvements to support continued growth while maintaining acceptable mobility in the Core.

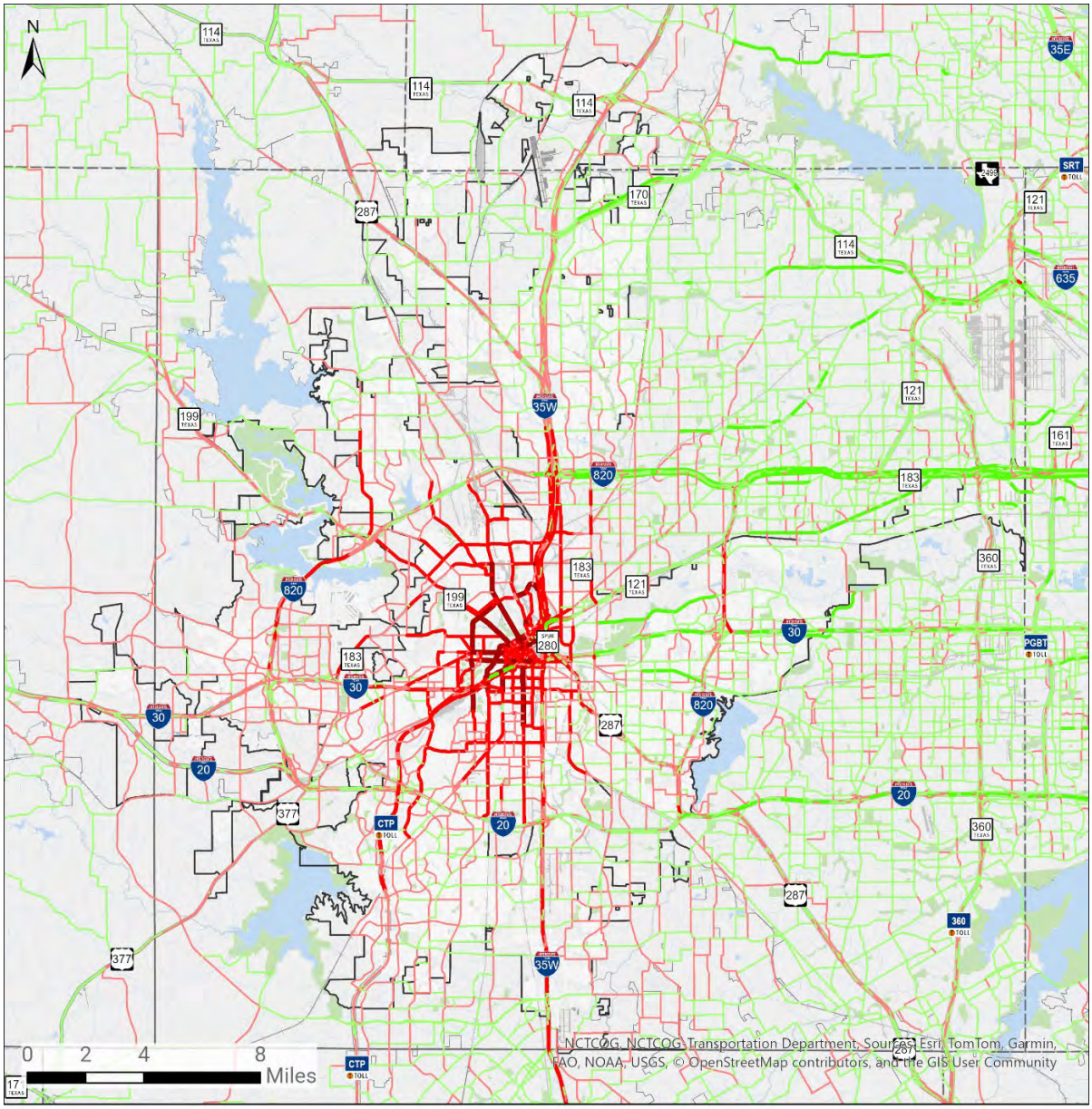


Figure 38: Daily Volume Difference Scenario 1 vs Baseline

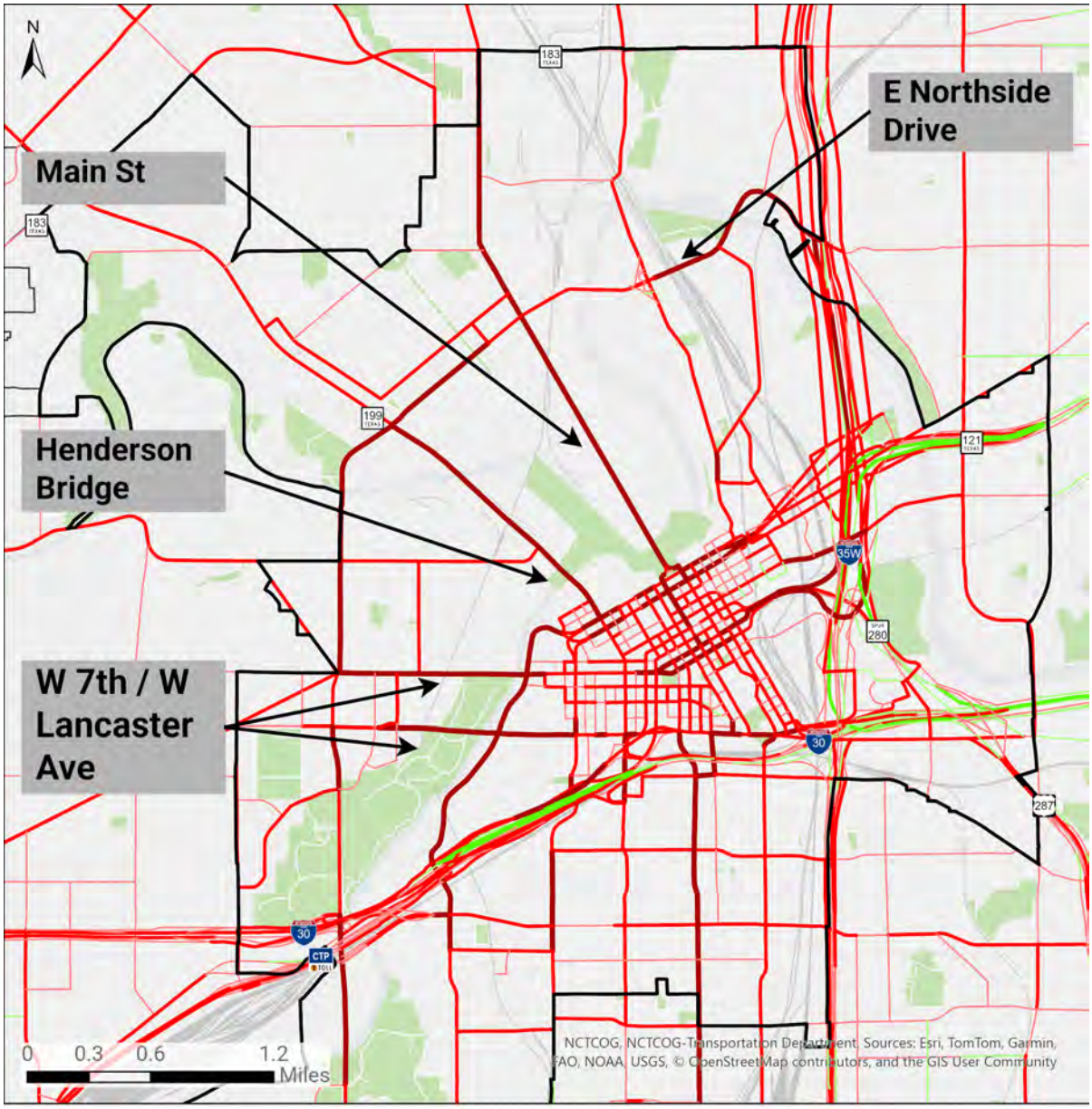


Figure 39: Daily Volume Difference Scenario 1 vs Baseline (Core City of Forth Worth)

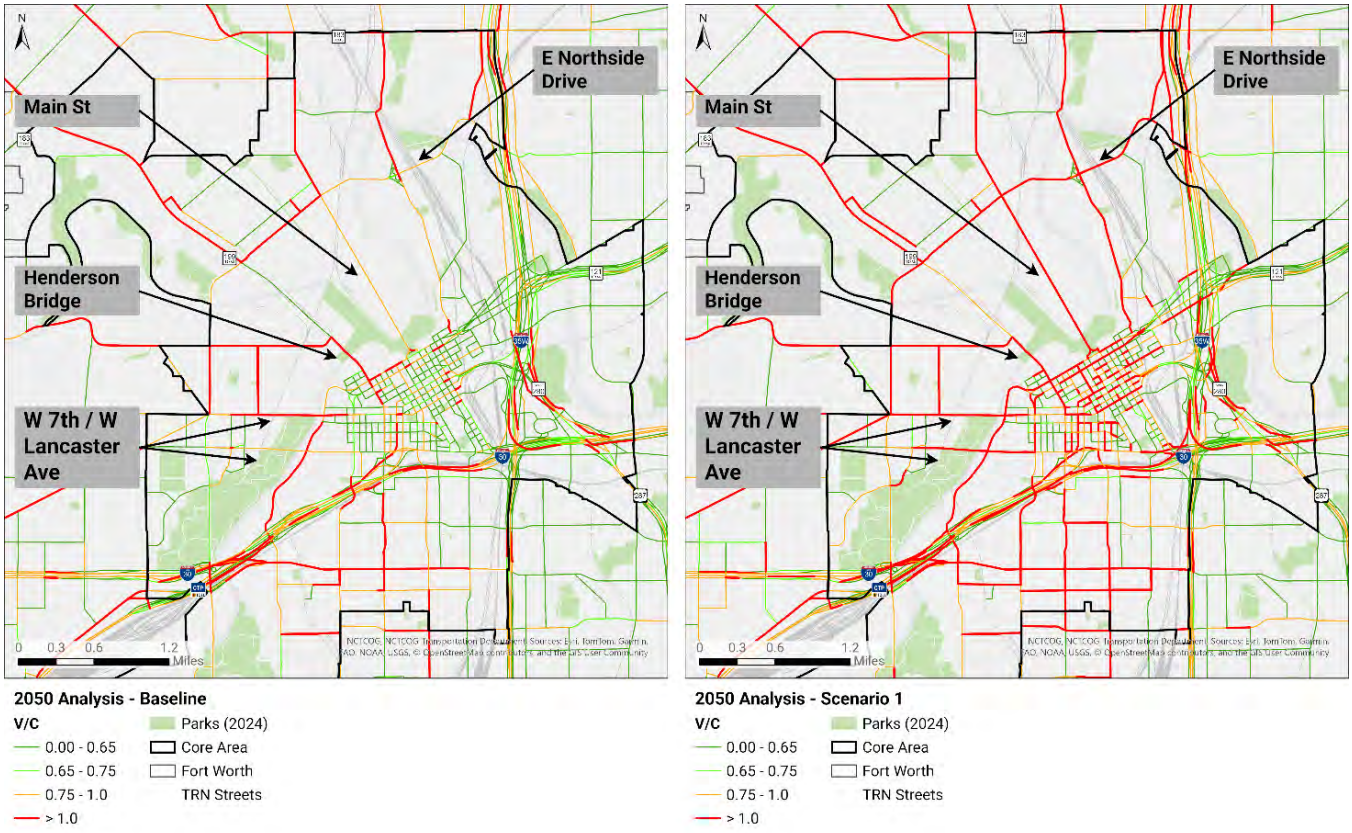


Figure 40: V/C Difference for Baseline and Scenario 1 (Core City of Forth Worth)[6]

[6] Worse of AM and PM V/C

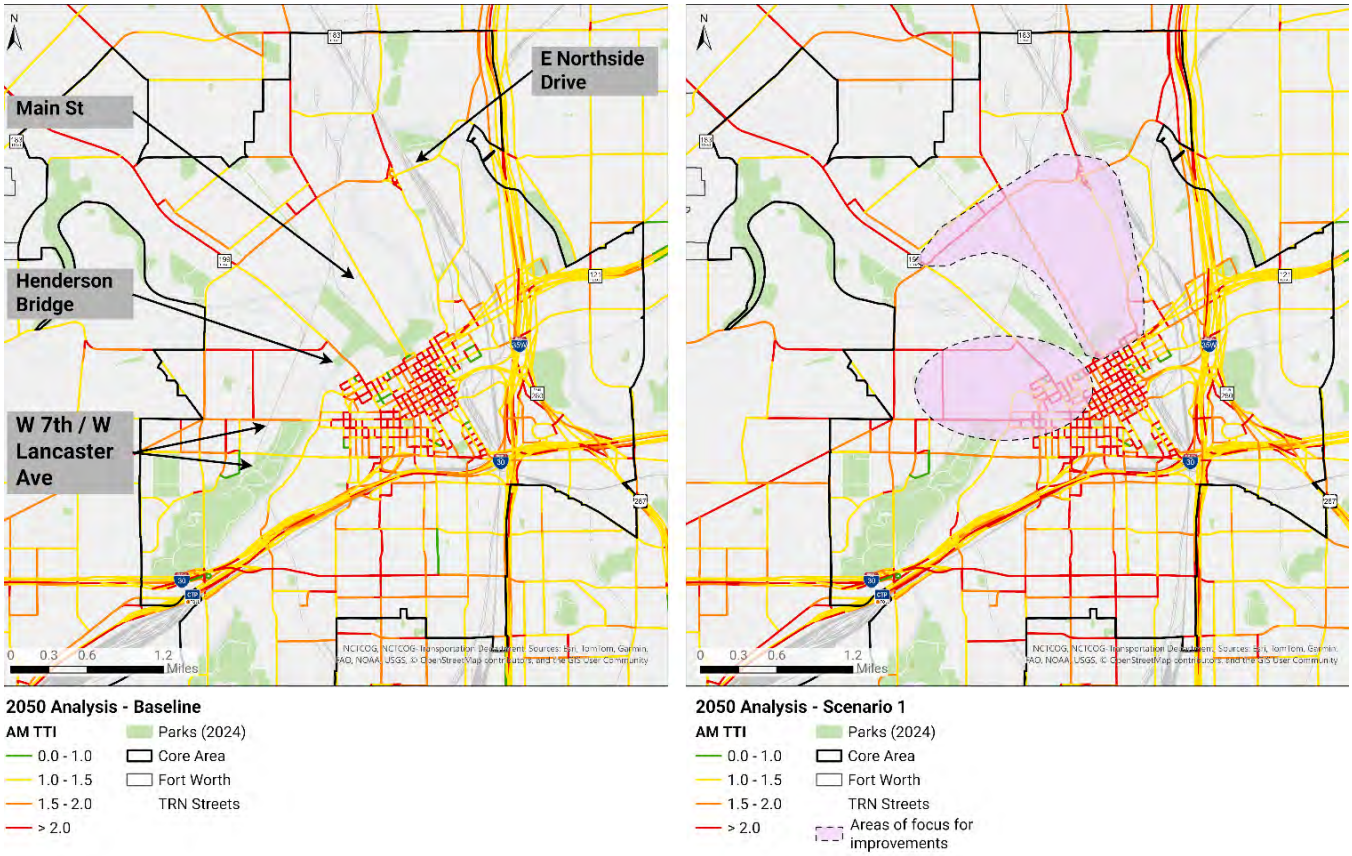


Figure 41: AM Travel Time Index (TTI) for Baseline and Scenario 1 (Core City of Forth Worth)

Figure 41 and Figure 42 show daily traffic volume differences between Scenario 2 and Scenario 1 for the City of Fort Worth and the Core Area, respectively. The largest traffic volume increases are concentrated on the newly added M1M facilities, both within and outside the Core. These projects improve regional connectivity and provide localized relief to adjacent corridors.

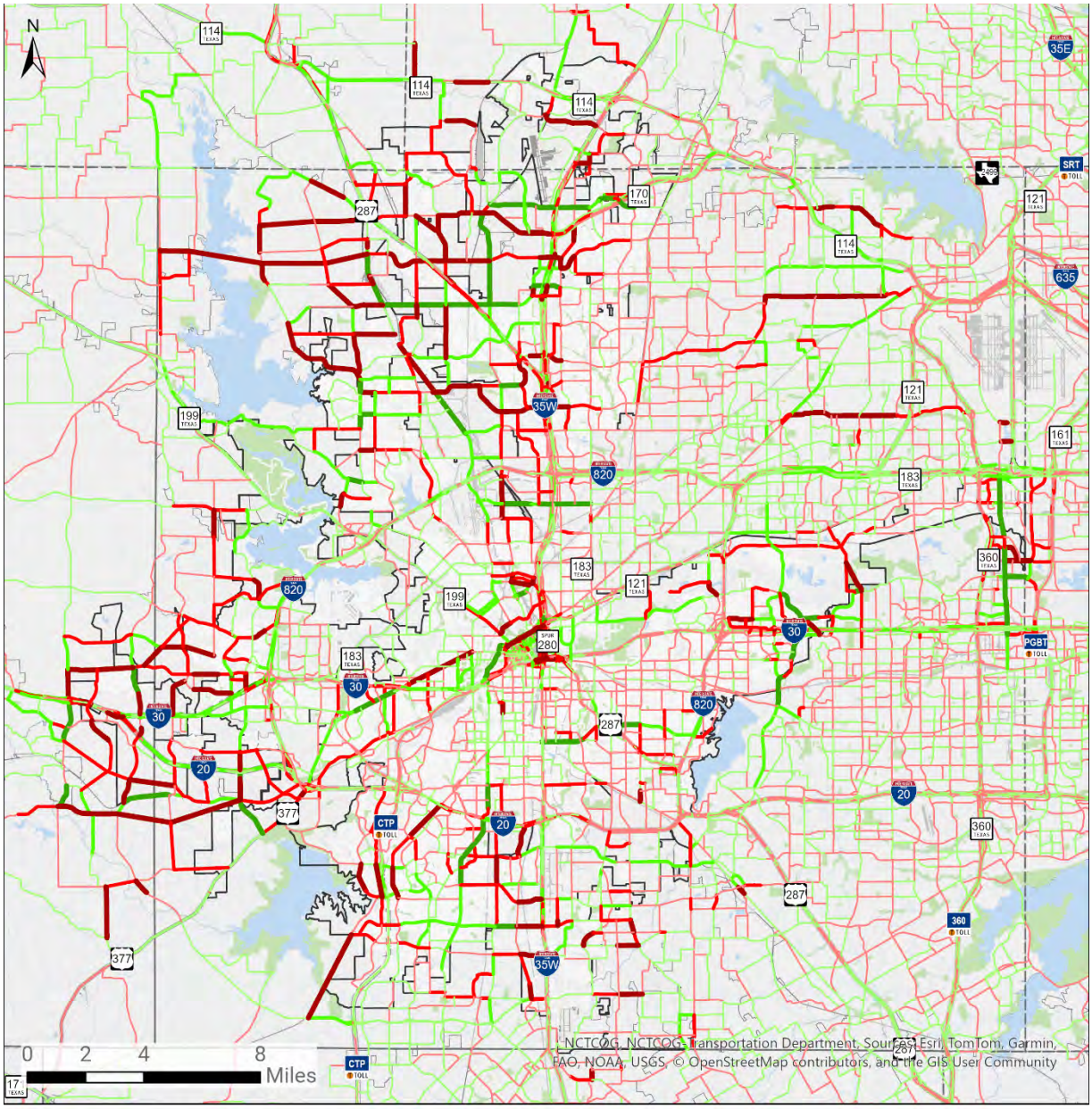


Figure 42: Daily Volume Difference Scenario 2 vs Scenario 1

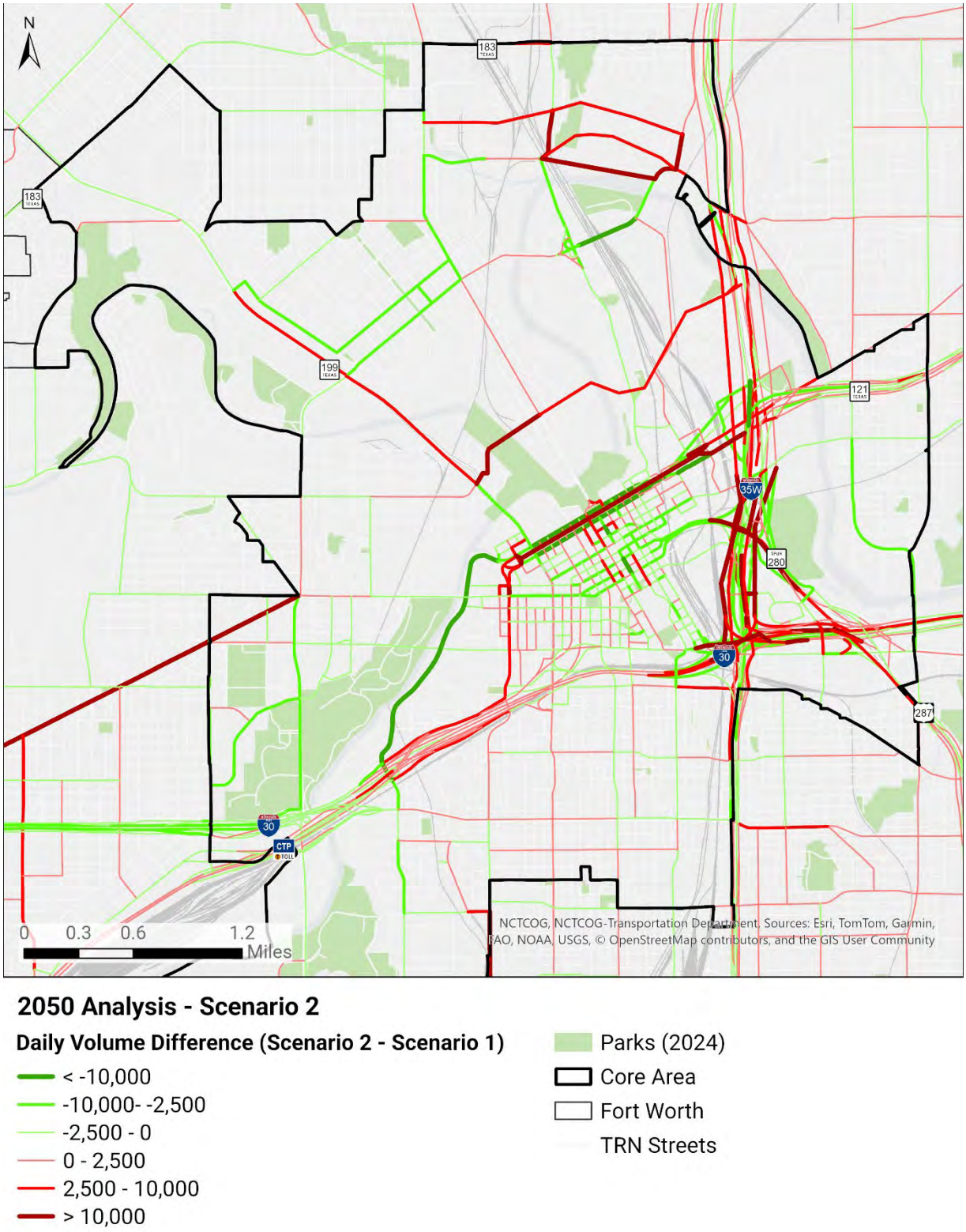


Figure 43: Daily Volume Difference Scenario 2 vs Scenario 1 (Core City of Forth Worth)

Figure 43 and Figure 44 show daily traffic volume differences between Scenario 3 and Scenario 2 for the City of Fort Worth and the Core Area, respectively. The increase in traffic volumes are mostly concentrated on managed lanes of I-35W, I-820, SH183, CTP Toll, and TX-360.

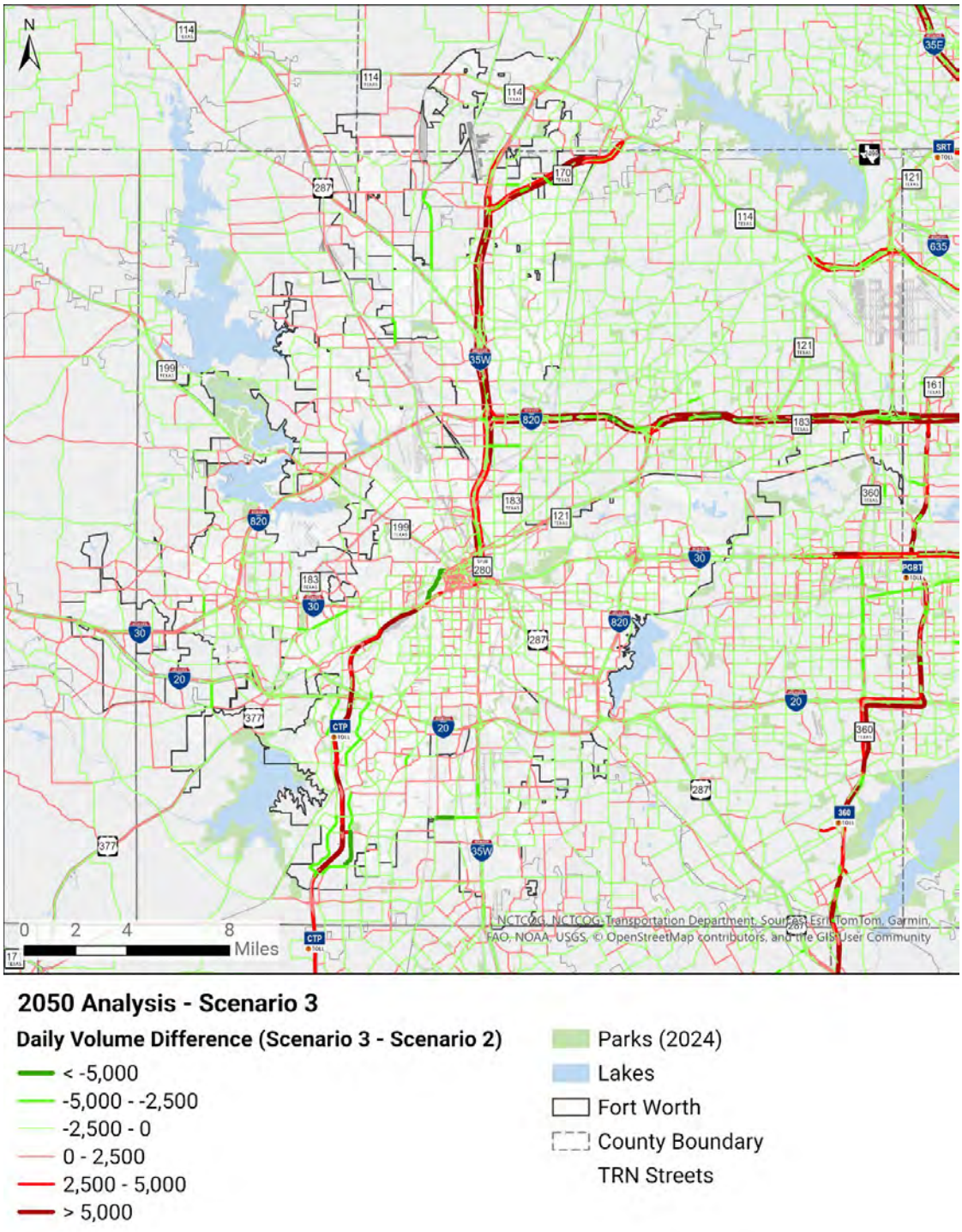


Figure 44: Daily Volume Difference Scenario 3 vs Scenario 2

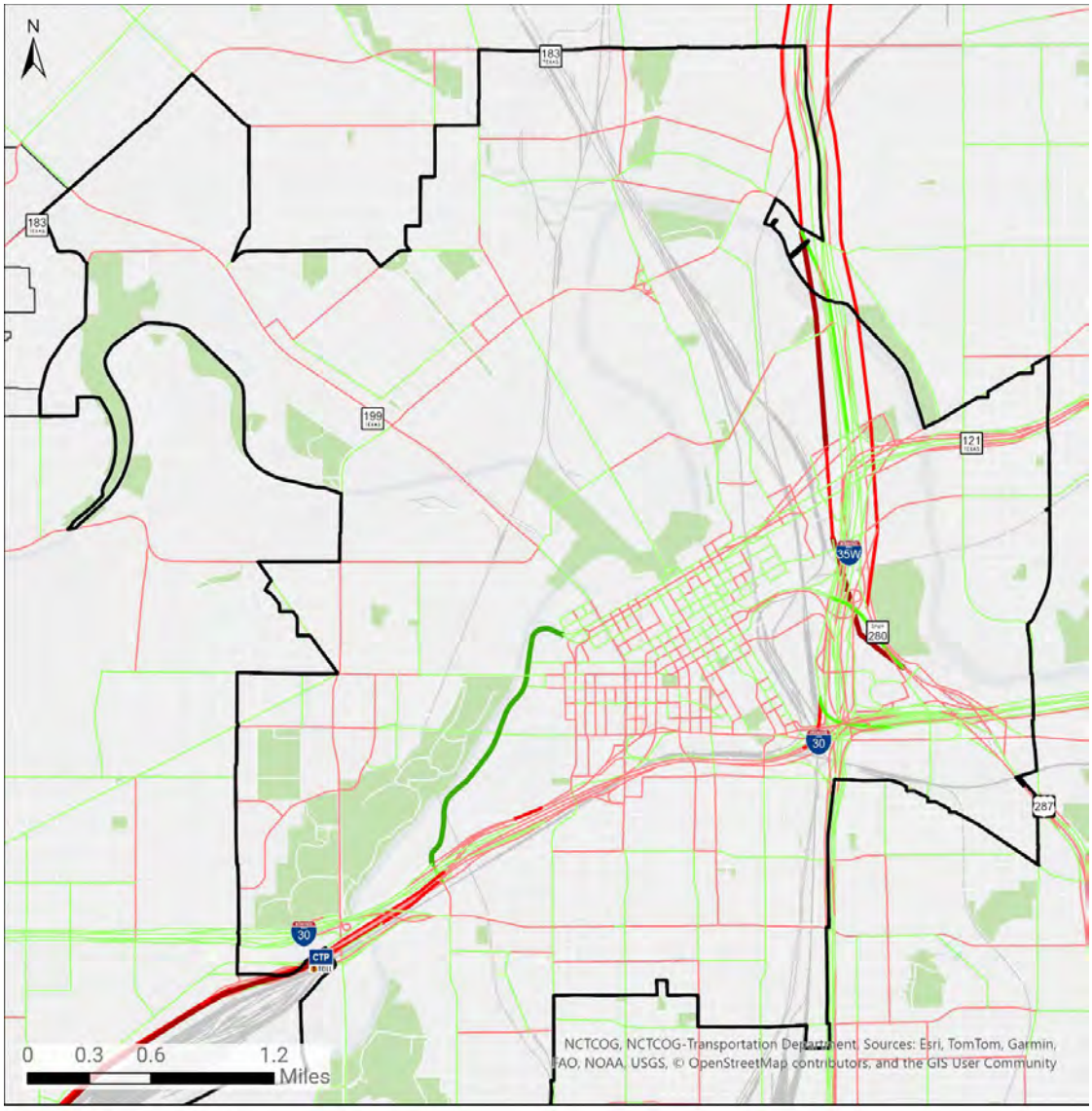


Figure 45: Daily Volume Difference Scenario 3 vs Scenario 2 (Core City of Forth Worth)

8.6.1 Key Performance Indicators

Figure 45 shows the City of Fort Worth VMT for each scenario, and Figure 46 shows the corresponding VHT for each scenario. Scenario 1 exhibits higher VMT and VHT compared to the Baseline, reflecting

increased activity in the Core. In Scenario 2, VMT rises due to added projects, while VHT decreases relative to Scenario 1. Scenario 3 shows a slight reduction in VMT and a slight increase in VHT after applying the transit shift. This pattern is due to the shifting of shorter trips within the city to transit, leading to some readjustment of travel patterns in the region.

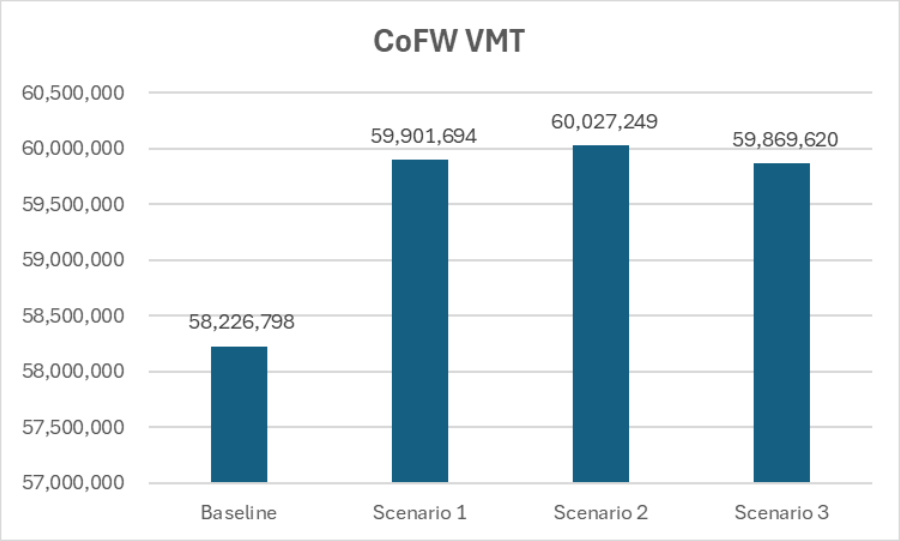


Figure 46: City of Fort Worth VMT by Scenario

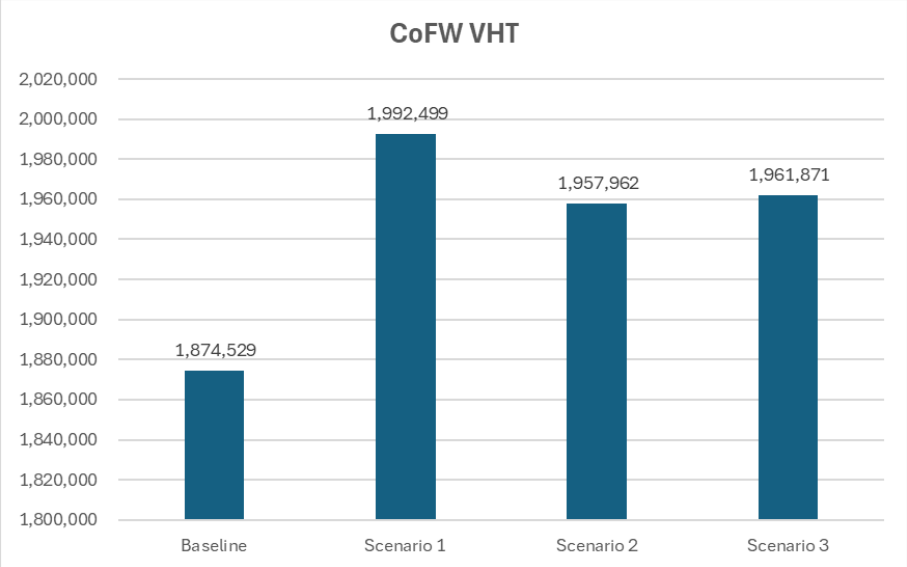


Figure 47: City of Fort Worth VHT by Scenario

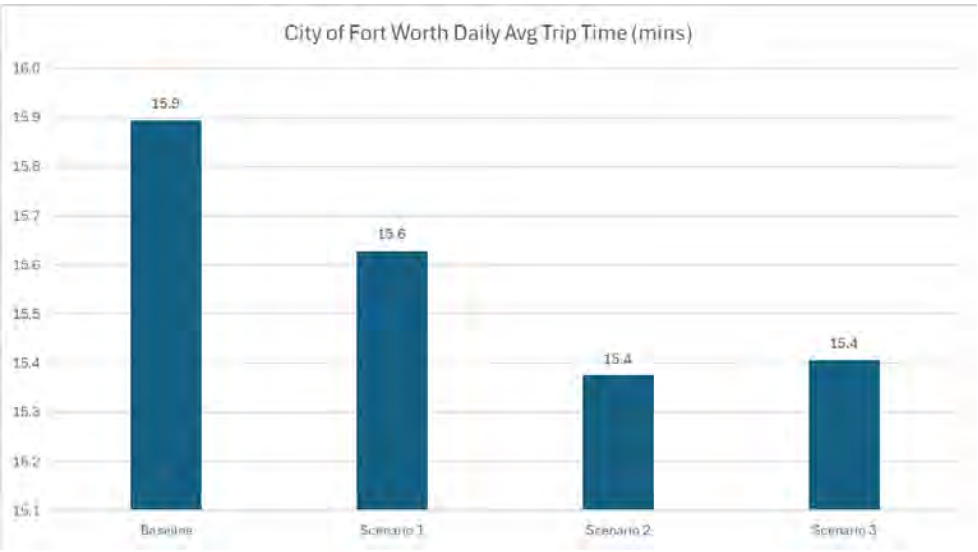


Figure 48: City of Fort Worth Daily Average Trip Time

Figure 47 illustrates average daily trip times for the City of Fort Worth. Trip times decrease under Scenarios 1 and 2 as traffic redistributes across the network, while Scenario 3 shows a slight increase due to longer trips shifting toward managed lanes.

Figure 49 shows that the Travel Time Index (TTI) defined as the ratio of peak-period travel time to free-flow travel time, where higher values indicate worse congestion, does not improve under Scenario 1 relative to the Baseline condition. While Scenario 1 successfully concentrates population and employment growth in the Core Area, it does so without changes to the roadway network or travel mode assumptions. As a result, increased travel demand is placed on the same infrastructure, leading to similar or slightly worsened congestion levels. In contrast, Scenarios 2 and 3 demonstrate improvements in Travel Time Index due to the introduction of targeted roadway connectivity improvements and transit mode shifts, respectively. These results highlight the importance of pairing land use intensification with supporting transportation investments.

As shown in Figure 50, Scenario 1 exhibits marginally lower average speeds across all time periods compared to Baseline. This outcome reflects increased congestion within the Core Area resulting from higher activity levels under unchanged network conditions. Scenarios 2 and 3 show modest stabilization in AM, PM, OP and improvements in daily speeds i.e. daily speeds going back up to Baseline levels, indicating that roadway and transit investments help offset the congestion effects associated with higher-density development.

Figure 51 presents the percentage change in roadway mileage operating at LOS F across scenarios relative to the Baseline condition. Under Scenario 1 (AOS), several facility types experience an increase in LOS F mileage, reflecting additional congestion pressure associated with concentrated population and employment growth in the Core. In contrast, freeways and managed lanes show a slight decrease in LOS F mileage in Scenario 1, suggesting a greater reliance on local facilities as activity intensifies within

the Core. While Scenarios 2 and 3 do not eliminate congestion across all facility types, both scenarios show reductions in LOS F mileage on minor arterials and collectors, indicating localized operational benefits from targeted roadway investments. Principal arterials and frontage roads, however, experience a slight increase in LOS F mileage in Scenario 2, suggesting the need for additional improvements to accommodate increased traffic volumes feeding into these facilities from enhanced local connectivity. Scenario 3 shows an increase in LOS F mileage on managed lanes.

Overall, the results reinforce that land use intensification alone is insufficient to reduce congestion and must be paired with strategic roadway investments and mode-shift strategies to achieve systemwide performance improvements.



Figure 49: Travel Time Index by Scenario

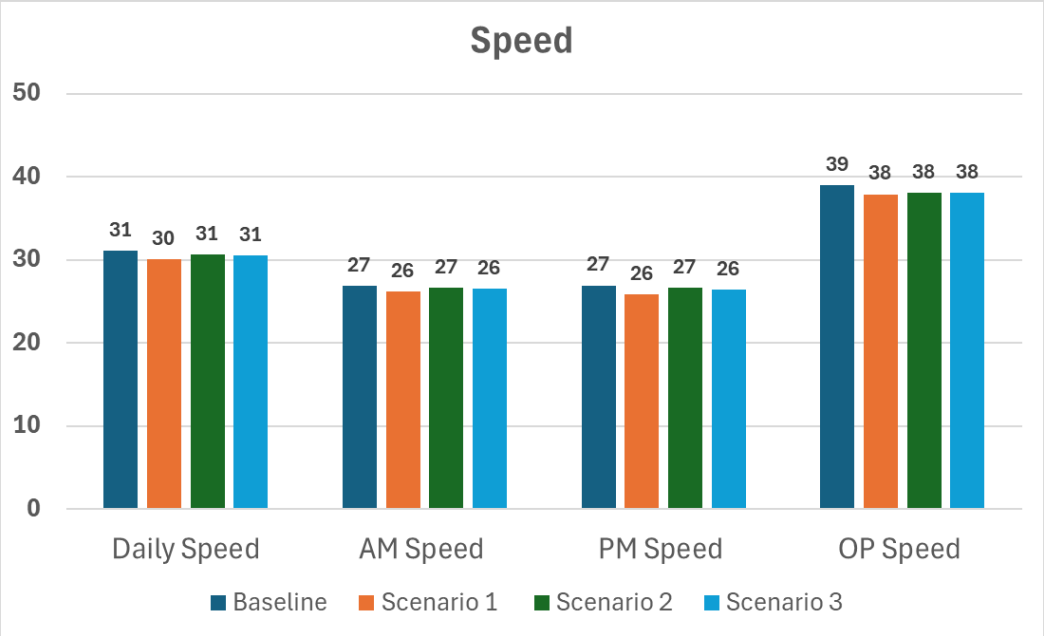


Figure 50: Speed at Daily and Time Period Level by Scenario

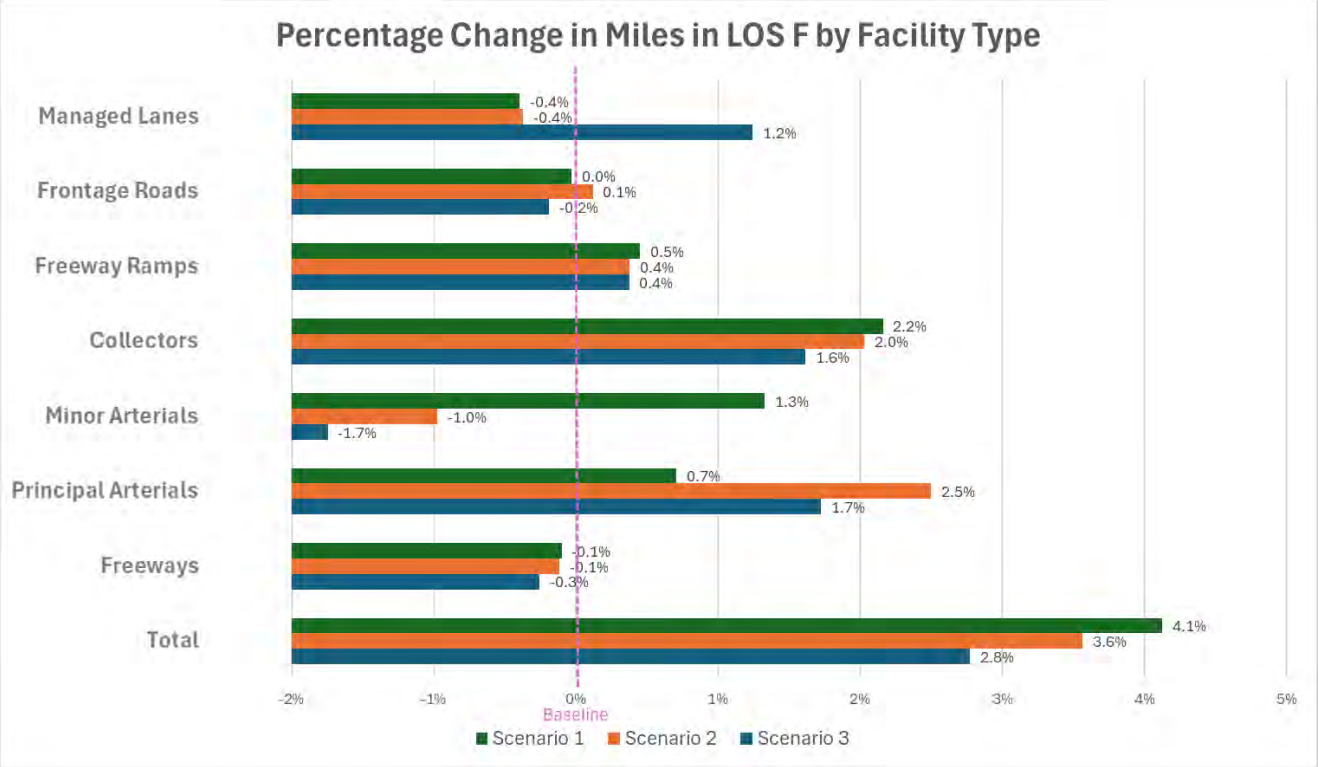


Figure 51: Percentage Change in Miles of Roadway at Level of Service (LOS) F by Facility Type and Scenario

9 Conclusions

The scenario analysis demonstrates that land use intensification alone, as represented by Scenario 1, significantly increases travel demand and congestion within Fort Worth's Core and along key regional corridors. While concentrating growth in the Core supports a broader economic and development objectives, it puts substantial pressure on the existing transportation network when not accompanied by infrastructure or mode-share changes.

Incorporating targeted roadway investments through the M1M program (Scenario 2) improves network connectivity, redistributes traffic more efficiently, and delivers localized congestion relief, particularly on collectors and minor arterials. These improvements stabilize system performance despite higher activity levels.

The addition of a planning-level transit strategy (Scenario 3) further influences travel patterns by reducing short auto trips within the Core and shifting remaining demand toward faster managed lanes. While this scenario does not eliminate congestion, it demonstrates the potential role of transit investments in supporting dense, mixed-use development when combined with roadway improvements.

Overall, the scenario planning analysis demonstrates the value of using the travel demand model to understand how alternative land use, roadway, and transit strategies interact to shape future mobility outcomes. The results indicate that aligning growth strategies with targeted roadway investments and transit enhancements can help Fort Worth accommodate continued development in the Core while maintaining acceptable system performance. Together, these findings provide a clear foundation for prioritizing future transportation investments and refining long-term mobility strategies in support of the City's growth vision.

Appendices

Appendix 1: Summary of Projects Coded

Table A-1: Long-Term Analysis List of Projects

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
Capacity Projects	1	Harmonson Rd	W Harmonson Rd	Dale Earnhardt Blvd	Design and reconfigure 3.13-miles of existing roadway to accommodate a four (4)-lane divided arterial roadway.	Y
	2	John Day Road	SH 114	Keller Haslet Rd	Design and reconfigure 4.17-miles of existing roadway to accommodate a four (4)-lane divided arterial roadway.	Y
	3	Avondale Haslet Road - Haslet Parkway	Willow Springs Rd	Avondale Haslet Rd	Design and reconfigure 7.29-miles of existing roadway to accommodate a six (6)-lane divided principal arterial roadway.	Y
	4	Blue Mound Road - Harmon Road	FM 156	Willow Springs Rd	Design and reconfigure 7.19-miles of existing roadway to accommodate a four (4)-lane divided arterial roadway with grade separation under the US-287 corridor.	Y
	5	Angle Avenue - Heritage Trace Parkway - Marine Creek Parkway - Old Decatur Road	Bailey Boswell Rd	Marine Creek Pkwy	Design and reconfigure 7.18-miles of existing roadway to accommodate a six (6)-lane divided principal arterial roadway with grade separation under the I-820 corridor.	Y

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	6	Bailey Boswell Road - Basswood Boulevard	Old Decatur Rd	Basswood Blvd	Design and reconfigure 6.92-miles of existing roadway to accommodate a six (6)-lane divided principal arterial roadway with grade separation above the US-287 corridor.	Y
	7	Camp Bowie Boulevard	Lancaster Ave	Van Ciburn Way	Design and reconfigure 2.54-miles of existing roadway to accommodate a six (6)-lane divided principal arterial roadway.	Y
	8	Clifford Street - White Settlement Road	Walsh ranch Pkwy	Verna Trail	Design and reconfigure 4.72-miles of existing roadway to accommodate a six (6)-lane divided principal arterial roadway.	Y
	9	Westpoint Boulevard	Chapel Creek Blvd	Chapel Creek Blvd	Design and reconfigure 2.38-miles of existing roadway to accommodate a six (6)-lane divided principal arterial roadway.	Y
	10	Chapel Creek Boulevard	Chapin Rd	Chapel Creek Blvd	Design and reconfigure 1.9-miles of existing roadway to accommodate a four (4)-lane divided arterial roadway.	Y
	11	Granbury Road - Summer Creek Drive	IH20 FRTG WB	Granbury Rd	Design and reconfigure 3.93-miles of existing roadway to accommodate a six (6)-lane divided principal arterial roadway.	Y
	12	Trinity Boulevard	Norwood Dr	Commercial LP	Design and reconfigure 3.96-miles of existing roadway to accommodate a six	Y

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
					(6)-lane divided principal arterial roadway.	
	13	Cheek Sparger Road	Brown Trail	SH121 FRTG SB	Design and reconfigure 4.09-miles of existing roadway to accommodate a four (4)-lane divided arterial roadway.	Y
	14	Continental Boulevard	FM1938 Davis Blvd	SH 26 IRA E Woods Blvd	Design and reconfigure 4.67-miles of existing roadway to accommodate a four (4)-lane divided arterial roadway.	Y
	15	Dove Road	Dove Rd	Shady Oak Dr	Design and reconfigure 5.04-miles of existing roadway to accommodate a four (4)-lane divided arterial roadway with grade separation below the TX-114 corridor.	Y
Roadway Gap	16	Prestige Rd	Golden Triangle Blvd	Founders Way	Design, acquire ROW, and construct a new 0.65-mile two (2)-lane major collector roadway with grade-separation above the I-35 corridor.	Y
	17	E Blue Mound Rd	Blue Mound Rd	Riverside Dr	Design, acquire ROW, and construct a new .94-mile four (4)-lane undivided arterial roadway	Y
	18	Texas Longhorn Way	Texas Longhorn Way	Old Denton Rd	Design, acquire ROW, and construct a new 0.57-mile two (2)-lane undivided major collector roadway.	Y
	19	Averett Rd	Anglin Dr	Sublett Rd	Design, acquire ROW, and construct a new 2.67-mile two (2)-lane undivided arterial roadway.	Y
	20	Great Southwest Pkwy	Trinty Blvd	Great Southwest Pkwy	Design, acquire ROW, and construct a new 1.25-mile four (4)-lane undivided arterial roadway.	Y

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	21	Greenbelt Rd	Greenbelt Rd	Green Oaks Blvd	Design, acquire ROW, and construct a new 1.4-mile two (2)-lane undivided arterial roadway.	Y
	22	Sandshell Blvd	Alliance Town Ctr	Basswood Blvd	Design, acquire ROW, and construct a new 2.3-mile two (2)-lane undivided arterial roadway.	Y
	23	Amon Carter Blvd	SH 183 FRTG WB	Airfield Dr	Design, Acquire ROW, and reconstruct 2.8-miles of a four (4)-lane divided arterial roadway.	Y
	24	Summer Fields Blvd	North Fwy	Old Denton Rd	Design, acquire ROW, and construct a new 0.73-mile two (2)-lane divided major collector roadway with grade separation.	Y
	25	Old Blue Mound Rd	FM 156	Litsey Rd	Design, acquire ROW, and construct a new 2.11-mile four (4)-lane divided arterial roadway with grade separation.	Y
	26	Morrison Dr	Morrison Dr	Meadowbrook Dr	Design, acquire ROW, and construct a new 0.21-mile two (2)-lane undivided major collector roadway.	Y
	27	Meadowbrook Dr	Morrison Dr	Dottie Lynn Pkwy	Design, acquire ROW, and construct a new 0.91-mile two (2)-lane undivided major collector roadway.	Y
	28	Lanc N 2 – Bomar	Near Williams Rd	T Square Medical Street	Design, acquire ROW, and construct a new 1.59-mile two (2)-lane undivided major collector roadway.	Y
	29	T Square St	Anderson Blvd	Ederville Rd	Design, acquire ROW, and construct a new 0.29-mile two (2)-lane undivided major collector roadway with grade separation over the I-30 corridor.	Y

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	30	Winding Ln	Little Cina Ln	Randol Mill Rd	Design, acquire ROW, and construct a new 0.12-mile two (2)-lane undivided major collector roadway.	Y
	31	Colbi Ln	Ranger Dr	Dottie Lynn Pkwy	Design, acquire ROW, and construct a new 0.21-mile two (2)-lane undivided major collector roadway.	Y
	32	Carson St	Airport Fwy	1st St	Design, acquire ROW, and construct a new 1.55-mile four (4)-lane undivided arterial roadway.	Y
	33	Oak Hill St	Village Ln	Parker Henderson Rd	Design, acquire ROW, and construct a new 0.29-mile two (2)-lane undivided major collector roadway.	Y
	34	Post and Paddock Rd	114th St	Roy Orr Blvd	Design, acquire ROW, and construct a new 0.5-mile four (4)-lane divided arterial roadway.	Y
	35	Overlake Dr	Hodgkins Rd	Over Lake Dr	Design, acquire ROW, and construct a new 0.7-mile two (2)-lane undivided major collector roadway.	Y
	36	Bluebonnet Dr	Hurst Blvd	Trinity Blvd	Design, acquire ROW, and construct a new 0.78-mile four (4)-lane divided arterial roadway.	Y
	37	Elliott Reeder Rd	Elliot Reeder Rd	Jack Newell Blvd	Design, acquire ROW, and construct a new 1.49-mile four (4)-lane divided arterial roadway.	Y
	38	Precinct Line Rd	Randol Mill Rd	Austonio Dr	Design, acquire ROW, and construct a new 0.72-mile two (2)-lane undivided major collector roadway.	Y
	39	Shelby Rd	Wichita (MTP)	Shelby Rd	Design, acquire ROW, and construct a new 2.29-mile two (2)-lane undivided major collector roadway.	Y

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	40	Race St	Oak Grove Shelby Rd	Hurst Rd	Design, acquire ROW, and construct a new 4.63-mile two (2)-lane undivided major collector roadway.	Y
	41	Rendon New Hope Rd	Kennedale Pkwy	Retta Mansfield Rd	Design, acquire ROW, and construct a new 7.35-mile four (4)-lane divided arterial roadway.	Y
	42	Old Weatherford Rd	I-20	I-820	Design, acquire ROW, and construct a new 2.79-mile six (6)-lane divided arterial roadway.	Y
	43	John Day Rd	John Day Rd (MTP)	Avondale Haslet Rd	Design and reconstruct 0.62-miles of a four (2)-lane undivided arterial roadway.	Y
	44	John Day Rd	Rancho Canyon Way	Highway 114	Design and reconstruct 2.62-miles of a four (4)-lane undivided arterial roadway.	Y
	45	Old Weatherford Rd	Old Weatherford Rd	White Settlement Rd	Design, acquire ROW, and construct a new four (4)-lane 2.33-mile divided roadway.	Y
	46	Berkshire Lake Blvd	Bonds Rand Rd	Berkshire Lake Blvd	Design, acquire ROW, and construct a new 0.21-mile two (2)-lane divided major collector roadway.	N
	47	W Blue Mound Rd	Highway 287	Hicks Avondale School Rd	Design, acquire ROW, and construct a new 1.9-mile two (2)-lane undivided major collector roadway.	Y
	48	Winscott Plover Rd	Westcreek Cir	Old Granburry Rd	Design, acquire ROW, and construct a new 4-mile two (2)-lane undivided arterial roadway.	N

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	49	Katy Rd	Martin St	I-20 Service Rd	Design, acquire ROW, and construct a new 1.47-mile two (2)-lane undivided arterial roadway.	N
	50	Quail Rd	Lancaster Ave	Berry St	Design, acquire ROW, and construct a new 1.81-mile two (2)-lane undivided major collector roadway.	Y
	51	Great Southwest Pkwy	Sunnyvale Rd	Avenue J	Design, acquire ROW, and construct a new 0.89-mile four (4)-lane divided major collector roadway.	Y
	51	Shelby Rd	Shelby Rd	Mansfield Cardinal Rd	Design, acquire ROW, and construct a new 3.07-mile two (2)-lane undivided arterial roadway.	Y
	52	E Harwood Rd	Highway 360	Service Rd	Design, acquire ROW, and construct a new 1.24-mile four (4)-lane divided principal arterial roadway.	Y
	53	John T White Rd	John T White Rd	Green Oaks Blvd	Design, acquire ROW, and construct a new 0.49-mile four (4)-lane divided arterial roadway.	N
	54	Dottie Lynn Pkwy	Cooks (MTP)	Dottie Lynn Pkwy	Design, acquire ROW, and construct a new 0.39-mile two (2)-lane undivided major collector roadway.	N
	55	Team Ranch Rd	Minor Rd	IH820 FRTG SB	Design, acquire ROW, and construct a new 2.78-mile two (2)-lane undivided arterial roadway.	Y
	56	Alemeda St	Chapin Rd	Vista Way	Design, acquire ROW, and construct a new 2.14-mile two (2)-lane undivided arterial roadway.	Y
	57	Hartman St	Arbor Ave	Mansfield Hwy	Design, acquire ROW, and construct a new 0.47-mile two (2)-lane undivided major collector roadway.	Y

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	58	Blue Sky Dr	Hicks Avondale School Rd	Alpine Ct	Design, acquire ROW, and construct a new 0.53-mile two (2)-lane undivided major collector roadway.	N
	59	Tinsley Ln	Dido Hicks Rd	Sarah Ln	Design, acquire ROW, and construct a new 3.52-mile two (2)-lane undivided arterial roadway.	Y
	60	Sonora Springs Trl	Westport Pkwy	Palancar Dr	Design, acquire ROW, and construct a new 0.11-mile two (2)-lane undivided roadway.	N
	61	Lost Creek Blvd	Lost Creek Blvd	Corporation Pkwy	Design, acquire ROW, and construct a new 0.74-mile two (2)-lane undivided major collector roadway.	N
	62	Twilight Trl	Pearl Ranch Rd	Twillight Trl	Design, acquire ROW, and construct a new 0.51-mile two (2)-lane undivided roadway.	N
	63	Usher St	Bryant St	Winscott Rd	Design, acquire ROW, and construct a new 0.13-mile two (2)-lane undivided roadway.	N
	64	Wildlike Pkwy	Lower Tarrant Rd	Hardrock Rd	Design, acquire ROW, and construct a new 0.41-mile four (4)-lane undivided principal arterial roadway.	Y
	65	Lochmoor Dr	Bowam Roberts Rd	Lochmoor Dr	Design, acquire ROW, and construct a new 0.06-mile two (2)-lane undivided roadway.	N
	66	Ben Ave	Ben Ave	Menzer Rd	Design, acquire ROW, and construct a new 0.77-mile two (2)-lane undivided major collector roadway.	N
	67	Ben Day Murrin Rd	Blanchard Way	FM 1187	Design, acquire ROW, and construct a new 0.61-mile two (2)-lane undivided roadway.	N

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	68	Hurst Rd	Abner Lee Dr	Hurst Rd	Design, acquire ROW, and construct a new 0.43-mile two (2)-lane undivided roadway.	N
	69	Crosstimbers Ln	Bursey Rd	Old Mill Rd	Design, acquire ROW, and construct a new 0.18-mile two (2)-lane undivided local roadway.	N
	70	Rolling Ridge Dr	Secondary Gap #60	Sagebrush Ct	Design, acquire ROW, and construct a new 0.07-mile two (2)-lane undivided local roadway.	N
	71	Parkwood Dr	Carriage Hill Dr	Parkwood Dr	Design, acquire ROW, and construct a new 0.17-mile two (2)-lane undivided local roadway.	N
	72	Griggs St	Parkwood Dr	Lon Stephenson Rd	Design, acquire ROW, and construct a new 0.55-mile two (2)-lane undivided local roadway.	N
	73	Tamarron Dr	High Meadow Trl	Tamarron Dr	Design, acquire ROW, and construct a new 0.14-mile two (2)-lane undivided local roadway.	N
	74	Adelbert Dr	High Meadon Trl	Adelbert Dr	Design, acquire ROW, and construct a new 0.10-mile two (2)-lane undivided local roadway.	N
	75	Harbour View Ln	Cibolo Hills (MTP)	Lighthouse Hill Ln	Design, acquire ROW, and construct a new 0.11-mile two (2)-lane undivided local roadway.	N
	76	Oak Grove Rd	Oak Grove Rd	Secondary Gap #68	Design, acquire ROW, and construct a new 0.67-mile two (2)-lane undivided major collector roadway.	N
	77	Pecan Meadow Dr	Rendon Rd	Stephenson Levy Rd	Design, acquire ROW, and construct a new 0.43-mile two (2)-lane undivided major collector roadway.	N

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	78	Danielle Dr	Colleyville Blvd	Danielle Dr	Design, acquire ROW, and construct a new 0.11-mile two (2)-lane undivided local roadway.	N
	79	Horse Creek Rd	FM 1187 (MTP)	Horse Creek Rd	Design, acquire ROW, and construct a new 0.67-mile two (2)-lane undivided local roadway.	N
	80	Canoe Way	Rockey Creek Rd	Secondary Gaps #70	Design, acquire ROW, and construct a new 0.17-mile two (2)-lane undivided local roadway.	N
	81	Riviera Dr	Burleson Retta Rd	Bandon Dunes Dr	Design, acquire ROW, and construct a new 0.17-mile two (2)-lane undivided local roadway.	N
	82	Fox Ln	Secondary Gap #75	Fox Ln	Design, acquire ROW, and construct a new 0.27-mile two (2)-lane undivided major collector roadway.	Y
	83	Brooks Rd	Renfro St	Brooke Rd	Design, acquire ROW, and construct a new 2.14-mile two (2)-lane undivided arterial roadway.	Y
	84	Burleson Retta Rd	Burleson Retta Rd	Rendon Rd	Design, acquire ROW, and construct a new 0.86-mile two (2)-lane undivided major collector roadway.	Y
	85	Rendon Rd	Rendon Rd	Priority Gap #78	Design, acquire ROW, and construct a new 0.50-mile two (2)-lane undivided major collector roadway.	Y
	86	Karis Blvd	Tullamore Rd	Karis Blvd	Design, acquire ROW, and construct a new 0.90-mile two (2)-lane undivided major collector roadway.	N
	87	Trail St	Simbra Ln	Trail St	Design, acquire ROW, and construct a new 1.02-mile two (2)-lane undivided local roadway.	N

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	88	Belshire Dr	Davis Blvd	Precint Line Rd	Design, acquire ROW, and construct a new 1.03-mile two (2)-lane undivided major collector roadway.	Y
	89	McDonwell School Rd	Precinct Line Rd	Colleyville Blvd	Design, acquire ROW, and construct a new 2.71-mile two (2)-lane undivided arterial roadway.	Y
	90	Riverside Pkwy	Highway 360	Post N Paddock St	Design, acquire ROW, and construct a new 1.46-mile two (2)-lane undivided arterial roadway.	Y
	91	Trigger Ridge Dr	Boaz Rd	Chisholm Ranch Dr	Design, acquire ROW, and construct a new 0.13-mile two (2)-lane undivided local roadway.	N
	92	Willow Springs Rd	Highway 287	Willow Springs Rd	Design, acquire ROW, and construct a new 1.67-mile two (2)-lane undivided major collector roadway.	Y
	93	Grants Ln	Secondary Gap #43	Grants Ln	Design, acquire ROW, and construct a new 0.49-mile two (2)-lane undivided local roadway.	N
	94	Holster Hollow Rd	Ramhorn Hill Rd	Skeedaddle St	Design, acquire ROW, and construct a new 1.14-mile two (2)-lane undivided arterial roadway.	N
	95	County Line Rd	Secondary Gap #91	County Line Rd	Design, acquire ROW, and construct a new 4.15-mile two (2)-lane undivided arterial roadway.	Y
	96	Hickory St	Hickory St	Highway 287	Design, acquire ROW, and construct a new 0.79-mile two (2)-lane undivided major collector roadway.	Y

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	97	Harmonson Rd	FM 156 S	I-35	Design, acquire ROW, and construct a new 3.04-mile six (6)-lane divided arterial roadway.	N
	98	Eastview St	Eastview St	MTP	Design, acquire ROW, and construct a new 0.08-mile two (2)-lane undivided local roadway.	N
	99	Eastview St	Cunningham St (PG)	Risinger Rd	Design, acquire ROW, and construct a new 0.54-mile two (2)-lane undivided local roadway.	N
	100	Southworth Dr	Ronald Dr	Hemphill (MTP)	Design, acquire ROW, and construct a new 0.53-mile two (2)-lane undivided local roadway.	N
	101	Wolf Mountain Ln	Flagstaff Run	Oak Grove Rd	Design, acquire ROW, and construct a new 0.28-mile two (2)-lane undivided localroadway.	N
	102	Silver Lake Trl	Tammaron Trl	Oak Grove Rd	Design, acquire ROW, and construct a new 0.29-mile two (2)-lane undivided local roadway.	N
	103	Berry Rd	Priority Gap #78	Berry Rd	Design, acquire ROW, and construct a new 0.50-mile two (2)-lane undivided major collector roadway.	N
	104	Ben Bert Rd	Sam Reynolds Rd	Highway 114	Design, acquire ROW, and construct a new 1.28-mile two (2)-lane undivided arterial roadway.	N
	105	Jamesway Rd	Over Lake Dr	Basswood Dr	Design, acquire ROW, and construct a new 0.04-mile two (2)-lane undivided local roadway.	N
	106	Shaddydell Dr	Over Lake Dr	Basswood Dr	Design, acquire ROW, and construct a new 0.04-mile two (2)-lane undivided local roadway.	N

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
	107	Hartman Rd	Arbor Ave	Mansfield Hwy	Design, acquire ROW, and construct a new 0.42-mile two (2)-lane undivided major collector roadway.	Y
	108	Blue Mound Round	E Bailey Boswell Rd	E Bonds Ranch Rd	Design and construct 2.75-miles of a four (4)-lane divided principal arterial roadway.	Y
	109	Blue Mound Round	E Industrial Ave	E Terminal Rd	Design and reconstruct 2.06-miles of a four (4)-lane undivided arterial roadway.	Y
Freight Project	109	East Exchange Avenue	BU 287P Main St	Decatur Ave	Design, acquire ROW, and construct a new 0.43-mile two (2)-lane undivided major collector roadway.	Y
	110	East Exchange Avenue	Samuels Ave	Northside Dr	Design, acquire ROW, and construct a new 0.76-mile two (2)-lane divided major collector roadway.	Y
	111	Martin St	Village Creek Rd	Carey St	Design, acquire ROW, and construct a new 0.46-mile two (2)-lane divided arterial roadway.	Y
	112	Village Creek Rd	Martin Street	David Strickland Rd	Design, acquire ROW, and construct a new 0.5-mile two (2)-lane divided arterial roadway.	Y
	113	West Risinger Rd	Risinger Rd	Oak Grover Rd	Design, acquire ROW, and construct a new 1.02-mile two (2)-lane undivided major collector roadway.	Y
	114	Will Rogers Blvd	Evernman Pkwy	Risinger Rd	Design, acquire ROW, and construct a new 0.93-mile two (2)-lane divided arterial roadway.	Y

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
Railroad Crossing	115	Seminary Dr	Evans Ave	Seminary Dr	Design and retrofit of existing railroad crossing.	Y
	116	Berry St	Mississippi Ave	Berry St	Design and retrofit of existing railroad crossing.	Y
	117	Hemphill St	Page Ave	Morningside Dr	Design and retrofit of existing railroad crossing.	Y
	118	Berry St	Forest Park Blvd	Cleburne Rd	Design and retrofit of existing railroad crossing.	Y
	119	7th St	Carroll St	West Street	Design and retrofit of existing railroad crossing.	Y
	120	Sycamore School Rd	Sycamore School Blvd	Everman Pkwy	Design and retrofit of existing railroad crossing.	Y
	121	Mccart Ave	Cleburne Rd	Biddison St	Design and retrofit of existing railroad crossing.	Y
	122	Belknap & Weatherford, between Henderson St and east of Pecan St	Lexington Street	Live Oak Connector	Reconfiguration of existing roadway to alleviate traffic impacts on local trips and multimodal options.	Y

Type of Projects	No.	Facility / Project Name	From	To	Description	Coded (Y/N)
CtC Priority Projects	123	Main St, Weatherford to Convention Center	Weatherford St	9th St	Reconfiguration of existing roadway and close to vehicular traffic to improve the public space.	Y
	124	Central – Alternative and White Settlement Rd	SH199 Henderson St	IH 35W NB	Design, acquire ROW, and construct a new 1.4-mile roadway.	Y
	125	Brennan & E Exchange Ave	BU 287P Main St	Decatur Ave	Design, acquire ROW, and construct a new 0.38 mile grade separated roadway above the railyard.	Y
	126	US 280/I-35 NB ramp	Lancaster Ave	US 287NB/ IH35W	Reconfiguration of existing roadway to improve vehicular access to Buter Place.	Y

APPENDIX H

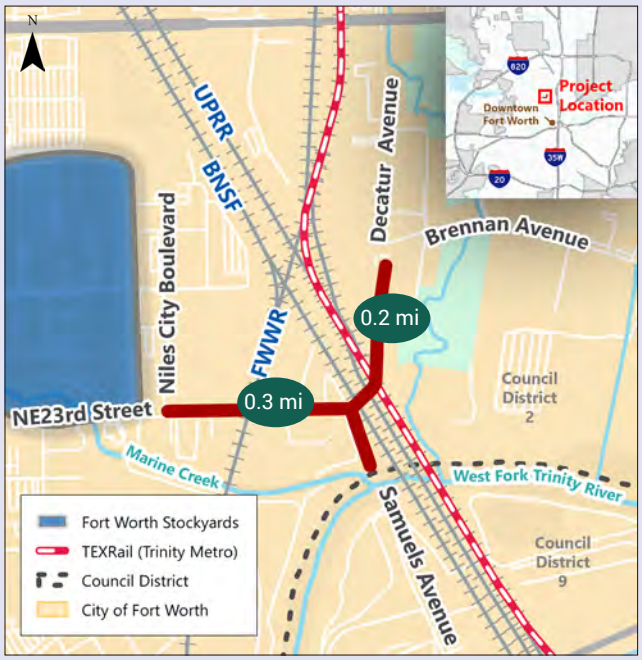
PRELIMINARY ENGINEERING ONE-PAGERS

Preliminary Engineering One-Pagers

23rd Street/Decatur Avenue Niles City Boulevard to Brennan Avenue
Altamesa Boulevard Anglin Drive to Dick Price Road
Altamesa Boulevard Campus Drive to Wichita Street
Altamesa Boulevard Forest Hill Drive to Anglin Drive
Altamesa Boulevard Lana Circle to Forest Hill Drive
Altamesa Boulevard Wichita Street to Lana Circle
Amon-Carter Extension N Great Southwest Parkway to Trinity Boulevard
Bailey Boswell Road Blue Mound Road (FM 156) to Horseman Road
Bonds Ranch Road Seg. 1 Boat Club Road (FM 1220) to N Saginaw Boulevard (Business 287)
Bonds Ranch Road Seg. 3 BNSF/UP Railroad to Wagley Robertson Road
Chapin Rd/Chapel Creek Blvd. Chapel Creek to Wispy Trail
Chapin School Rd (RM 2871) IH 20 to Rolling Hills Drive
Hemphill Street Rosedale Springs Lane to Sycamore School Road
Heritage Trace Parkway Old Decatur Road (BUS 287) to Wagley Robertson Road
Heritage Trace Parkway Wagley Robertson Road to Copper Meadow Drive
Heritage Trace Parkway Wagley Robertson Road to Boulder Oak Boulevard
John T White Road Racquet Club Drive to NW Green Oaks Boulevard
John T White Road Newport Road to Racquet Club Drive
Meacham Blvd. Ph. II West Blue Mound Road (FM 156) to IH 35W
North Beach Street Keller Haslet Road to Eagle Parkway
Old Denton Road Sawtimber Trail to Westport Parkway
Randol Mill Road Oakland Boulevard to Woodhaven Boulevard
Sendera Ranch Boulevard Avondale-Haslet Road to Diamondback Lane
Shelby Road S Race Street to Forest Hill Drive
Ten Mile Bridge Road Boat Club Road to E Bowman Roberts Road
Wagley Robertson Road W Bonds Ranch Road to Quicksilver Trail
Westport Parkway High Mesa Road to Park Vista Boulevard
Westport Parkway IH 35W to N Beach Street
West Risinger Road Hemphill Street to Crowley Road
West Risinger Road Technology Boulevard to Hemphill Street
WJ Boaz Road Boat Club Road (FM 1220) to 600 Feet East of Elkins School Road

23rd Street/Decatur Avenue

Niles City Boulevard to Brennan Avenue



PROJECT PURPOSE

The project will construct an overpass that will elevate 23rd Street, Decatur Avenue and Samuels Avenue over the UP, BNSF, TEXRail and FWWR tracks and at-grade crossings.

PROJECT OVERVIEW

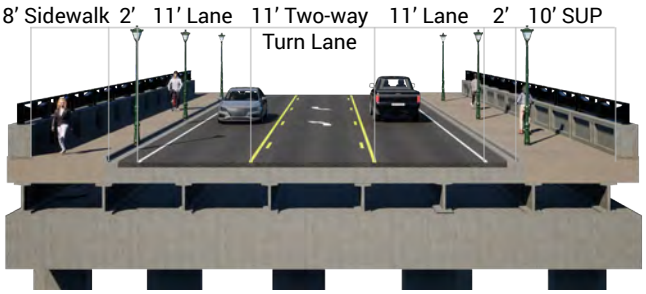
Limits / Length / Proposed Cross Section:

Niles City Blvd to Samuels Ave — 0.3 mi

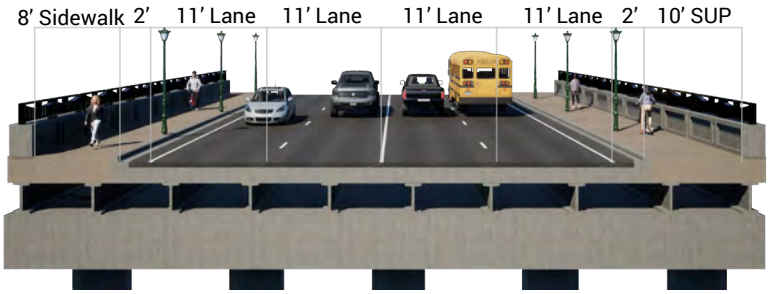
- One 11′ travel lane in each direction
- One 11′ two-way turn lane
- 8′ and 14′ shared-use path, one on each side
- 63′ right-of-way

Samuels Ave to Brennan Ave — 0.2 mi

- Two 11′ travel lanes in each direction
- 8′ and 10′ shared-use path, one on each side
- 74 right-of-way



23RD ST - TYPICAL SECTION



DECATUR AVE/SAMUELS AVE - TYPICAL SECTION

PROJECT BENEFITS

- Improves multimodal connectivity via shared-use path and sidewalk.
- Eliminates five dangerous at-grade crossings with weather-responsive bridge design.
- Reduces transportation emissions and congestion by eliminating rail-crossing idling, improves travel time, and accommodates increased passenger and freight demand.

PROJECT COSTS

$80 million
(FY2024 $)

JURISDICTION

Council District **2**

Precinct **4**

PROJECT CONTACT

transportation@fortworthtexas.gov

23rd Street/Decatur Avenue

Niles City Boulevard to Brennan Avenue

PROSPECTIVE PARTNERS

- Texas Department of Transportation
- BNSF Railway
- UP Railroad
- City of Fort Worth (2026 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Regulatory Compliance**:
This project will likely qualify for a Categorical Exclusion (CE) under NEPA as significant environmental impacts are unlikely.

» **Environmental Due Diligence**:
If new ROW will be acquired then, a Phase I Environmental Site Assessment (ESA) to identify potential sources of hazardous materials.

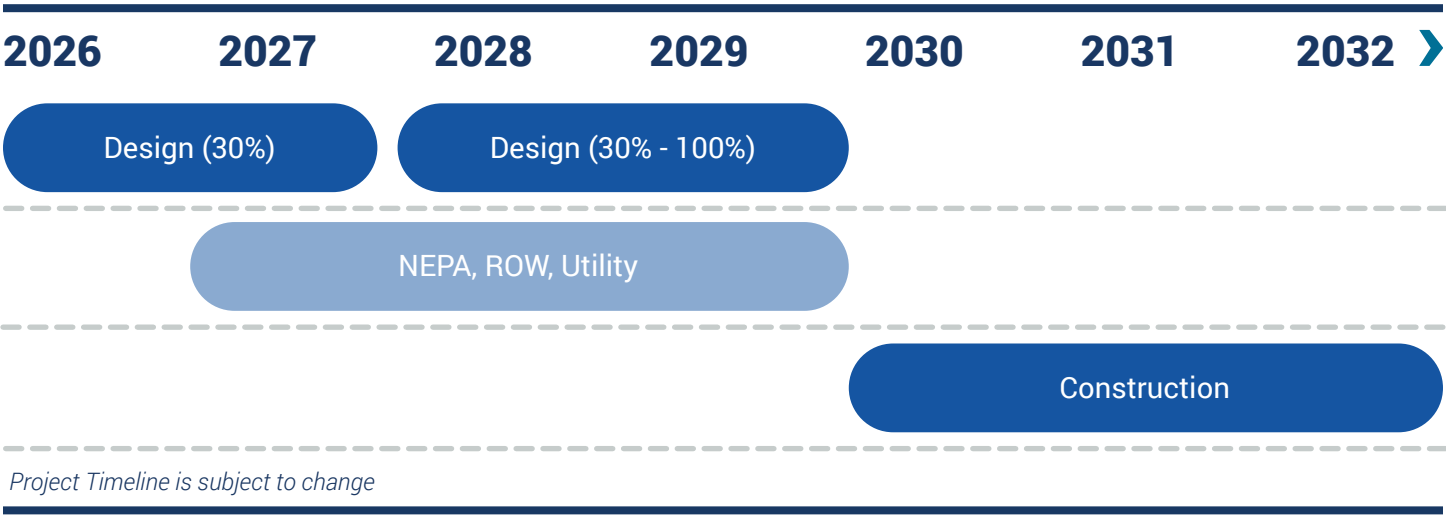
PROJECT COMPLEXITY

The top challenges include railroad coordination, ROW and utility relocation risks.



High

PROJECT TIMELINE



Project Timeline is subject to change

Altamesa Boulevard

Anglin Drive to Dick Price Road

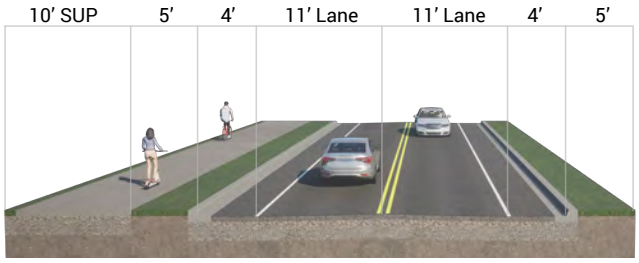


PROJECT PURPOSE

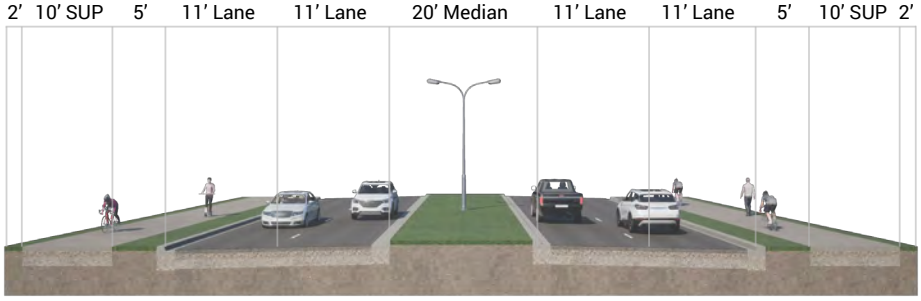
The project will construct a two-lane undivided roadway with a shared-use path on one side and a bridge crossing over a FEMA floodplain. Future improvements will upgrade the corridor to a four-lane divided roadway featuring shared-use paths on both sides, a raised median, and a twin bridge.

PROJECT OVERVIEW

Limits: Anglin Dr to Dick Price Rd
Length: ~1.2 miles
Proposed Cross Section:
» One 11′ travel lane in each direction
» One 10′ shared-use path
» 120′ right-of-way



ALTAMESA BLVD (PHASE I) - TYPICAL SECTION



ALTAMESA BLVD (ULTIMATE) - TYPICAL SECTION

PROJECT BENEFITS

- Expands East–West access by connecting Lon Stephenson Road to Dick Price Road, enhancing mobility parallel to IH-20.
- Improves regional connectivity by linking Fort Worth, Forest Hill, Kennedale, and Arlington, offering an alternative to IH-20.
- Promotes active transportation and supports industrial growth, including industrial and distribution centers.

PROJECT COSTS

$137 million
(FY 2034 $)

JURISDICTION

Council District **8**
Precinct **2**

PROJECT CONTACT

transportation@fortworthtexas.gov

Altamesa Boulevard

Anglin Drive to Dick Price Road

PROSPECTIVE PARTNERS

- North Central Texas Council of Governments (NCTCOG)
- Tarrant County
- City of Fort Worth (2026 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Aquatic Resources**:
Village Creek is a named perennial waterbody.

» **Threatened and Endangered Species**:
Perennial streams provide habitat to endangered species and may require consultation with the Texas Parks and Wildlife Department.

» **Environmental Due Diligence**:
A large landfill and several oil and gas wells were identified, which may present a Recognized Environmental Condition (REC).

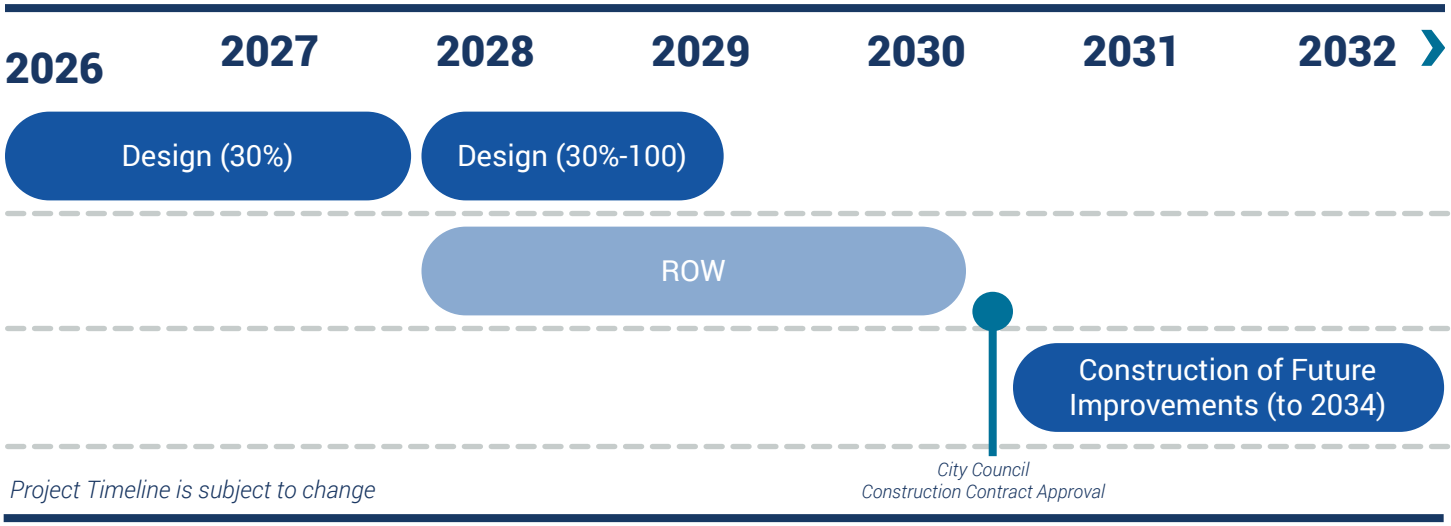
PROJECT COMPLEXITY

The top challenges include securing ROW, addressing environmental permitting requirements related to floodplain impacts, and executing complex bridge construction to accommodate large earthhauling equipment near the city landfill.



Very High

PROJECT TIMELINE



Project Timeline is subject to change

Altamesa Boulevard

Campus Drive to Wichita Street



PROJECT PURPOSE

The project will close a key gap in Fort Worth's roadway network with a Phase I (0.3 mile) and an Ultimate section (1.2 miles).

PROJECT OVERVIEW

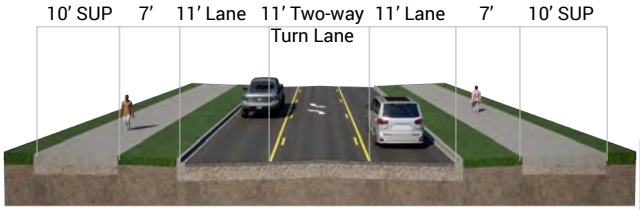
Limits / Length / Proposed Cross Section:

FWWR to the creek crossing (Phase I) — 0.3 mi

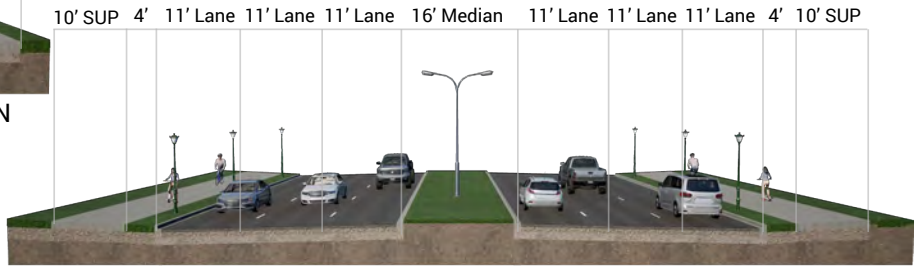
- One 11' travel lane in each direction
- One 11' two-way turn lane
- One 10' shared-use path on both sides
- 80' right-of-way

Campus Drive to Wichita Street — 1.2 mi

- Three 11' travel lanes in each direction
- 16' Median
- One 10' shared-use path on both sides
- 148' right-of-way



ALTAMESA BLVD (PHASE I) - TYPICAL SECTION



ALTAMESA BLVD (ULTIMATE) - TYPICAL SECTION

PROJECT BENEFITS

- Provides a direct east-west connection, reducing travel delays and enhancing regional access across southern Fort Worth.
- Reduces rail-related risks by constructing a future grade separation to eliminate a dangerous at-grade rail crossing. A bridge will be constructed over the creek.
- Closes a major gap in the arterial grid, creating an alternative to I-20 and linking key communities, and supporting job growth and investment near the Carter Industrial Park.

PROJECT COSTS

$166 million (Phase I & Ultimate)
(FY 2030 $)

JURISDICTION

Council District **8**

Precinct **1**

PROJECT CONTACT

transportation@fortworthtexas.gov

FORT WORTH

www.movingamillion.org

Altamesa Boulevard

Campus Drive to Wichita Street

PROSPECTIVE PARTNERS

- North Central Texas Council of Governments (NCTCOG)
- Tarrant County
- Developer
- City of Fort Worth (2026 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Aquatic Resources**:
An unnamed tributary to Village Creek crosses the proposed alignment.

» **Threatened and Endangered Species**:
A habitat assessment is recommended due to potential impacts to undeveloped land within the project area.

» **Environmental Due Diligence**:
The presence of a commercial facility and railroad within the project vicinity could represent a Recognized Environmental Condition (REC). Phase I Environmental Site Assessment (ESA) is recommended.

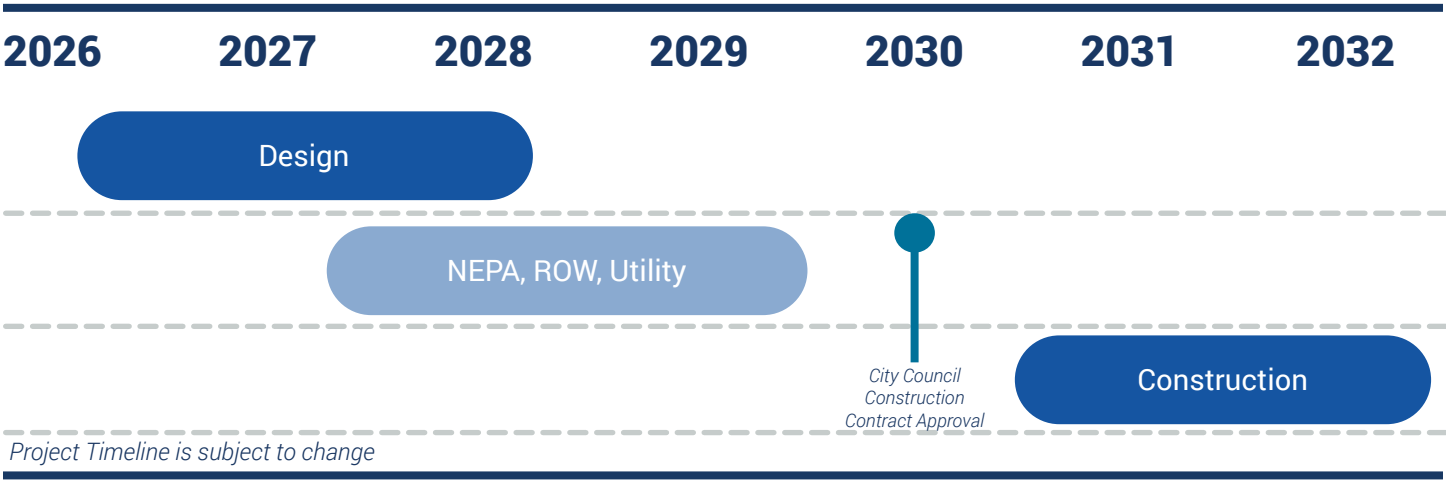
PROJECT COMPLEXITY

The top challenges include railroad involvement, floodplain present, NEPA involvement, ROW constraints, utility relocation risks, 2 bridges in the project limits and retaining wall need.



Very High

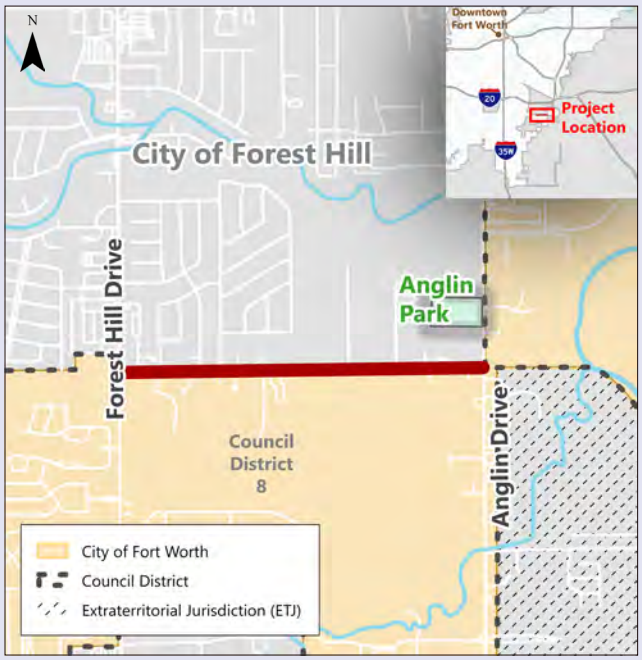
PROJECT TIMELINE



Project Timeline is subject to change

Altamesa Boulevard

Forest Hill Drive to Anglin Drive

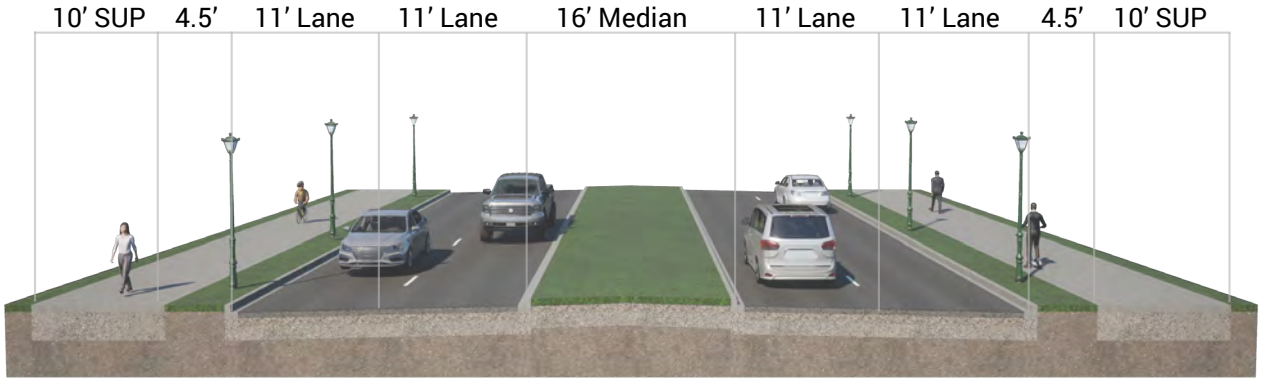


PROJECT PURPOSE

The project will convert a two-lane undivided roadway to a four-lane divided roadway with shared use paths to enhance mobility, safety, and accessibility.

PROJECT OVERVIEW

Limits: Forest Hill Dr to Anglin Dr
Length: ~1 mile
Proposed Cross Section:
» Two 11′ travel lanes in each direction
» 16′ Median
» 10′ shared-use path on both sides
» 94′ - 126′ right-of-way



ALTAMESA BLVD - TYPICAL SECTION

PROJECT BENEFITS

- Reduces traffic congestion by expanding from two lanes to four lanes with a median and enhancing regional connectivity across southern Fort Worth.
- Reduces safety risks with a divided roadway design, and upgraded street lighting.
- Incorporates dedicated shared-use paths on both sides of the roadway, promoting walkability and cycling accessibility.

PROJECT COSTS

$38.9 million
(FY 2030 $)

JURISDICTION

Council District **8**
Precinct **1**

PROJECT CONTACT

transportation@fortworthtexas.gov

Altamesa Boulevard

Forest Hill Drive to Anglin Drive

PROSPECTIVE PARTNERS

- Tarrant County
- City of Forest Hill
- City of Fort Worth (2026 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Wetland Considerations**:
Historic aerial photographs depict undeveloped land that may have wetlands with a surface water connection to a Relatively Permanent Water (RPW). A wetland delineation and jurisdictional determination are recommended.

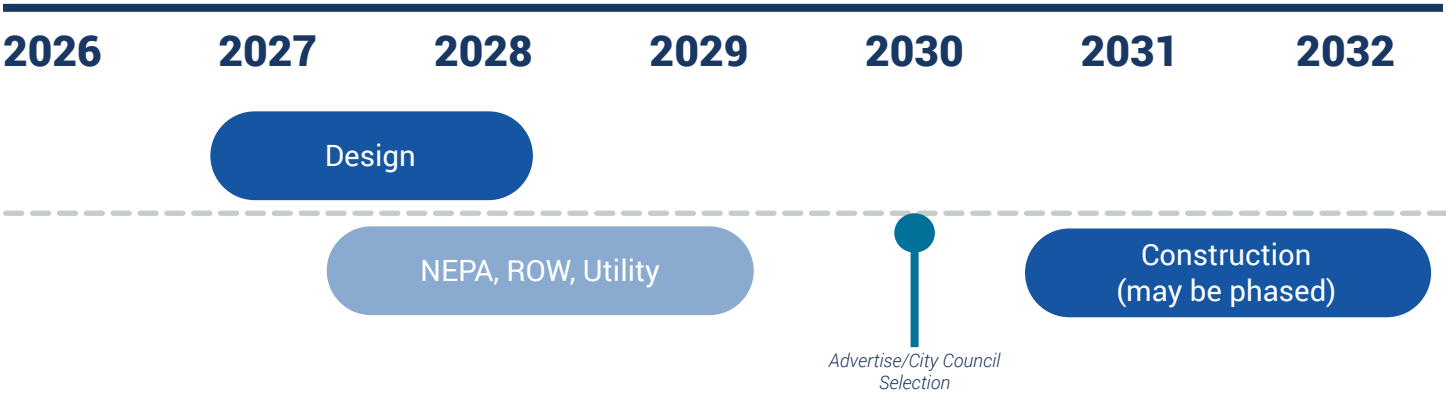
PROJECT COMPLEXITY

The top challenges include ROW constraints with many residential properties throughout.



Medium

PROJECT TIMELINE



Project Timeline is subject to change

Altamesa Boulevard

Lana Circle to Forest Hill Drive

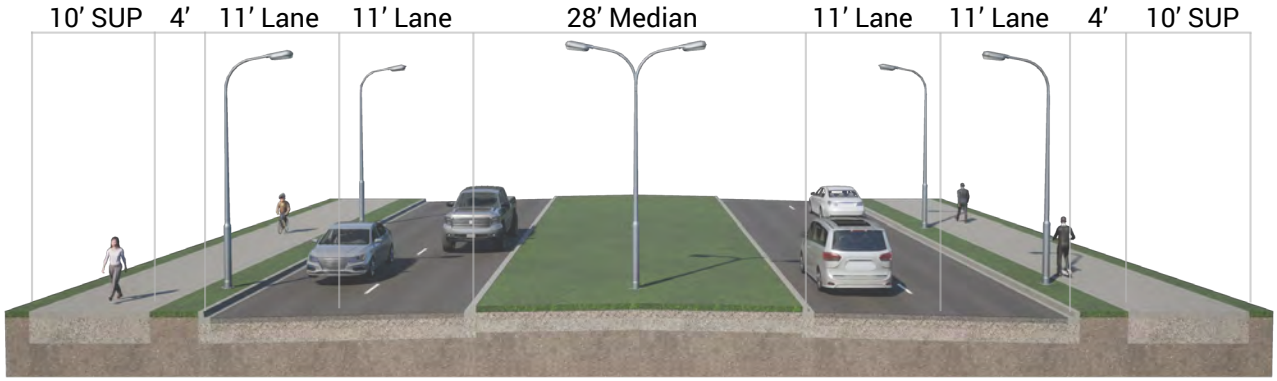


PROJECT PURPOSE

The project will enhance connectivity and mobility by constructing a four-lane divided roadway on Altamesa Boulevard approximately 0.6 miles from its current terminus at Lana Circle to meet Forest Hill Drive at Lon Stephenson Road.

PROJECT OVERVIEW

Limits: Lana Cir to Forest Hill Dr
Length: ~0.6 mile
Proposed Cross Section:
» Two 11′ travel lanes in each direction
» 28′ Median
» 10′ shared-use path on both sides
» 117′ right-of-way



ALTAMESA BLVD - TYPICAL SECTION

PROJECT BENEFITS

- Provides a key linkage to an area planned for residential and neighborhood commercial uses, and enhancing regional access across southern Fort Worth.
- Reduces through traffic on residential streets and increases safety through a divided roadway design.
- Supports economic growth by improving access for local businesses and freight movement.

PROJECT COSTS

$31.7 million
(FY 2030 $)

JURISDICTION

Council District **8**
Precinct **1**

PROJECT CONTACT

transportation@fortworthtexas.gov

Altamesa Boulevard

Lana Circle to Forest Hill Drive

PROSPECTIVE PARTNERS

- North Central Texas Council of Governments (NCTCOG)
- Tarrant County
- City of Fort Worth (2026 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Threatened and Endangered Species:**
A threatened and endangered species habitat assessment is recommended - perennial streams provide habitat to endangered species.

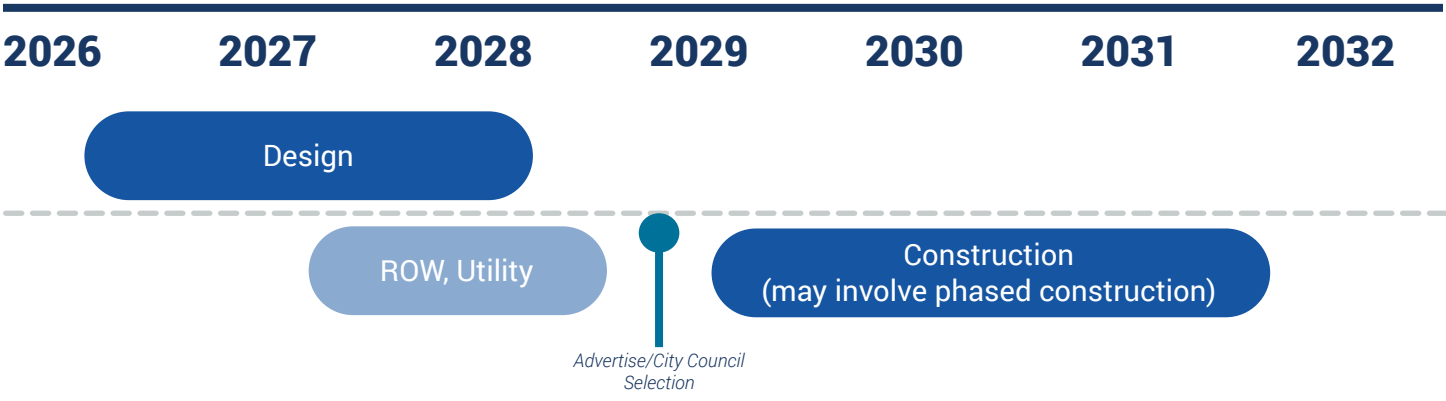
PROJECT COMPLEXITY

The top challenges include ROW constraints with nearby single family residences.



Very Low

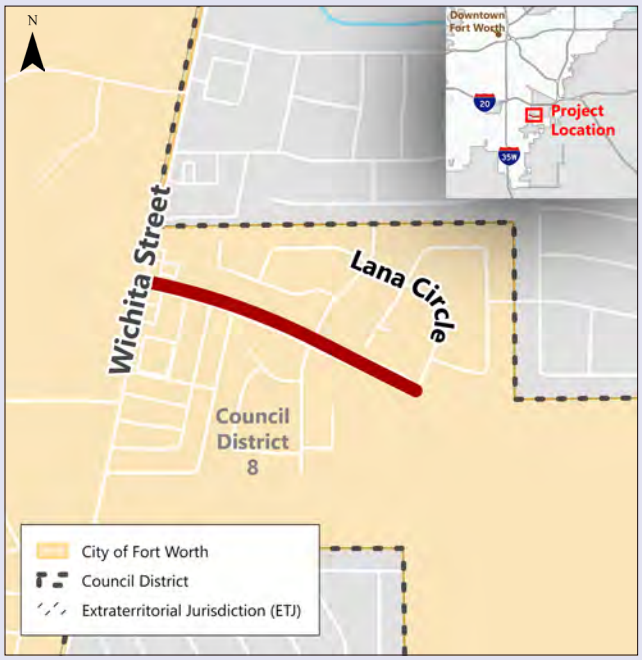
PROJECT TIMELINE



Project Timeline is subject to change

Altamesa Boulevard

Wichita Street to Lana Circle

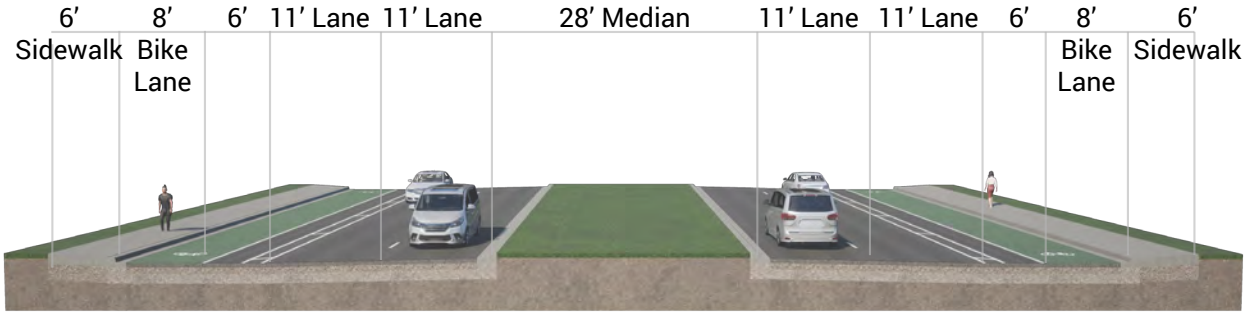


PROJECT PURPOSE

The project will close a key gap in Fort Worth's roadway network by restriping the existing pavement to create a four-lane divided arterial roadway to improve mobility, safety, and pedestrian access.

PROJECT OVERVIEW

Limits: Wichita St to Lana Cir
Length: ~0.3 mile
Proposed Cross Section:
» Two 11′ travel lanes in each direction
» 28′ Median
» 8′ buffered bike lane on both sides
» 6′ sidewalk on both sides
» 120′ right-of-way



ALTAMESA BLVD - TYPICAL SECTION

PROJECT BENEFITS

- Provides a direct east-west connection, reducing travel delays and enhancing regional access across southern Fort Worth.
- Reduces congestion, improves travel times, and accommodates increased passenger demand.
- Incorporates dedicated sidewalks and bike lanes on both sides of the roadway, promoting walkability and cycling accessibility.

PROJECT COSTS

$3.3 million
(FY 2030 $)

JURISDICTION

Council District **8**
Precinct **1**

PROJECT CONTACT

transportation@fortworthtexas.gov

Altamesa Boulevard

Wichita Street to Lana Circle

PROSPECTIVE PARTNERS

- City of Forest Hill
- City of Fort Worth (2026 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Environmental Due Diligence:**
Texas Commission on Environmental Quality lists a Leaking Petroleum Storage Tank (LPST) on the west end of the project which is a common Recognized Environmental Condition (REC).

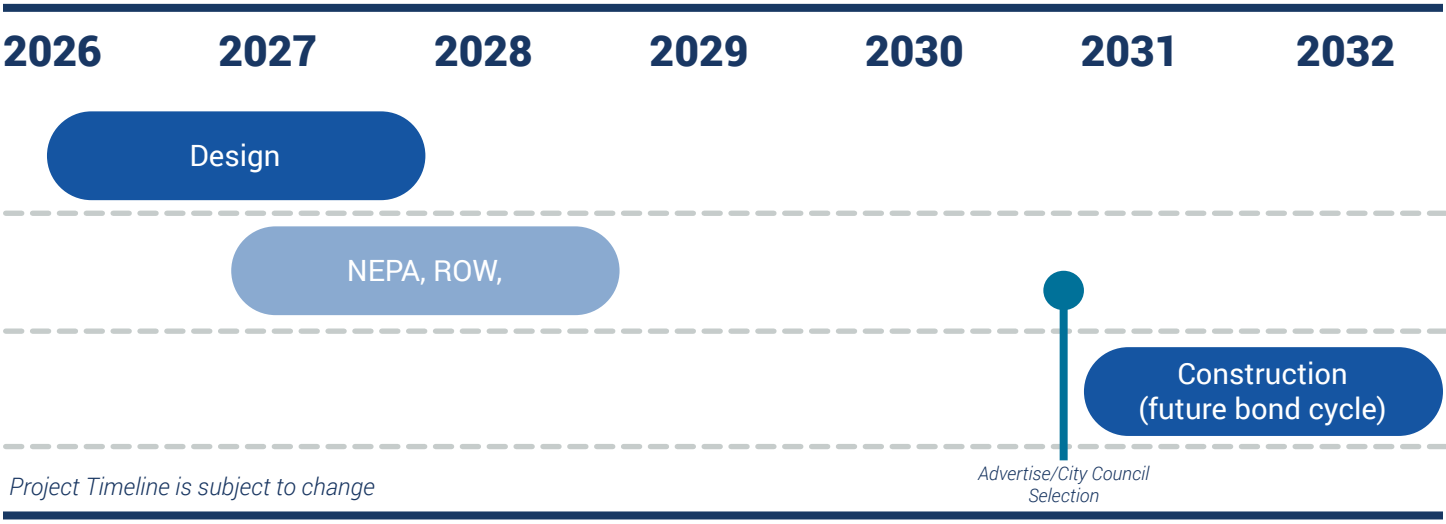
PROJECT COMPLEXITY

The top challenges include ROW constraints from single family residences and a church.



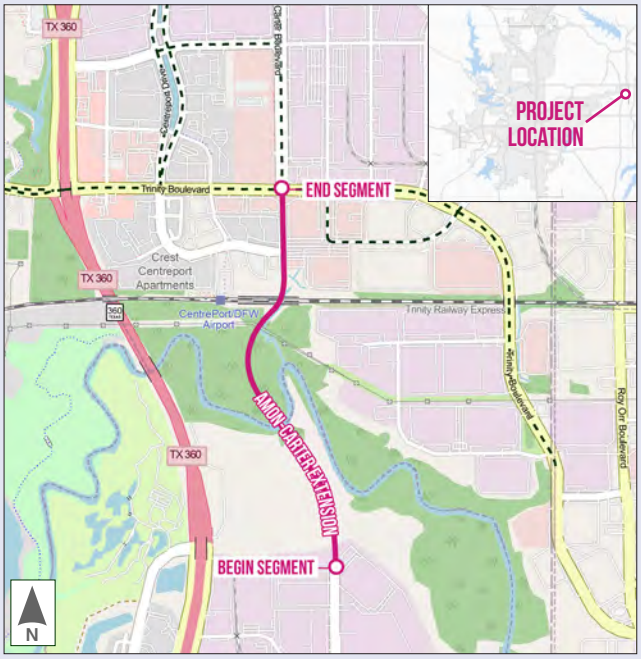
Low

PROJECT TIMELINE



Amon-Carter Blvd Extension

N Great Southwest Parkway to Trinity Boluvard



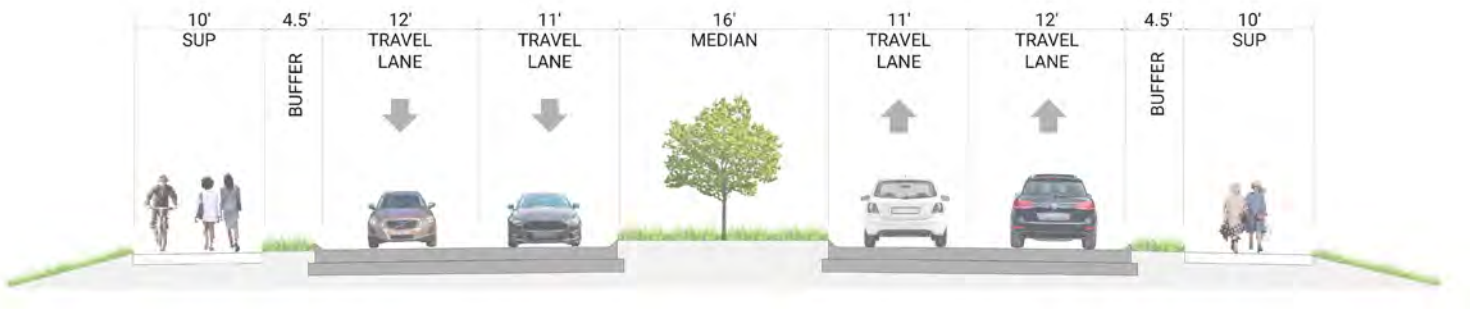
PROJECT PURPOSE

Amon-Carter Blvd Extension will be a new 4-lane divided roadway between N Great Southwest Parkway and Trinity Boluvard. Proposed improvements include an elevated roadway section and an at-grade roadway section. These upgrades are intended to enhance connectivity and access, and support growth.

PROJECT OVERVIEW: AT GRADE ROADWAY

Limits: N Great Southwest Parkway to Trinity Boluvard
Length: ~1.29 miles
Proposed Cross Section:

» Two 11’ to 12’ travel lanes in each direction
» 4.5-feet buffer on each side of the roadway
» 10’ shared-use paths on both sides
» 110’ right-of-way



AMON-CARTER BLVD EXTENSION - PROPOSED TYPICAL SECTION: AT GRADE ROADWAY

PROJECT DRIVERS

- Development activity in the area, including Preliminary Plats and Community Facilities Agreements (CFA).
- Serves local traffic CentrePort/DFW Airport Station (located on Statler Blvd) and residential and office and industrial sites. This also improves emergency response teams accessing the south end of the project.
- Connects to the new Trinity BLVD Road corridor to the south, creating access to S.H.360 and I30, connecting Fort Worth and Grand Prairie.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$269 million

JURISDICTION

Council District
5

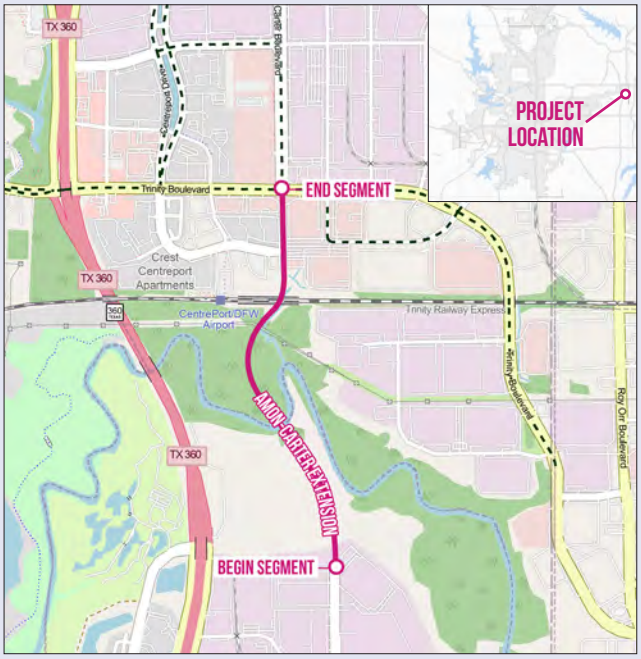
Precinct
1

PROJECT CONTACT

transportation@fortworthtexas.gov

Amon-Carter Blvd Extension

N Great Southwest Pkwy to Trinity Blvd



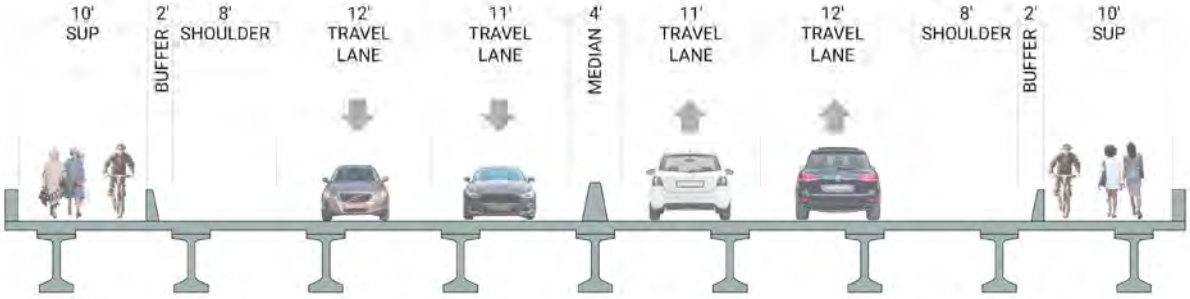
PROJECT PURPOSE

Amon-Carter Blvd Extension will be a new 4-lane divided roadway between N Great Southwest Pkwy and Trinity Blvd. Proposed improvements include an elevated roadway section and an at-grade roadway section. These upgrades are intended to enhance connectivity and access, and support growth.

PROJECT OVERVIEW: ELEVATED ROADWAY

Limits: N Great Southwest Pkwy to Trinity Blvd
Length: ~1.23 miles
Proposed Cross Section:

» Two 11' to 12' travel lanes in each direction
» 2-feet buffer on each side of the roadway
» 10' shared-use paths on both sides
» 110' right-of-way



AMON-CARTER BLVD EXTENSION - TYPICAL SECTION: ELEVATED ROADWAY

PROJECT DRIVERS

- Development activity in the area, including Preliminary Plats and Community Facilities Agreements (CFA).
- Serves local traffic CentrePort/DFW Airport Station (located on Statler Blvd) and residential and office and industrial sites. This also improves emergency response teams accessing the south end of the project.
- Connects to the new Trinity BLVD Road corridor to the south, creating access to S.H.360 and I30, connecting Fort Worth and Grand Prairie.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$265 million

JURISDICTION

Council District
5

Precinct
1

PROJECT CONTACT

transportation@fortworthtexas.gov

Bailey Boswell Road

Blue Mound Road (FM 156) to Horseman Road

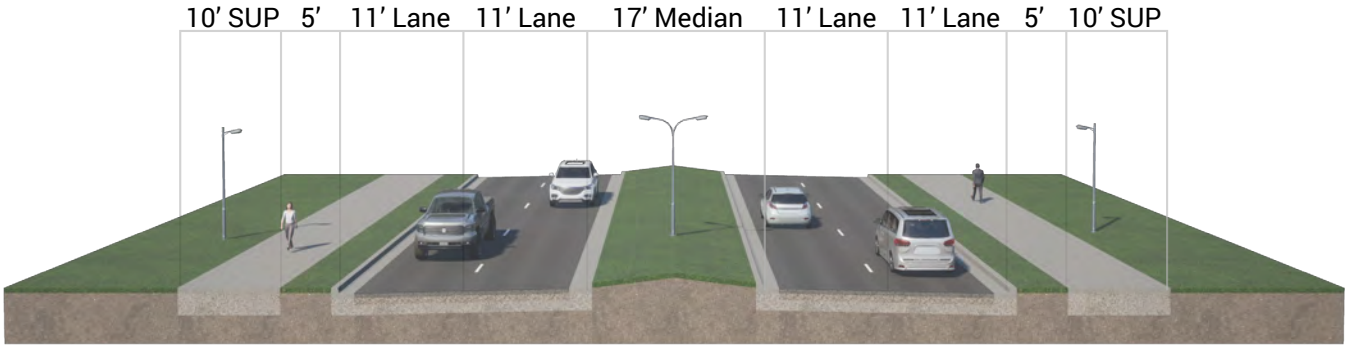


PROJECT PURPOSE

The project will enhance connectivity in Council District 7 by constructing a new four-lane divided roadway and a new bridge over Big Fossil Creek between Blue Mound Road (FM 156) and Horseman Road.

PROJECT OVERVIEW

Limits: Blue Mound Rd (FM 156) to Horseman Rd
Length: ~0.7 miles
Proposed Cross Section:
» Two 11′ travel lanes in each direction
» 17′ raised median
» 10′ shared-use path on both sides
» 108′ - 120′ right-of-way



BAILEY BOSWELL BLVD - TYPICAL SECTION

PROJECT BENEFITS

- Eliminates the Bailey Boswell roadway gap at Big Fossil Creek, and extends recently built culverts and constructs other essential drainage improvements.
- Increases traffic capacity in the area, and reduces congestion on parallel roadways (Basswood Boulevard and E. Harmon Road).
- Provides direct connectivity for pedestrians traveling from neighborhoods to Highland Middle School and neighboring facilities.

PROJECT COSTS

$44 million
(FY 2029 $)

JURISDICTION

Council District **7**
Precinct **3, 4**

PROJECT CONTACT

transportation@fortworthtexas.gov

Bailey Boswell Road

Blue Mound Road (FM 156) to Horseman Road

PROSPECTIVE PARTNERS

- Private Partners
- City of Fort Worth (2026 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Aquatic Resources**:
Big Fossil Creek and its tributary are perennial/ intermittent waterbodies.

» **Environmental Due Diligence**:
Several oil and gas wells and a plant nursery were identified through the Texas Railroad Commission and review of County Appraisal District data.

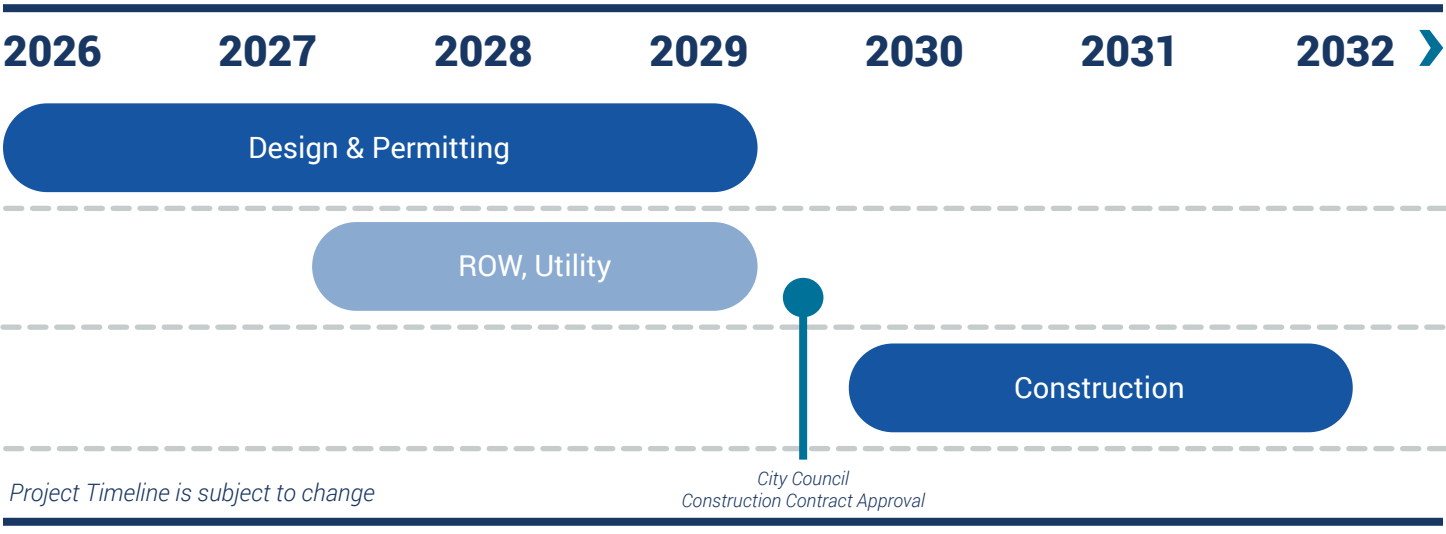
PROJECT COMPLEXITY

The top challenges include the presence of active water channels and flood-prone areas, the potential for saturated subsoils, and ROW concerns with Tree Nursery on Blue Mound Rd near connection.



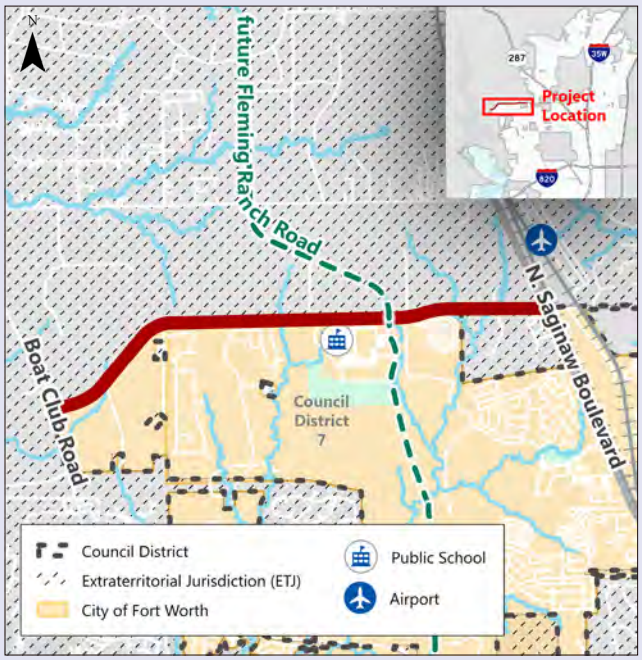
Medium

PROJECT TIMELINE



Bonds Ranch Road - Segment 1

Boat Club Rd (FM 1220) to N Saginaw Blvd (Business 287)

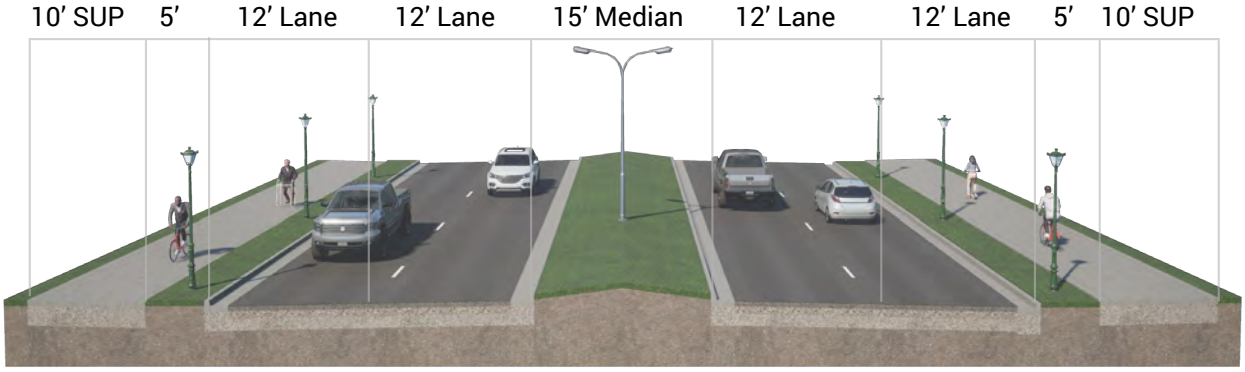


PROJECT PURPOSE

The project will widen 3.5 miles of Bonds Ranch Road from a two-lane roadway to a four-lane divided roadway.

PROJECT OVERVIEW

Limits: Boat Club Rd (FM 1220) to N Saginaw Blvd (Business 287)
Length: ~3.5 miles
Proposed Cross Section:
» Two 12′ travel lanes in each direction
» 15′ raised median
» 10′ shared-use path on both sides
» 116′ right-of-way



BONDS RANCH ROAD (SEGMENT 1) - TYPICAL SECTION

PROJECT BENEFITS

- Enhances east-west connectivity in far north Fort Worth between FM 1220 and N. Saginaw Boulevard (Business 287).
- Delivers infrastructure improvements aligned with ongoing residential development in the surrounding area.
- Expands Bonds Ranch Road to meet growing travel demand.

PROJECT COSTS

$67 million
(FY 2026 $)

JURISDICTION

Council District **7**
Precinct **4**

PROJECT CONTACT

transportation@fortworthtexas.gov

Bonds Ranch Road - Segment 1

Boat Club Rd (FM 1220) to N Saginaw Blvd (Business 287)

PROSPECTIVE PARTNERS

- North Central Texas Council of Governments (NCTCOG)
- Tarrant County
- Developer
- City of Fort Worth (2026 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Aquatic Resources**:
The project crosses at least five streams with varying flow regimes. Perennial streams are classified as Relatively Permanent Waters (RPWs).

» **Floodplain Considerations:**
Portions of the project fall within FEMA-designated Zone A and Zone AE floodplains, which will impact drainage design and require coordination during environmental review and permitting.

PROJECT COMPLEXITY

The top challenges include floodplain impacts, utility relocations, and coordination with developers and stakeholders.



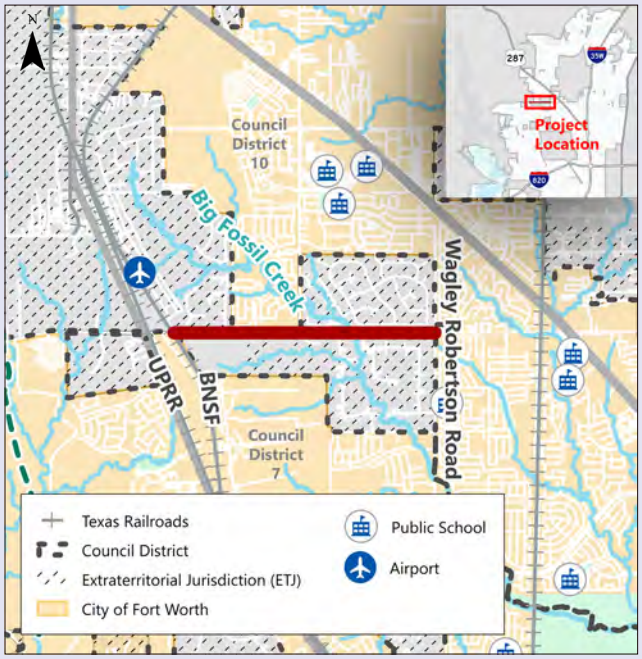
Medium

PROJECT TIMELINE



Bonds Ranch Road - Segment 3

BNSF/UP Railroad to Wagley Robertson Road

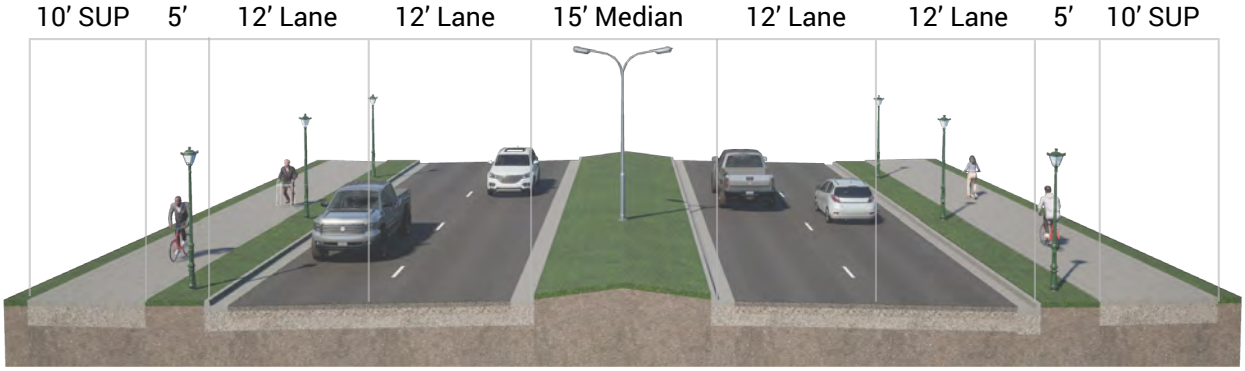


PROJECT PURPOSE

The project will reconstruct a 1.9-mile segment from east of the BNSF/UP Railroad to Wagley Robertson Road, converting the existing two-lane roadway into a four-lane divided concrete roadway, including a new bridge culvert at Big Fossil Creek.

PROJECT OVERVIEW

Limits: BNSF/UP Railroad to Wagley Robertson Rd
Length: ~1.9 miles
Proposed Cross Section:
» Two 12' travel lanes in each direction
» 15' raised median
» 10' shared-use path on both sides
» 116' - 140' right-of-way



BONDS RANCH RD (SEGMENT 3) - TYPICAL SECTION

PROJECT BENEFITS

- Adds a signalized intersection at Willow Springs Road and improves travel time reliability.
- Accommodates rapid residential and commercial development in the surrounding area.
- Expands Bonds Ranch Road to meet growing travel demand in far north Fort Worth.

PROJECT COSTS

$37 million
(FY 2029 $)

JURISDICTION

Council District
7, 10

Precinct
4

PROJECT CONTACT

transportation@fortworthtexas.gov

Bonds Ranch Road - Segment 3

BNSF/UP Railroad to Wagley Robertson Road

PROSPECTIVE PARTNERS

- Tarrant County
- City of Fort Worth (2026 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Floodplain Considerations:**
Portions of the project fall within FEMA-designated A/E floodplains, which may affect drainage design and require coordination during environmental review and permitting.

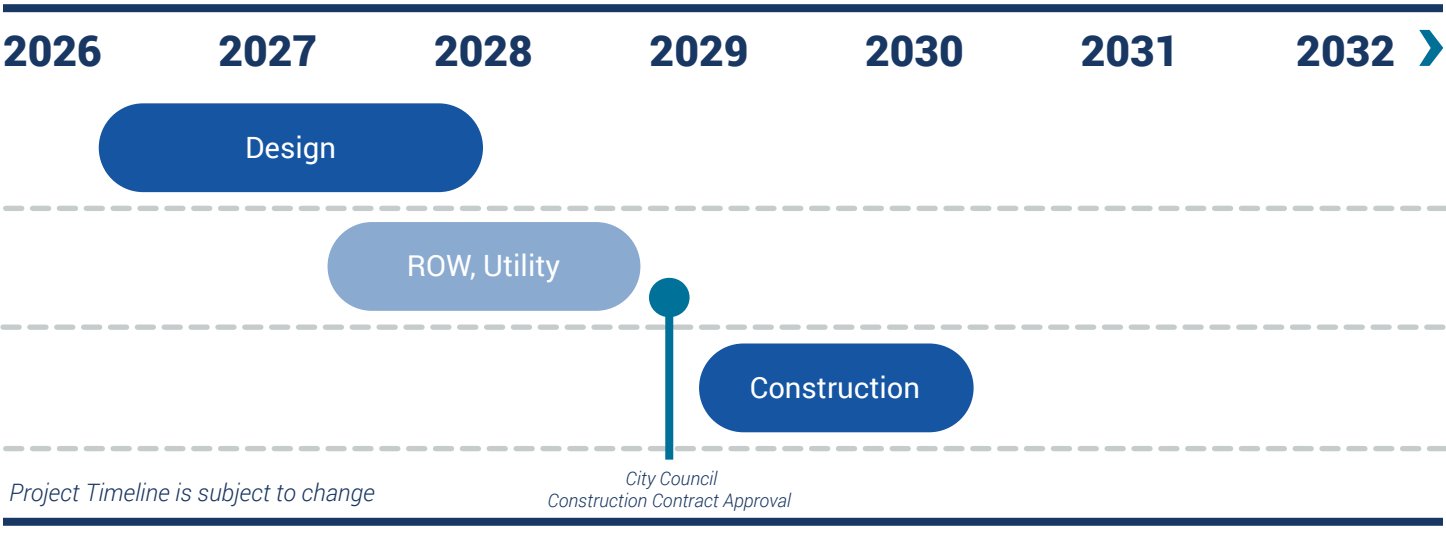
PROJECT COMPLEXITY

The top challenges include ROW constraints, insufficient staging areas, traffic control plan concerns.



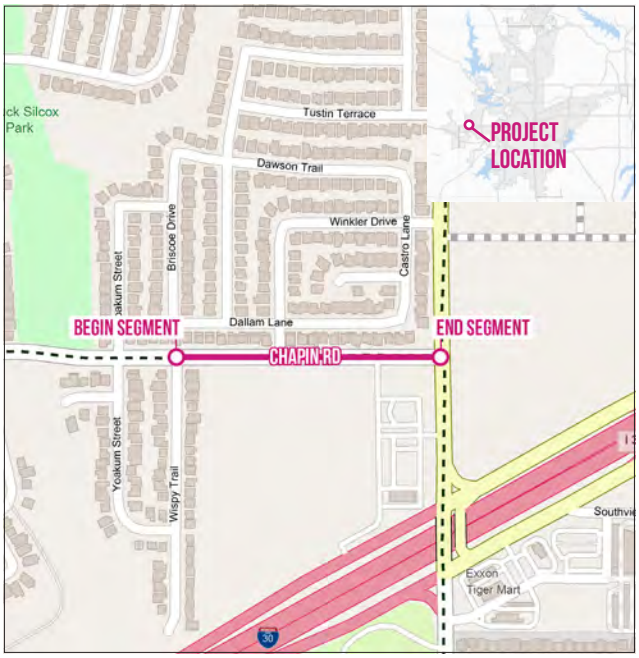
Very Low

PROJECT TIMELINE



Chapin Rd/Chapel Creek Blvd

Chapel Creek to Wispy Trail



PROJECT PURPOSE

Chapin Rd will be widened and reconstructed from a 3-lane undivided roadway with a center turn lane to a 5-lane undivided roadway with a center turn lane from Wispy Trl to Chapel Creek Blvd. The project supports local connectivity between neighborhoods, providing a continuous corridor from Whitetail Chase Drive to Chapel Creek Boulevard.

PROJECT OVERVIEW

Limits: Wispy Trail to Chapel Creek Blvd
Length: ~0.24 miles
Proposed Cross Section:
» Five 11' travel lanes southern end
» Two-way Center Turn Lane
» 6' sidewalk southern end
» 110' right-of-way

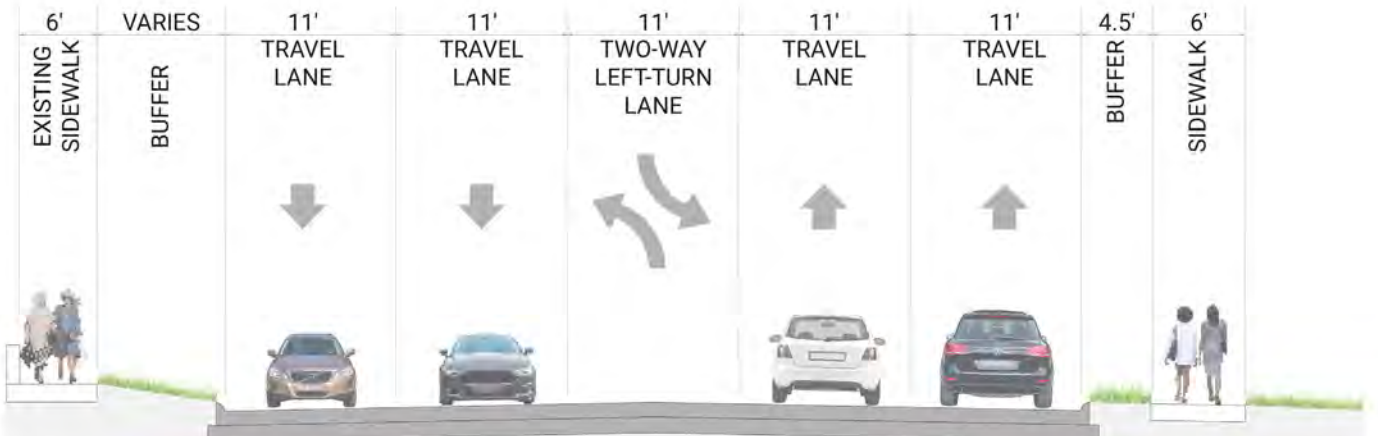
EXISTING CONDITIONS

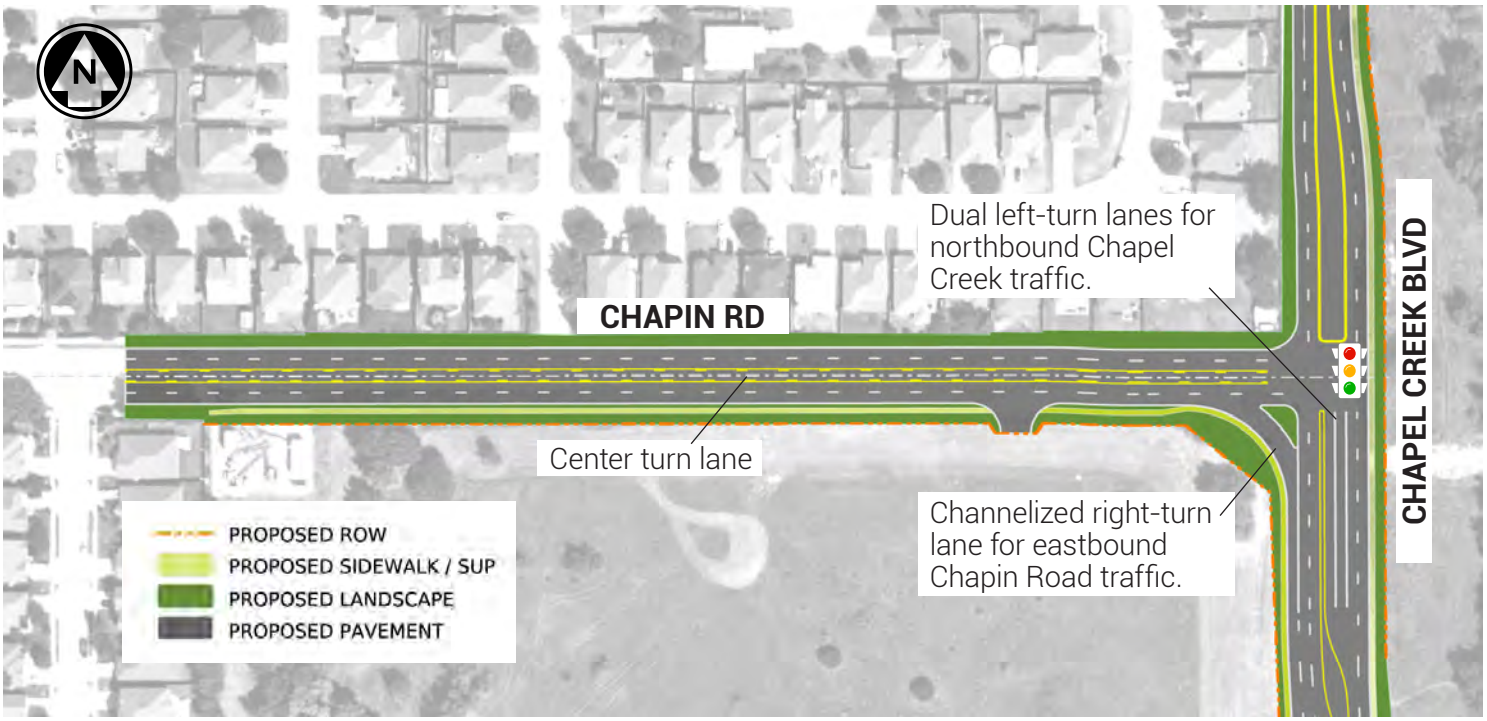
- Current width varies from **55 to 57 feet** within existing right-of-way.
- **Lacks adequate capacity** for peak-hour volumes and future development traffic.
- Inconsistent cross-section with **missing sidewalks** on the south side.
- Intersection with Chapel Creek Boulevard experiences **congestion and operational delays.**

PROPOSED IMPROVEMENTS

- Reconstruct as **five 11-foot lanes**, maintaining a center two-way left-turn lane.
- Intersection reconfiguration at Chapel Creek Blvd to include **dual left-turn lanes** for northbound Chapel Creek traffic and a **channelized right-turn lane** for eastbound Chapin Road traffic.
- Closed drainage system, **new street lighting,** and updated pavement markings.

CHAPIN RD/CHAPEL CREEK BLVD - TYPICAL SECTION





CHAPIN RD/CHAPEL CREEK BLVD - CONCEPTUAL DESIGN

COMMUNITY AND COORDINATION

Public involvement will engage residents of **Pamila Springs, Chapin Village, Homestead, and Westview** subdivisions, along with the **Uplift Elevate Preparatory School, Chapel Creek Neighborhood Association,** and **Chapel Creek Business Park**.

Coordination will be required with **utility providers, property owners**, and a **communications tower** located within the proposed ROW.

PROJECT BENEFITS

- Improves safety and traffic operations for neighborhood and school traffic.
- Enhances multimodal access and pedestrian connectivity.
- Supports future growth and development along the Chapel Creek corridor.
- Fills a key **capacity and cross-section gap** between Whitetail Chase Drive and Chapel Creek Boulevard.

PROJECT COSTS

Estimated Project Delivery Cost
$21 million

JURISDICTION

Council District
7

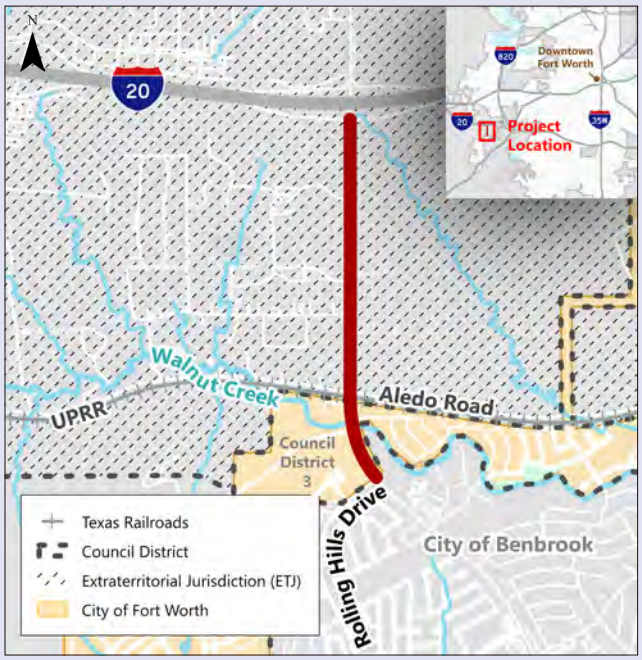
Precinct
4

PROJECT CONTACT

transportation@fortworthtexas.gov

Chapin School Road (RM 2871)

IH 20 to Rolling Hills Drive

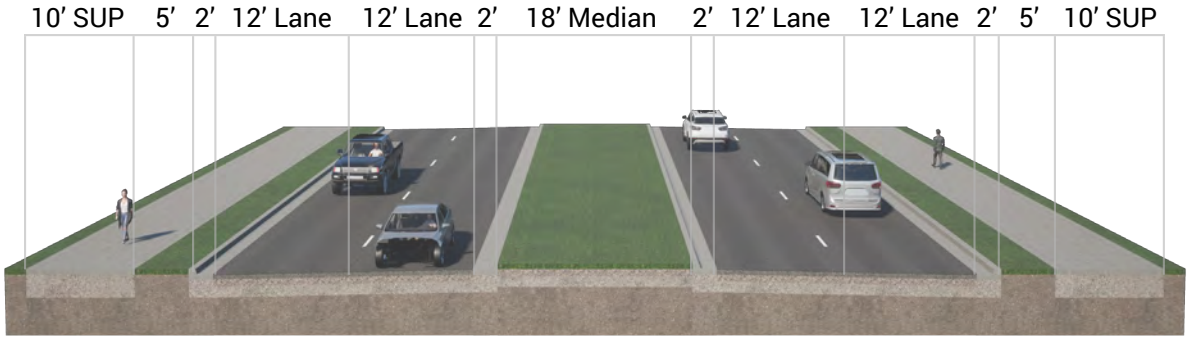


PROJECT PURPOSE

The project will widen the existing 1.2-mile two-lane roadway to a four-lane divided roadway and construct a bridge over the UP Railroad and Aledo Road intersection. The Texas Department of Transportation is constructing this project.

PROJECT OVERVIEW

Limits: IH 20 to Rolling Hills Dr
Length: ~1.2 miles
Proposed Cross Section:
» Two 12′ travel lanes in each direction
» 18′ median
» 10′ shared-use path on both sides
» 120′ - 330′ right-of-way



CHAPIN SCHOOL RD (RM 2871) - TYPICAL SECTION

PROJECT BENEFITS

- Alleviates congestion on RM 2871 and improves traffic flow in southwest Fort Worth.
- Eliminates the at-grade rail crossing with a new bridge structure and improves pedestrian and bicycle connectivity in a rapidly growing residential area.
- Converts rural cross-section to urban design with curb and gutter drainage.

PROJECT COSTS

$115 million
(FY 2029 $)

JURISDICTION

Council District **3**
Precinct **2, 4**

PROJECT CONTACT

transportation@fortworthtexas.gov

Chapin School Road (RM 2871)

IH 20 to Rolling Hills Drive

PROSPECTIVE PARTNERS

- Texas Department of Transportation
- North Central Texas Council of Governments (NCTCOG)
- Tarrant County
- City of Benbrook
- City of Fort Worth (2026 Bond)

ENVIRONMENTAL CONSIDERATIONS

» **Aquatic Resources:**
The project area is located within the 100-year floodplain associated with Walnut Creek.

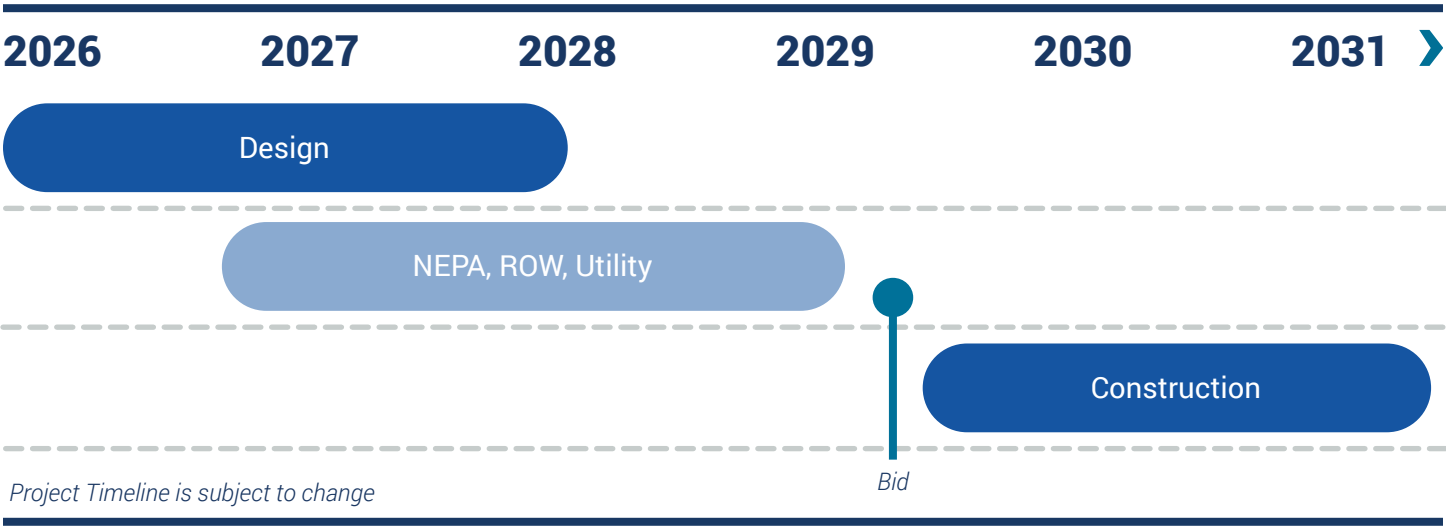
PROJECT COMPLEXITY

The top challenges include UPRR coordination, multi-jurisdictional involvement, utility relocation, and ROW impacts.



High

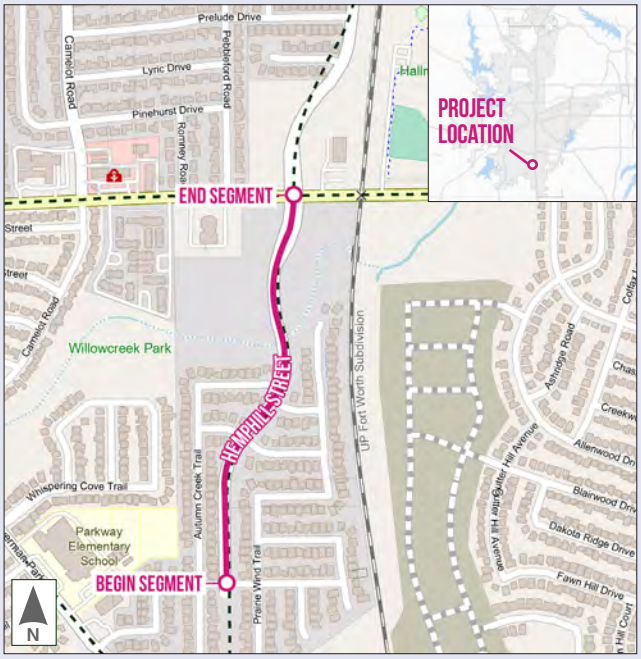
PROJECT TIMELINE



Project Timeline is subject to change

Hemphill Street

Rosedale Springs Lane to Sycamore School Road



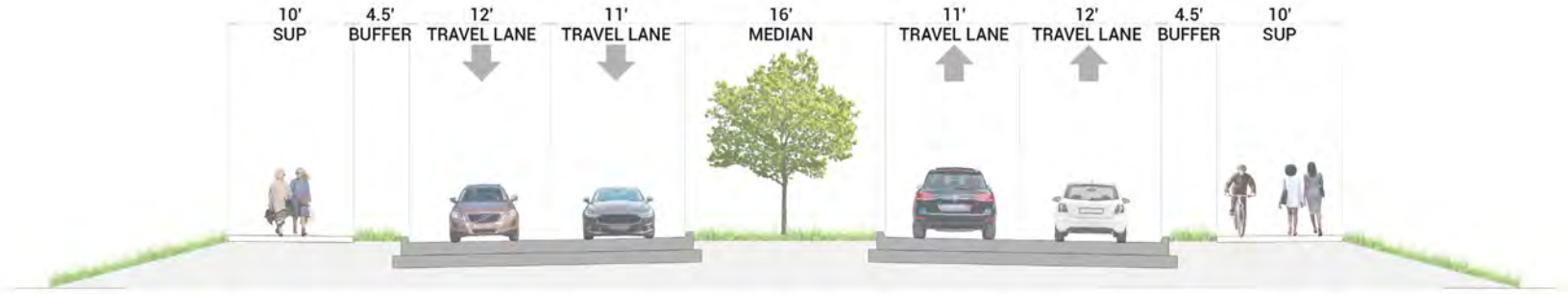
PROJECT PURPOSE

Hemphill Street will be widened from a 2-lane undivided roadway to a 4-lane divided roadway between Rosedale Springs Road and Sycamore School Road. These upgrades are intended to enhance safety, relieve congestion, and support growth in one of Fort Worth's fastest-developing areas.

PROJECT OVERVIEW

Limits: Rosedale Springs Lane to Sycamore School Road
Length: ~0.48 miles
Proposed Cross Section:

» Two 11' to 12' travel lanes in each direction
» 16' raised median with turn bays
» 10' shared-use paths on both sides
» 110' right-of-way



HEMPHILL STREET - PROPOSED TYPICAL SECTION

PROJECT DRIVERS

- Significant development activity in the area, including active Preliminary Plats and Community Facilities Agreements (CFA).
- Serves local traffic accessing the Trails of Willow Creek subdivision and Parkway Elementary School.
- Will improve connectivity to existing development locally and increase capacity for future roadway extension.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$15 million

JURISDICTION

Council District
8

Precinct
1

PROJECT CONTACT

transportation@fortworthtexas.gov

Heritage Trace Parkway

Old Decatur Road (BUS 287) to Wagley Robertson Road

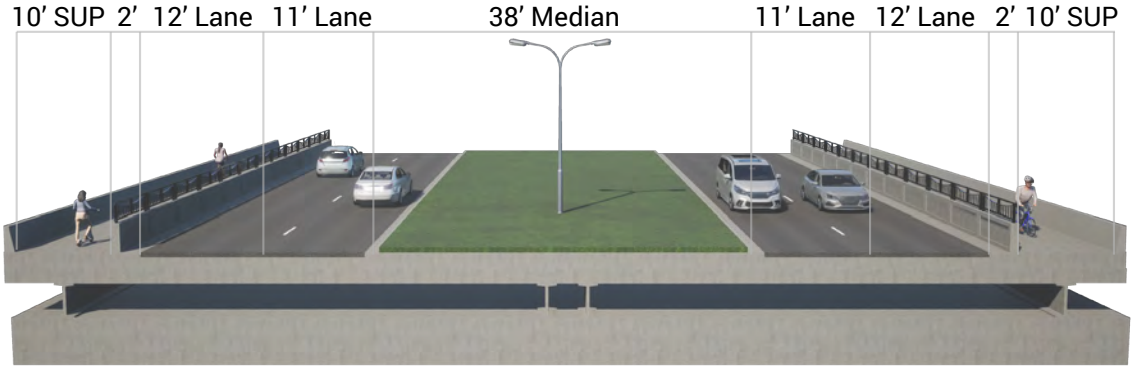


PROJECT PURPOSE

The Heritage Trace Parkway extension project will enhance connectivity in Council District 7 by creating a four-lane divided roadway, including a new bridge over the railroad tracks and BUS 287, and providing connectivity to Old Decatur Road (BUS 287) and Wagley Robertson Road.

PROJECT OVERVIEW

Limits: Old Decatur Rd (BUS 287) to Wagley Robertson Rd
Length: ~1.4 miles
Proposed Cross Section:
» Two 11′ to 12′ travel lanes in each direction
» 38′ Median
» One 10′ shared-use path on both sides
» 112′ - 130′ right-of-way



HERITAGE TRACE PKWY - TYPICAL SECTION

PROJECT BENEFITS

- Closes a critical corridor gap and enhances connectivity with a new access point to BUS 287.
- Increases roadway capacity and relieves congestion on parallel routes, and supports long-term infrastructure resilience.
- Potential train/vehicle conflicts are avoided with the proposed bridge over the UP and BNSF railroad tracks.

PROJECT COSTS

$53.6 million West Segment (FY2029)
$33.6 million East Segment (FY2028)

JURISDICTION

Council District **7**
Precinct **3**

PROJECT CONTACT

transportation@fortworthtexas.gov

Heritage Trace Parkway

Old Decatur Road (BUS 287) to Wagley Robertson Road

PROSPECTIVE PARTNERS

- North Central Texas Council of Governments (NCTCOG)
- Tarrant County
- City of Fort Worth (2022 & 2026 Bonds)



ENVIRONMENTAL CONSIDERATIONS

» **Aquatic Resources**:
The National Wetland Inventory (NWI)/National Hydrography Database depicts two tributaries to Big Fossil Creek crossing the alignment.

» **Threatened and Endangered Species**:
Stretches of undeveloped land contain suitable habitat to support protected species. A habitat assessment is recommended.

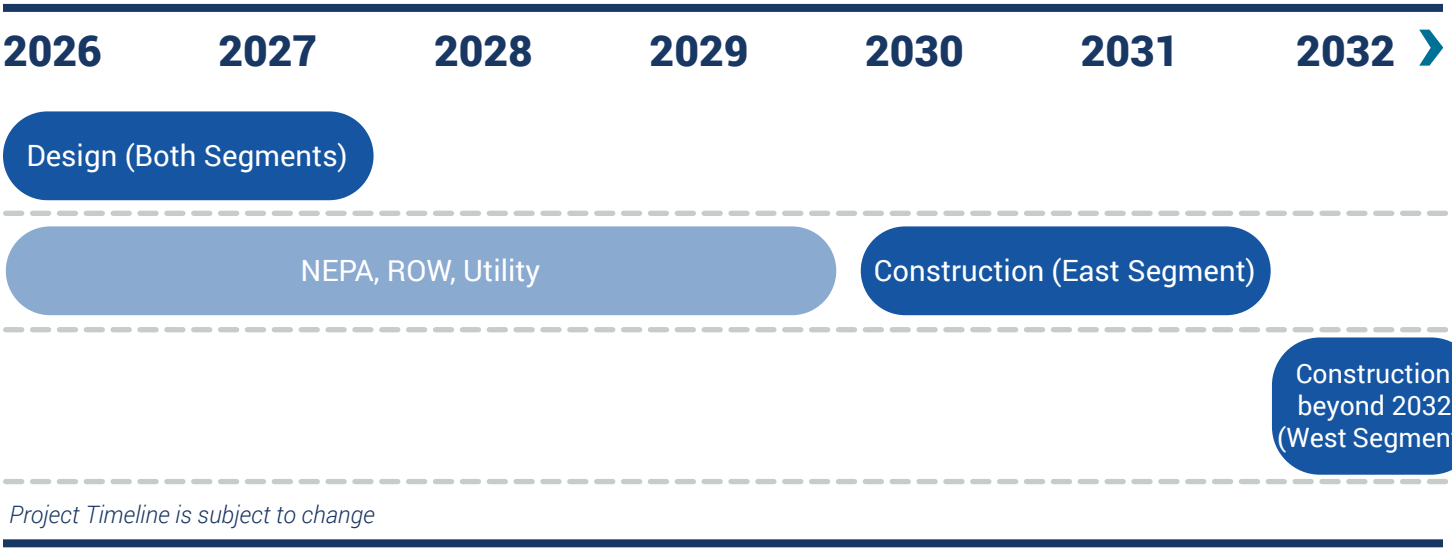
PROJECT COMPLEXITY

The top challenges include railroad coordination, complex bridge design, floodplain impacts, coordination with developers and stakeholders.



High

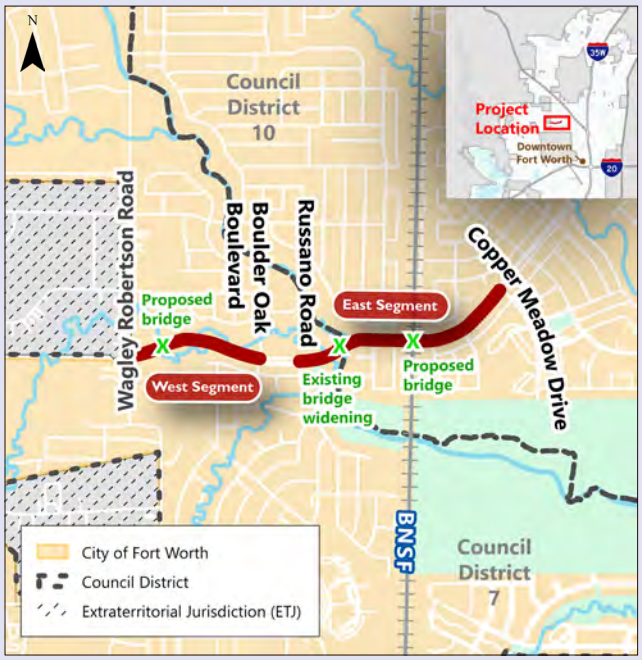
PROJECT TIMELINE



Project Timeline is subject to change

Heritage Trace Parkway

Wagley Robertson Road to Copper Meadow Drive

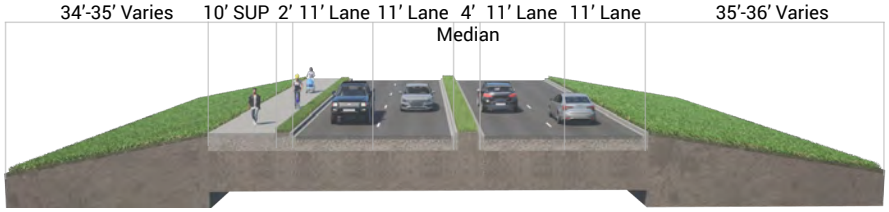


PROJECT PURPOSE

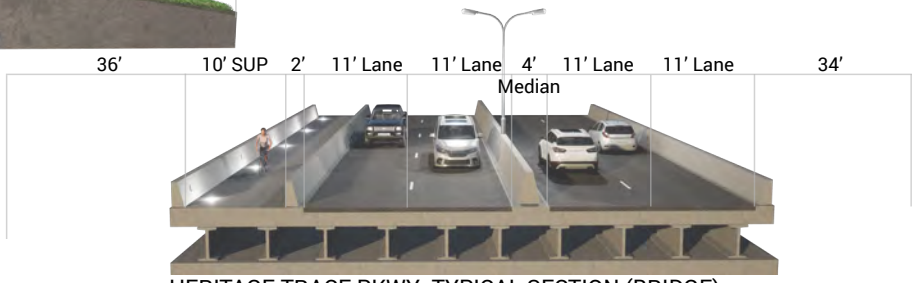
The project will close a key gap in Fort Worth's roadway network by creating two bridges, widening an existing bridge, and constructing a four-lane divided roadway to improve mobility, safety, and pedestrian access.

PROJECT OVERVIEW

Limits: Wagley Robertson Rd to Copper Meadow Dr
Length: ~1 mile
Proposed Cross Section:
» Two 11' travel lanes in each direction
» 4' Median
» One 10' shared-use path
» 130' right-of-way



HERITAGE TRACE PKWY -TYPICAL SECTION (AT-GRADE)



HERITAGE TRACE PKWY -TYPICAL SECTION (BRIDGE)

PROJECT BENEFITS

- Provides a direct east-west connection, reducing travel delays and enhancing regional access across northern Fort Worth.
- Enhances safety and multimodal access by providing safer pedestrian and bicycle connections between nearby neighborhoods and destinations.
- Incorporates two bridges to improve accessibility across the creek and the BNSF railroad.

PROJECT COSTS

$50.9 million West Segment (FY2030)
$55.6 million East Segment (FY2030)

JURISDICTION

Council District: **7, 10**
Precinct: **4**

PROJECT CONTACT

transportation@fortworthtexas.gov

Heritage Trace Parkway

Wagley Robertson Road to Copper Meadow Drive

PROSPECTIVE PARTNERS

- City of Fort Worth (2026 & 2030 Bonds)
- U.S. Department of Transportation



ENVIRONMENTAL CONSIDERATIONS

» **Floodplain and Wetland Considerations:** Portions of the project area fall within FEMA-designated Zone A and Zone AE floodplains, which will influence the drainage design. A wetland delineation is recommended to determine if jurisdictional wetlands exists.

» **Environmental Due Diligence:** Previous oil and gas wells near the project area. A Phase I Environmental Site Assessment (ESA) is recommended.

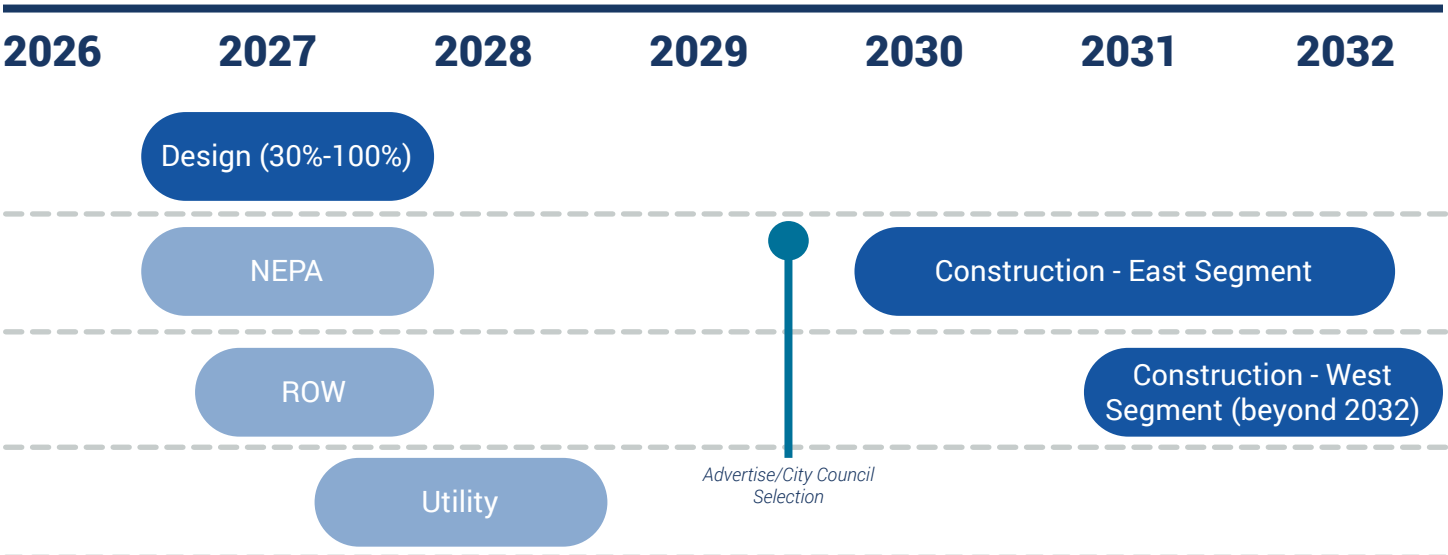
PROJECT COMPLEXITY

The top challenges include railroad coordination, complex bridge design, floodplain impacts, potential wetlands, and utility relocation.



High

PROJECT TIMELINE



Project Timeline is subject to change

Heritage Trace Parkway

Wagley Robertson Road to Boulder Oak Boulevard



PROJECT PURPOSE

Heritage Trace Parkway will be continued as a 4-lane divided roadway between Wagley Robertson Road and Boulder Oak Boulevard. These upgrades are intended to enhance safety, relieve congestion, and support growth in one of Fort Worth's fastest-developing areas.

PROJECT OVERVIEW

Limits: Wagley Robertson Road to Boulder Oak Boulevard
Length: ~0.34 miles
Proposed Cross Section:
» Two 11' travel lanes in each direction
» 38' median
» 10' shared-use paths on both sides
» 110' right-of-way



HERITAGE TRACE PARKWAY - PROPSOED TYPICAL SECTION

PROJECT DRIVERS

- Significant development activity in the area, including active Concept Plans, Plats, and Community Facilities Agreements (CFA).
- Serves local traffic accessing the Bar C Ranch subdivision, including Comanche Springs Elementary School and Prairie Vista Middle School.
- Aligns with the Wagley Robertson Road improvements, enhancing regional connectivity and safety.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$61 million

JURISDICTION

Council District
7

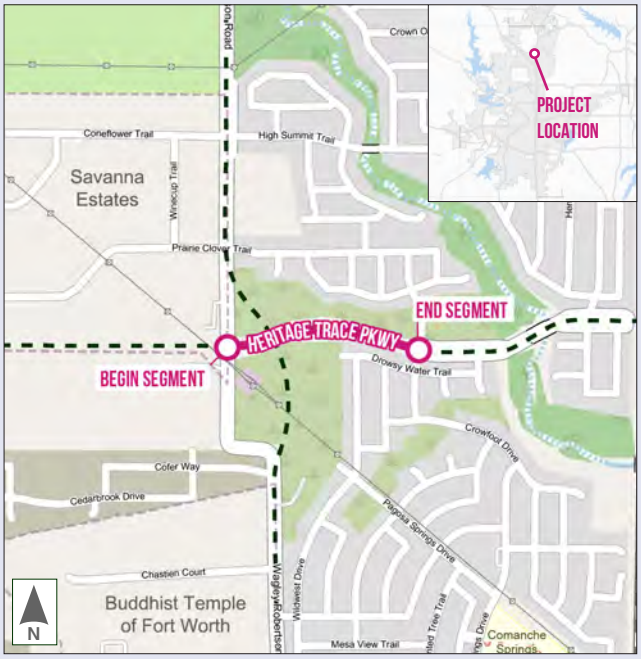
Precinct
4

PROJECT CONTACT

transportation@fortworthtexas.gov

Heritage Trace Pkwy

Wagley Robertson Road to Boulder Oak Boulevard



PROJECT PURPOSE

Heritage Trace Parkway will be continued as a 4-lane divided roadway between Wagley Robertson Road and Boulder Oak Boulevard. These upgrades are intended to enhance safety, relieve congestion, and support growth in one of Fort Worth's fastest-developing areas.

PROJECT OVERVIEW

Limits: Wagley Robertson Road to Boulder Oak Boulevard
Length: ~0.34 miles
Proposed Cross Section:
» Two 11' travel lanes in each direction
» 38' median
» 10' shared-use paths on both sides
» 110' right-of-way



HERITAGE TRACE PARKWAY - PROPOSED BRIDGE SECTION

PROJECT DRIVERS

- Significant development activity in the area, including active Concept Plans, Plats, and Community Facilities Agreements (CFA).
- Serves local traffic accessing the Bar C Ranch subdivision, including Comanche Springs Elementary School and Prairie Vista Middle School.
- Aligns with the Wagley Robertson Road improvements, enhancing regional connectivity and safety.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$61 million

JURISDICTION

Council District
7

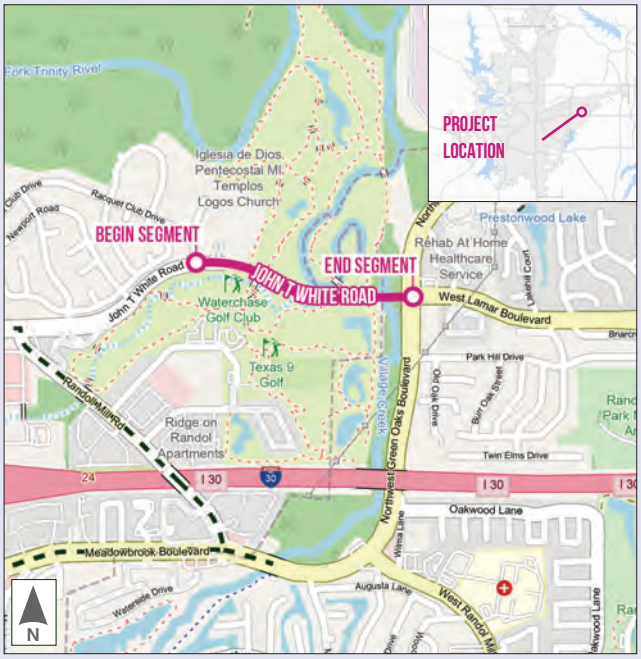
Precinct
4

PROJECT CONTACT

transportation@fortworthtexas.gov

John T White Road

Racquet Club Drive to NW Green Oaks Boulevard



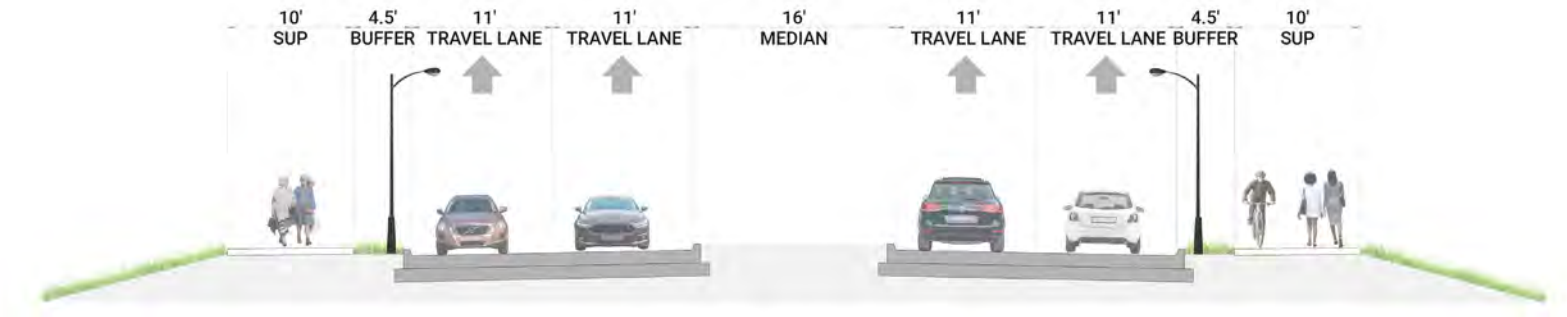
PROJECT PURPOSE

John T White Road will be a new 4-lane divided roadway primarily constructed as a bridge over the Village Creek floodway and wetlands. These upgrades are intended to boost regional connectivity, enhance safety, relieve congestion, and support growth.

PROJECT OVERVIEW

Limits: Racquet Club Drive to NW Green Oaks Boulevard
Length: ~0.56 miles
Proposed Cross Section:

» Two 11' travel lanes in each direction
» 16' raised median with turn bays
» 10' shared-use paths on both sides
» 110' right-of-way



JOHN T WHITE ROAD - PROPOSED TYPICAL SECTION

PROJECT DRIVERS

- Development activity in the area, including Plats and Community Facilities Agreements (CFA).
- Serves local traffic of the nearby neighborhoods of Twelve Oak Estates and Brighton Village off W Lamar Boulevard.
- Connects the existing John T White Road to residents and businesses along NW Green Oaks Boulevard and West Lamar Boulevard.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.
- Improves regional connectivity between City of Fort Worth and City of Arlington.

PROJECT COSTS

Estimated Project Delivery Cost
$89 million

JURISDICTION

Council District
5

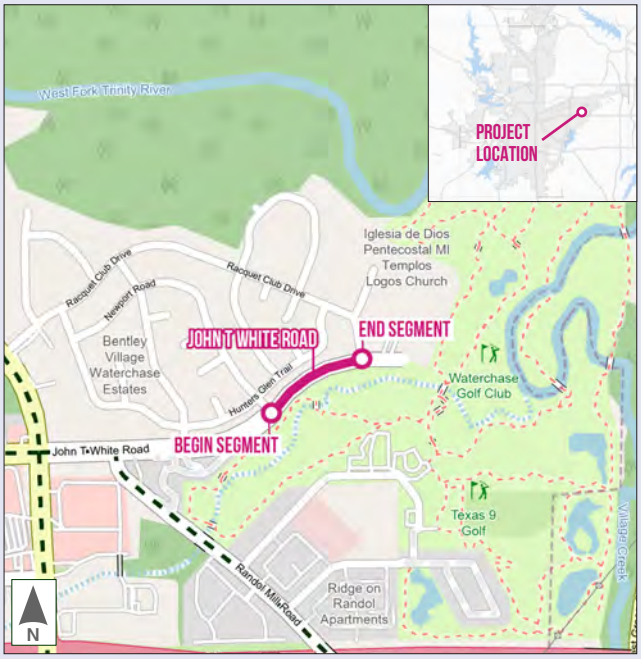
Precinct
1

PROJECT CONTACT

transportation@fortworthtexas.gov

John T White Road

Newport Road to Racquet Club Drive



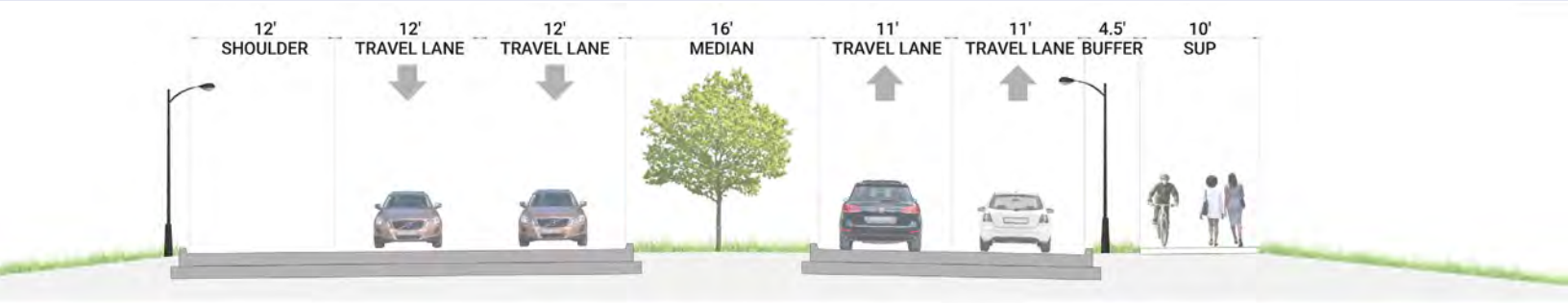
PROJECT PURPOSE

John T White Road will be widened and reconstructed from a 2-lane undivided roadway to a 4-lane divided roadway between Newport Road and Racquet Club Drive. These upgrades are intended to boost regional connectivity, enhance safety, relieve congestion, and support growth.

PROJECT OVERVIEW

Limits: Newport Road to Racquet Club Drive
Length: ~0.19 miles
Proposed Cross Section:

» Two 11’ travel lanes in each direction
» 16’ raised median with turn bays
» 10’ shared-use paths on both sides
» 110’ right-of-way



JOHN T WHITE ROAD - PROPSOED TYPICAL SECTION

PROJECT DRIVERS

- Development activity in the area, including Plats and Community Facilities Agreements (CFA).
- Serves local traffic accessing the Bentley Village Waterchase Estates and Iglesia de Dios Pentecostal M.I. Templo Logos Church, as well as the commercial area to the west.
- Connects to the new John T White Road corridor that ultimately connects to W Lamar Boulevard in the future.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$10.6 million

JURISDICTION

Council District
5

Precinct
1

PROJECT CONTACT

transportation@fortworthtexas.gov

Meacham Boulevard Phase II West

Blue Mound Road (FM 156) to IH 35W

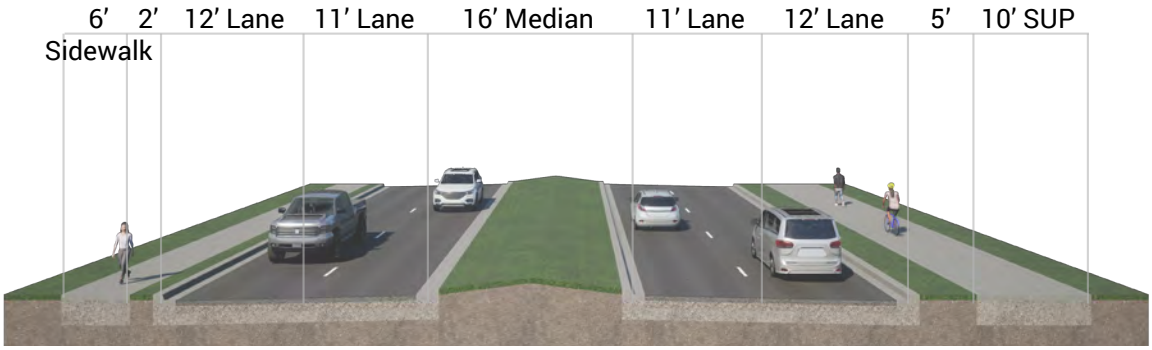


PROJECT PURPOSE

The project will reconstruct and widen the existing roadway from a three-lane undivided to a four-lane divided facility, enhancing freight access, mobility, and safety.

PROJECT OVERVIEW

Limits: Blue Mound Rd (FM 156) to IH 35W
Length: ~1.7 miles
Proposed Cross Section:
» Two 11′ to 12′ travel lanes in each direction
» 16′ raised median
» One 10′ shared-use path on the south side and one 6′ sidewalk on the north side
» 144′ right-of-way



MEACHAM BLVD - TYPICAL SECTION

PROJECT BENEFITS

- Accommodate growing transportation demands for both passenger and freight movement.
- Incorporates updated roadway design to improve safety, resilience and reliability.
- Includes new drainage systems, roadway lighting, intersection signalization, and shared-use path.

PROJECT COSTS

$44.3 million
(with anticipated letting in 3 years)

JURISDICTION

Council District **2**
Precinct **4**

PROJECT CONTACT

transportation@fortworthtexas.gov

FORT WORTH

www.movingamillion.org

Meacham Boulevard Phase II West

Blue Mound Road (FM 156) to IH 35W

PROSPECTIVE PARTNERS

- Texas Department of Transportation
- North Central Texas Council of Governments (NCTCOG)
- City of Fort Worth (2022 & 2026 Bonds)



ENVIRONMENTAL CONSIDERATIONS

» **Wetland Considerations:**
A channelized stream/ditch crosses Meacham Boulevard west of the project alignment, another wetland appears west of the railroad tracks, and a minor stream crosses the eastern portion of the alignment.

» **Hazardous Waste:**
The project area has several areas that might present a Recognized Environmental Condition (REC) including Leaking Petroleum Storage Tanks (LPST) and Hazardous Waste Corrective Action sites.

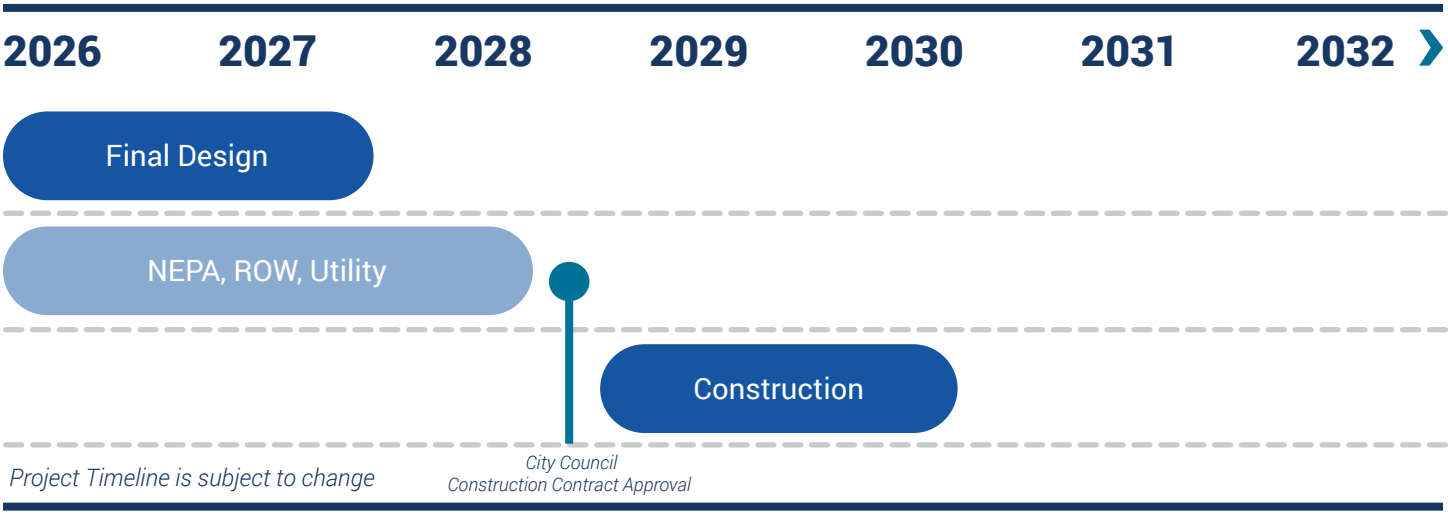
PROJECT COMPLEXITY

The top challenges for this project include the UPRR involvement and utility relocations.



Medium

PROJECT TIMELINE



North Beach Street

Keller Haslet Rd to Eagle Pkwy



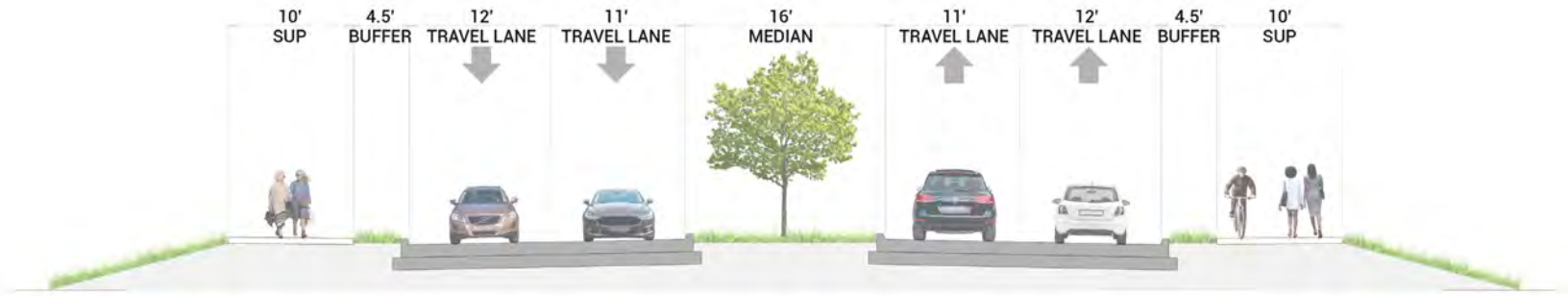
PROJECT PURPOSE

The project will construct a new 4-lane divided roadway corridor between Keller Haslet Road and Eagle Parkway. These upgrades are intended to enhance safety, relieve congestion, and support growth in one of Fort Worth's quickly developing areas.

PROJECT OVERVIEW

Limits: Keller Haslet Rd to Eagle Pkwy
Length: ~2.03 miles
Proposed Cross Section:

» Two 11′ to 12′ travel lanes in each direction
» 16′ raised median with turn bays
» 10′ shared-use paths on both sides
» 110′ right-of-way



NORTH BEACH STREET - TYPICAL SECTION

PROJECT DRIVERS

- Significant development activity in the area, including active Concept Plans, Preliminary Plats, and CFAs.
- Connects to five cross streets which provide access to The Ranches subdivisions.
- Provides alternate route for freight transportation for commercial businesses such as "XPO Logistics" warehouse and "LG Electronics" distribution service plant.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$118 million

JURISDICTION

Council District
10

Precinct
3

PROJECT CONTACT

transportation@fortworthtexas.gov

Old Denton Road

Sawtimber Trail to Westport Parkway



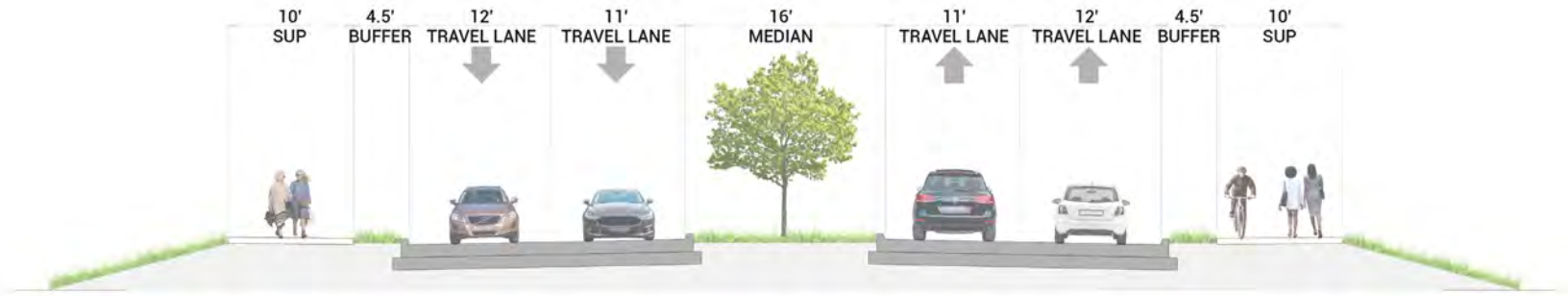
PROJECT PURPOSE

Old Denton Road will be widened, realigned, and reconstructed from a 2-lane undivided roadway to a 4-lane divided roadway between Sawtimber Trail and Westport Parkway. These upgrades are intended to enhance multimodal and pedestrian safety, reduce crash incidents, relieve congestion, and support growth in one of Fort Worth's fastest-developing areas.

PROJECT OVERVIEW

Limits: Sawtimber Trail and Westport Parkway
Length: ~1.20 miles
Proposed Cross Section:

» Two 11' to 12' travel lanes in each direction
» 16' raised median with turn bays
» 10' shared-use paths on both sides
» 110' right-of-way



OLD DENTON ROAD- PROPSOED TYPICAL SECTION

PROJECT DRIVERS

- Significant development activity in the area, including active Concept Plans, Plats, and Community Facilities Agreements (CFA).
- Serves southbound traffic accessing Interstate Highway I-35W.
- Aligns with the future reconstruction of Westport Parkway.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$33 million

JURISDICTION

Council District
10

Precinct
3

PROJECT CONTACT

transportation@fortworthtexas.gov

Randol Mill Road

Oakland Boulevard to Woodhaven Boulevard



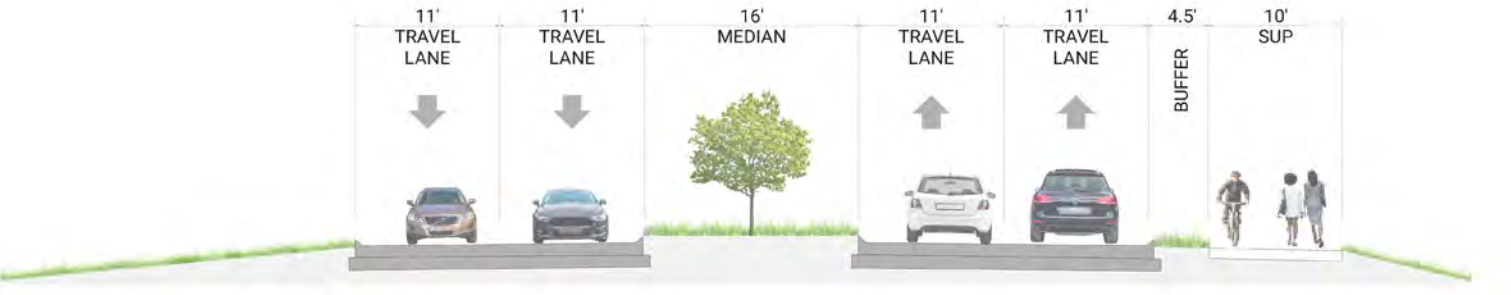
PROJECT PURPOSE

Randol Mill Road will be widened and reconstructed from a 2-lane undivided roadway to a 4-lane divided roadway between Oakland Boulevard and Woodhaven Boulevard. These upgrades are intended to enhance safety, relieve congestion, and support growth.

PROJECT OVERVIEW

Limits: Oakland Boulevard to Woodhaven Boulevard
Length: ~1.05 miles
Proposed Cross Section:

» Two 11’ travel lanes in each direction
» 16’ raised median with turn bays
» 4.5 buffer
» One 10’ shared-use path south side of roadway
» 110’ right-of-way



RANDOL MILL ROAD - PROPOSED TYPICAL SECTION

PROJECT DRIVERS

- Development activity in the area, including Plats and Community Facilities Agreements (CFA).
- Serves local traffic accessing the White Lake Hills subdivision, Lakewood Village Retirement Community, and Loan Catholic High School Elementary School.
- Increases capacity and enhance connectivity by connecting the eastern residential development to the highways and industrial and commercial developments to the west.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$57 million

JURISDICTION

Council District
5

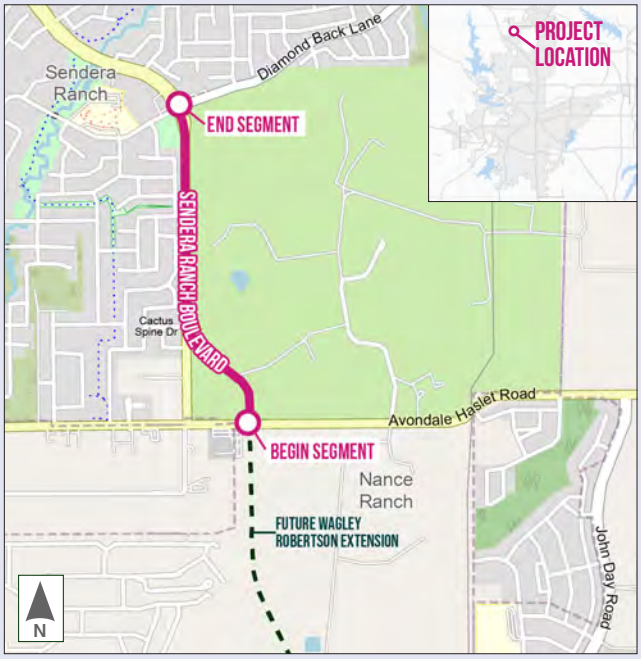
Precinct
1

PROJECT CONTACT

transportation@fortworthtexas.gov

Sendera Ranch Boulevard

Avondale-Haslet Road to Diamondback Lane

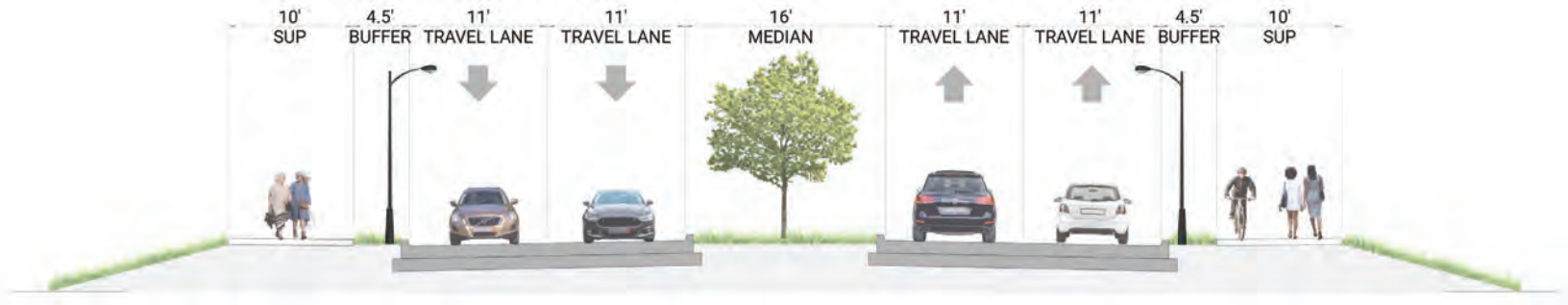


PROJECT PURPOSE

Sendera Ranch Boulevard will be improved from a two-lane undivided roadway to a four-lane divided roadway with shared-use paths on both sides. These upgrades are intended to enhance safety, relieve congestion, and support growth in one of Fort Worth's fastest-developing areas.

PROJECT OVERVIEW

Limits: Avondale-Haslet Road to Diamondback Lane
Length: ~1.8 miles
Proposed Cross Section:
» Two 11' travel lanes in each direction
» 16' raised median with turn bays
» 10' shared-use paths on both sides
» 110' right-of-way



SENDERA RANCH BOULEVARD - PROPOSED TYPICAL SECTION

PROJECT DRIVERS

- Significant development activity in the area, including active Concept Plans, Preliminary Plats, and Community Facilities Agreements (CFA).
- Serves as a primary spine through the Sendera Ranch master-planned community.
- Aligns with the future Wagley Robertson Rd extension, enhancing regional connectivity.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$22 million

JURISDICTION

Council District
10

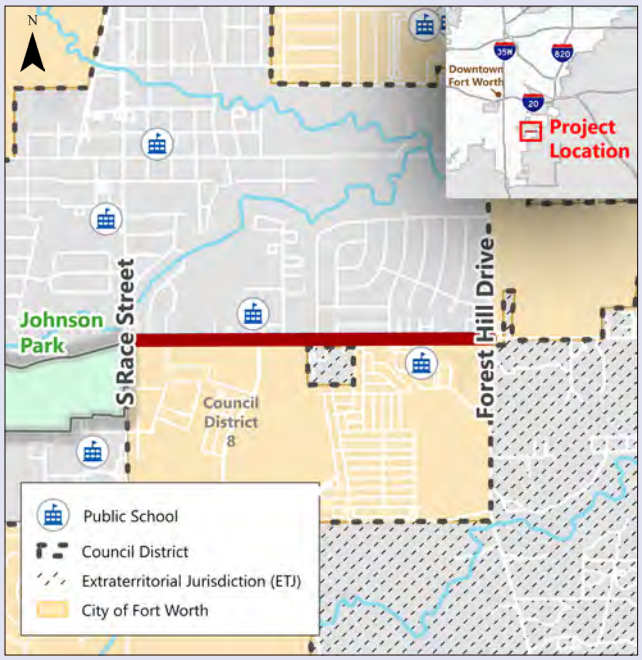
Precinct
4

PROJECT CONTACT

transportation@fortworthtexas.gov

Shelby Road

S Race Street to Forest Hill Drive

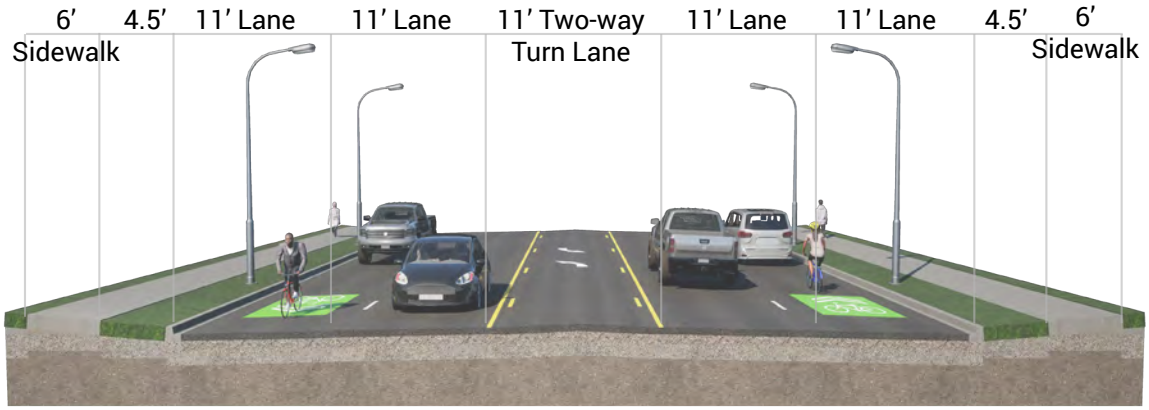


PROJECT PURPOSE

The project will reconstruct and widen the existing two-lane undivided roadway into a four-lane undivided facility with a center turn lane extending from S Race Street to Forest Hill Drive.

PROJECT OVERVIEW

Limits: S Race St to Forest Hill Dr
Length: ~1 mile
Proposed Cross Section:
» Two 11′ travel lanes in each direction
» One 11′ two-way turn lane
» One 6′ sidewalk on each side
» 132′ right-of-way



SHELBY RD - TYPICAL SECTION

PROJECT BENEFITS

- Enhances multimodal access for nearby commercial, industrial, and residential areas, while improving access to educational and leisure facilities.
- Relieves congestion along Shelby Road and addresses future traffic impacts from the nearby planned developments.
- Facilitates regional economic development by improving access to key corridors, including IH 35W.

PROJECT COSTS

$49 million
(FY 2031 $)

JURISDICTION

Council District **8**
Precinct **1, 2**

PROJECT CONTACT

transportation@fortworthtexas.gov

Shelby Road

S Race Street to Forest Hill Drive

PROSPECTIVE PARTNERS

- North Central Texas Council of Governments (NCTCOG)
- Tarrant County
- City of Everman
- City of Fort Worth (2026 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Wetland Considerations:**
Aerial imagery indicates that wetlands are likely present south of Shelby Road.

» **Environmental Due Diligence:**
There are autobody shops and service repair shops adjacent to the roadway that are common Recognized Environmental Condition (REC). A Phase I Environmental Site Assessment (ESA) is recommended.

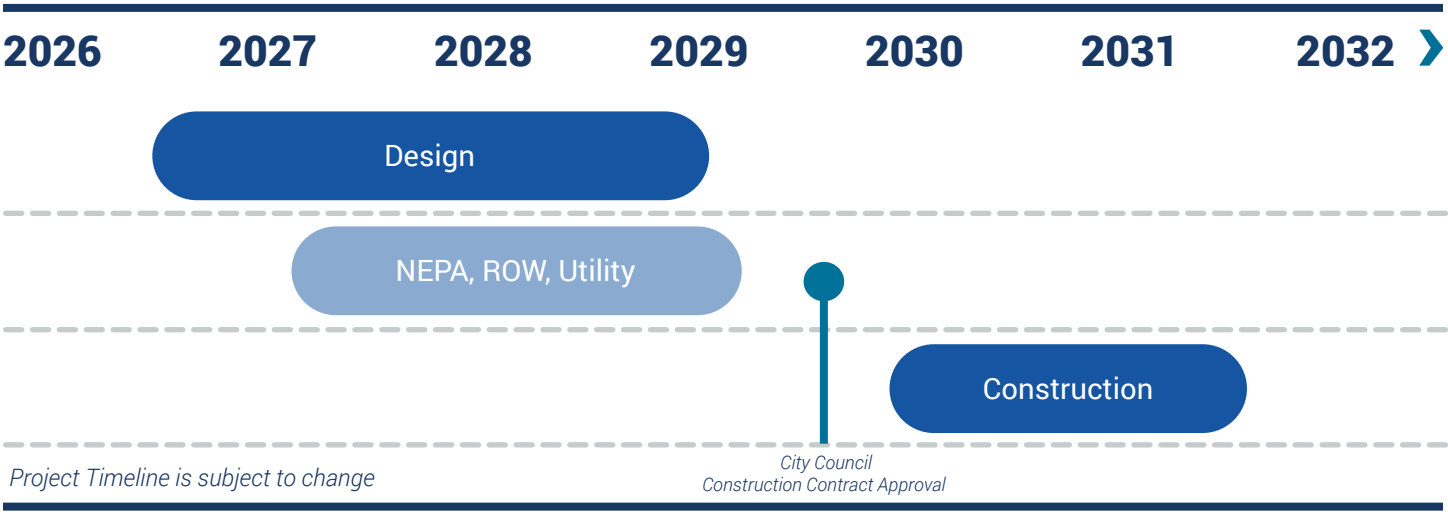
PROJECT COMPLEXITY

The top challenges for this project include ROW constraints and school coordination.



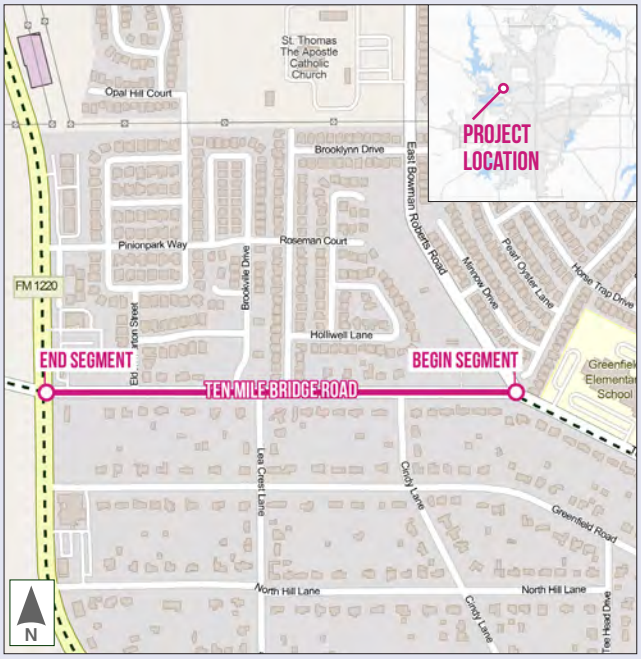
Very Low

PROJECT TIMELINE



Ten Mile Bridge Road

Boat Club Road to E Bowman Roberts Road



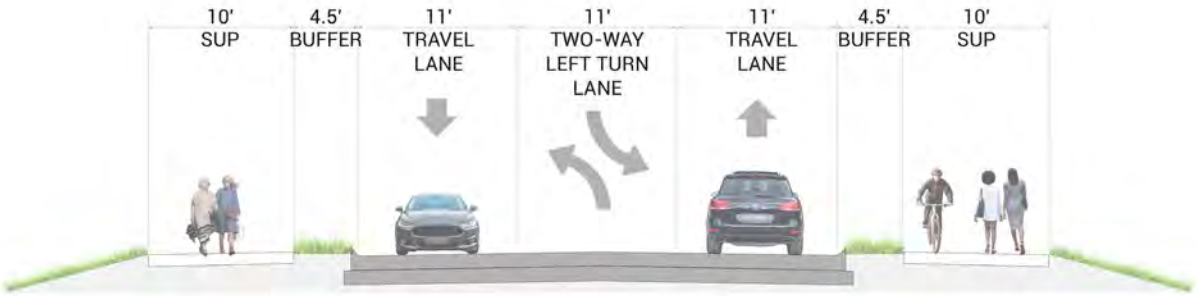
PROJECT PURPOSE

Ten Mile Bridge Road will be widened and reconstructed from a 2-lane undivided roadway to a 3-lane roadway corridor with a Two-Way Left Turn Lane (TWLTL) from Bowman Roberts Road to Boat Club Road. These upgrades are intended to improve through traffic and enhance connectivity and safety, relieve congestion, and support residential growth.

PROJECT OVERVIEW

Limits: Boat Club Road to E Bowman Roberts Road
Length: ~0.56 miles
Proposed Cross Section:

» Two 11' travel lanes in each direction
» 11' two-way left turn bays
» 10' shared-use paths on both sides
» 4.5' buffer zone
» 80' right-of-way



TEN MILE BRIDGE ROAD - PROPOSED TYPICAL SECTION

PROJECT DRIVERS

- Development activity in the area, including Preliminary Plats and Community Facilities Agreements (CFA).
- Serves local traffic accessing Bowman Estates, Brookville Ranch, and Pinion Park, as well as the commercial area to the west and the Greenfield Elementary School to the east.
- Improves connectivity to the Boat Club Road to E Bowman Roberts Road.
- Anticipated residential growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$29 million

JURISDICTION

Council District
2

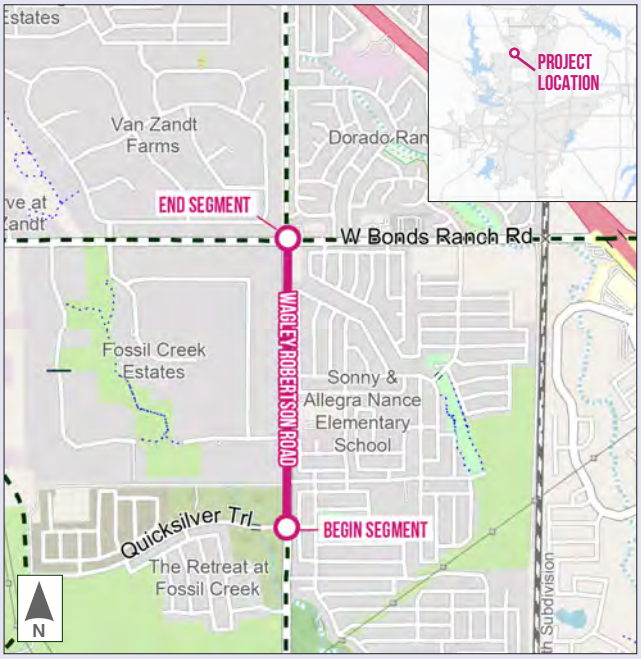
Precinct
4

PROJECT CONTACT

transportation@fortworthtexas.gov

Wagley Robertson Road

Quicksilver Trail to W Bonds Ranch Road



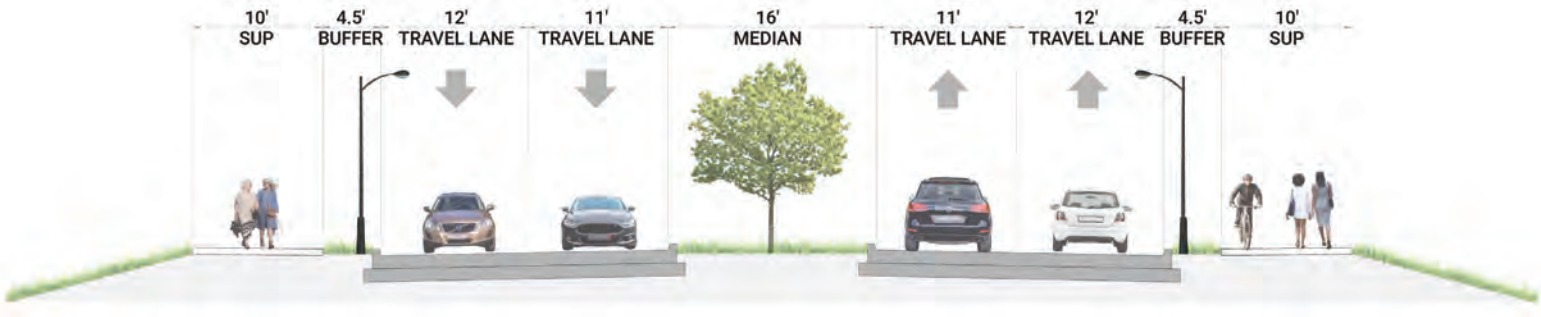
PROJECT PURPOSE

Wagley Robertson Road will be widened and reconstructed from a 2-lane undivided roadway to a 4-lane divided roadway between Quicksilver Trail and W Bonds Ranch Road. These upgrades are intended to enhance safety, relieve congestion, and support growth in one of Fort Worth's fastest-developing areas.

PROJECT OVERVIEW

Limits: Quicksilver Trail to W Bonds Ranch Road
Length: ~0.86 miles
Proposed Cross Section:

» Two 11' to 12' travel lanes in each direction
» 16' raised median with turn bays
» 10' shared-use paths on both sides
» 4.5' SUP Buffer
» 110' right-of-way



WAGLEY ROBERTSON ROAD - PROPOSED TYPICAL SECTION

PROJECT DRIVERS

- Significant development activity in the area, including active Concept Plans, Preliminary Plats, and Community Facilities Agreements (CFA).
- Serves local traffic accessing the Fossil Hill Estates subdivision and Sonny and Allegra Nance Elementary School.
- The 16-foot raised median is designed to support future pedestrian crosswalks at key locations.
- Anticipated traffic growth and safety concerns support the need for proactive improvements.

PROJECT COSTS

Estimated Project Delivery Cost
$61 million

JURISDICTION

Council District
7

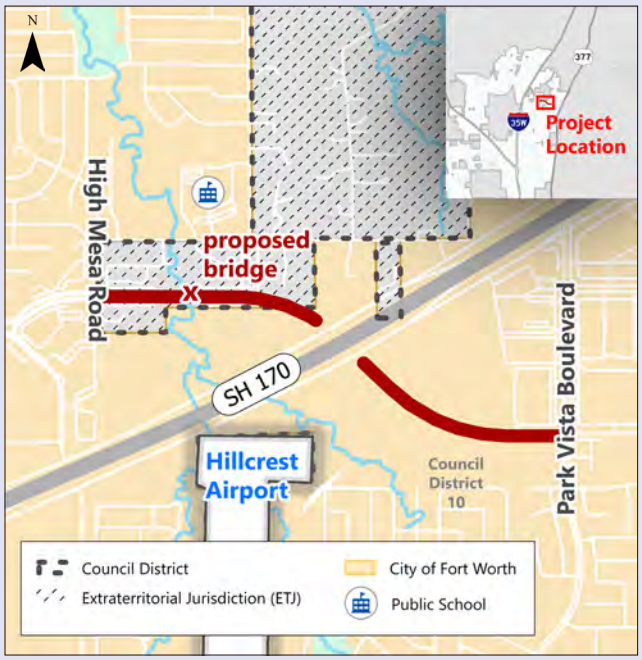
Precinct
3

PROJECT CONTACT

transportation@fortworthtexas.gov

Westport Parkway

High Mesa Road to Park Vista Boulevard

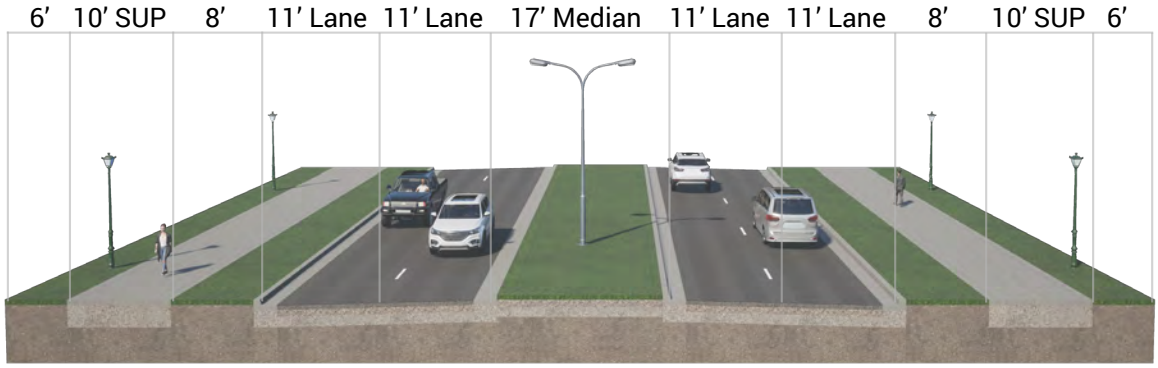


PROJECT PURPOSE

The Westport Parkway expansion project will enhance connectivity in Council District 10 by creating a continuous four-lane divided roadway, providing seamless access to SH 170 and surrounding areas.

PROJECT OVERVIEW

Limits: High Mesa Rd to Park Vista Blvd
Length: ~1 mile
Proposed Cross Section:
» Two 11′ travel lanes in each direction
» 17′ Median
» 10′ shared-use path on both sides
» 110′ right-of-way



WESTPORT PKWY - TYPICAL SECTION

PROJECT BENEFITS

- Links disconnected segments to the surrounding areas and supports the growing transportation demands for passenger and freight movement.
- Enhances safety by incorporating City of Fort Worth roadway design and a new bridge.
- Includes new drainage, lighting, signals, and shared-use path.

PROJECT COSTS

$109 million
(FY 2032 $)

JURISDICTION

Council District **10**
Precinct **3**

PROJECT CONTACT

transportation@fortworthtexas.gov

Westport Parkway

High Mesa Road to Park Vista Boulevard

PROSPECTIVE PARTNERS

- North Central Texas Council of Governments (NCTCOG)
- Tarrant County
- Hillwood
- City of Fort Worth (2026 Bond and 2030 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Aquatic Resources:**
Westport Parkway will span a creek that is a tributary to Henrietta Creek which is in a Zone A FEMA 100-year floodplain.

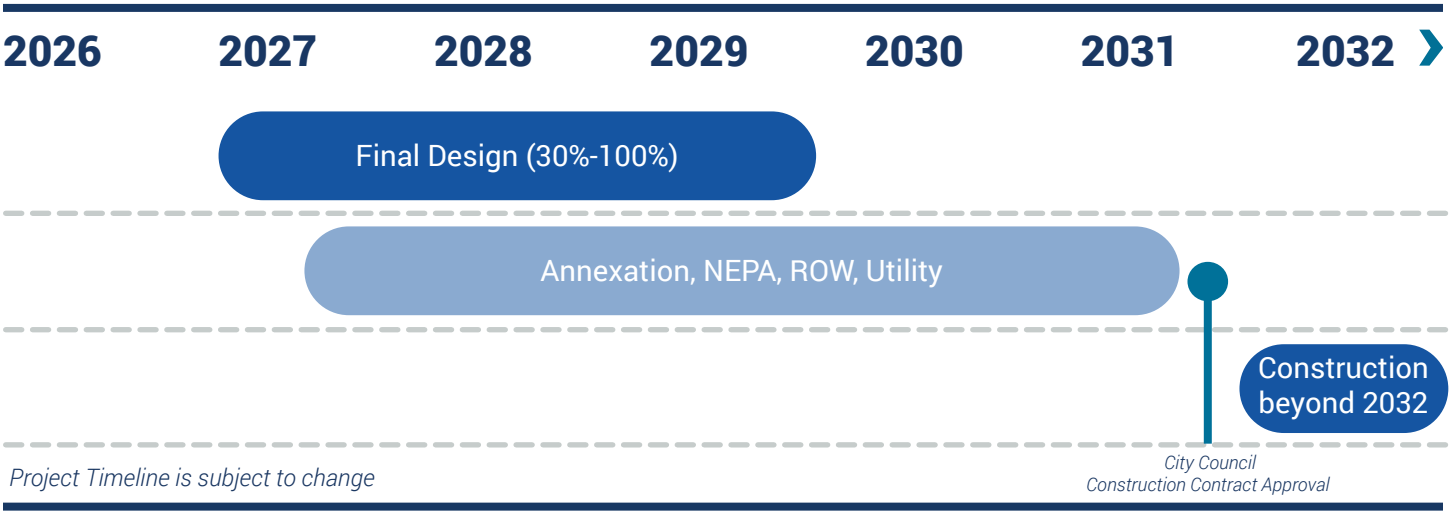
» **Right-of-Way Acquisition and Property Impacts:**
Several occupied commercial buildings within the project limits will require careful planning and coordination with property owners to mitigate economic impacts.

PROJECT COMPLEXITY

The top challenges include 100-year floodplain, NEPA process, business displacements, ROW constraints with local businesses, and utility relocation.

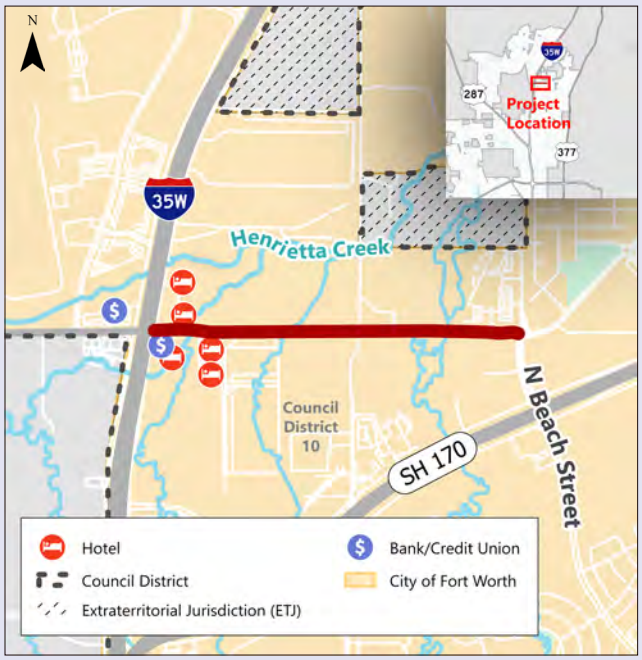


PROJECT TIMELINE



Westport Parkway

IH 35W to N Beach Street

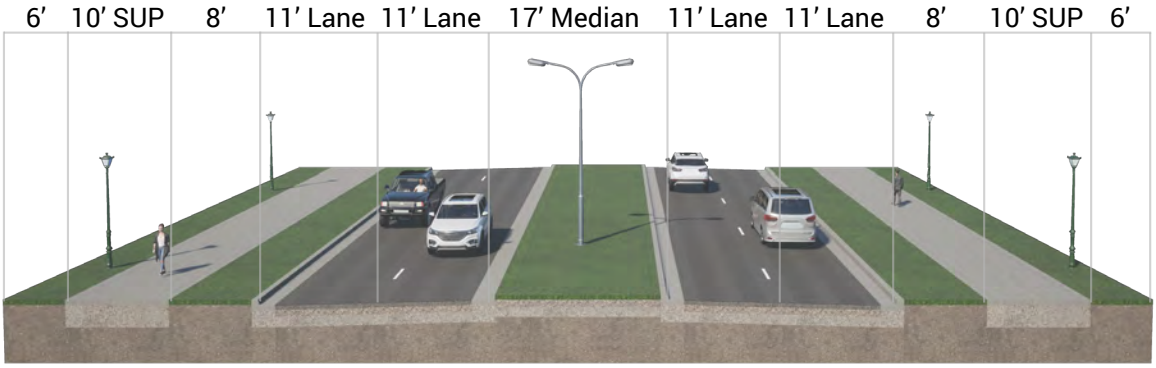


PROJECT PURPOSE

The Westport Parkway reconstruction project will widen the existing two-lane roadway to a four-lane divided facility between IH 35W and N Beach Street, improving mobility, safety and pedestrian access.

PROJECT OVERVIEW

Limits: IH 35W to N Beach St
Length: ~1 mile
Proposed Cross Section:
» Two 11′ travel lanes in each direction
» 17′ Median
» One 10′ shared-use path on both sides
» 110′ right-of-way



WESTPORT PKWY - TYPICAL SECTION

PROJECT BENEFITS

- Strengthens access between IH 35W, SH 170, and North Beach Street.
- Implements intersection improvements at Old Denton Road to reduce congestion, improve travel times, and accommodate increased passenger and freight demand.
- Incorporates dedicated shared-use paths on both sides of the roadway, promoting walkability and cycling accessibility.

PROJECT COSTS

$55 million
(FY 2029 $)

JURISDICTION

Council District **10**
Precinct **3**

PROJECT CONTACT

transportation@fortworthtexas.gov

Westport Parkway

IH 35W to N Beach Street

PROSPECTIVE PARTNERS

- City of Fort Worth (2026 Bond)
- Private Partners

ENVIRONMENTAL CONSIDERATIONS

» **Environmental Due Diligence:**
The project crosses FEMA regulatory floodplains and floodways at three locations, necessitating permitting and compliance with environmental regulations.

» **Utility Conflicts:**
Existing gas and overhead electric lines extend along almost the entire length of the project corridor.

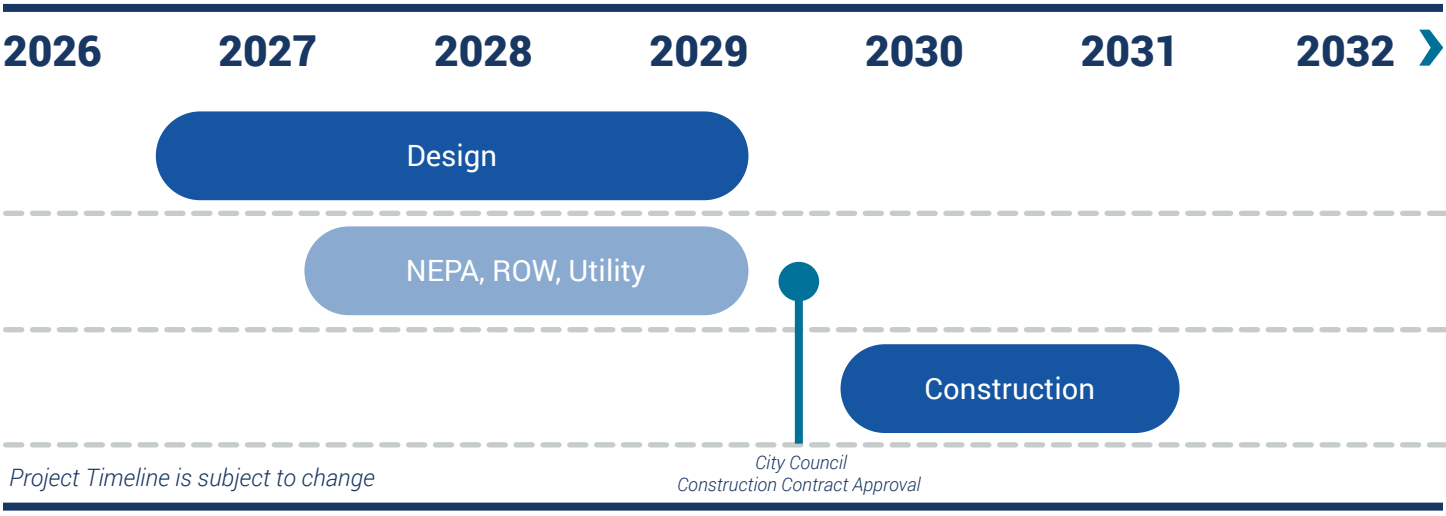
PROJECT COMPLEXITY

The top challenges include floodplain and utility relocation risks.



Medium

PROJECT TIMELINE



W Risinger Road

Hemphill Street to Crowley Road



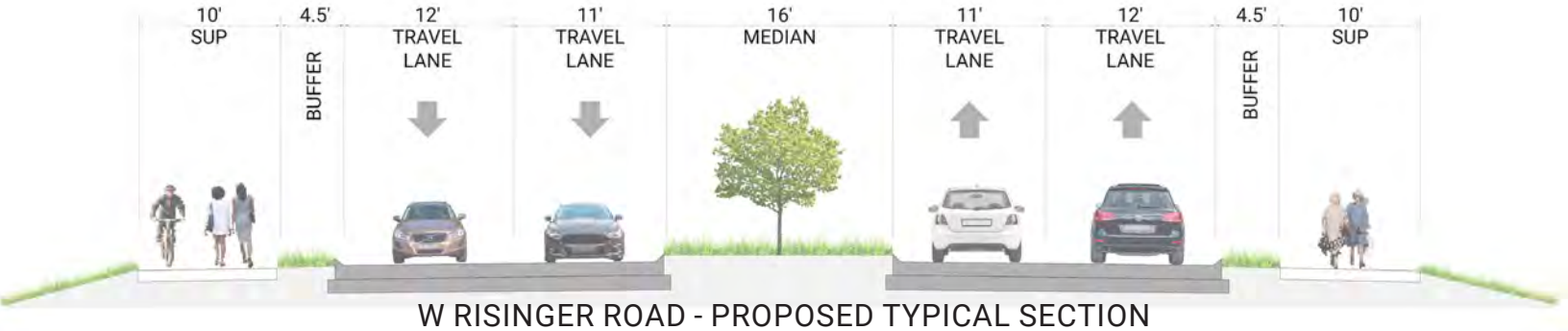
PROJECT PURPOSE

W Risinger Road will be widened and reconstructed from a two-lane undivided roadway to a four-lane divided facility between Hemphill Street and Crowley Road. These improvements will enhance safety, reduce congestion, and address recurring flooding issues in one of Fort Worth's fastest-developing areas. The project includes a 1,050-foot culverts spanning the FEMA floodplain, improving storm resilience and maintain critical east–west connectivity.

PROJECT OVERVIEW

Limits: 300-foot west of Hemphill Street To Crowley Road
Length: ~0.68 miles
Proposed Cross Section:

» Two 11' to 12' travel lanes in each direction
» 16' raised median
» 10' shared-use paths on both sides
» 110' right-of-way



W RISINGER ROAD - PROPOSED TYPICAL SECTION

PROJECT DRIVERS

- Eliminates flood-related roadway closures through a roadway section designed considering the FEMA floodplain.
- Connects to Commercial Connectors like Crowley Road and Hemphill Street and serves as a System Link for the City of Fort Worth.
- Supports residential, commercial, and industrial access to I-35W, less than one mile east of the project.
- Improves traffic flow and safety for residents, school traffic, and industrial users accessing the corridor.
- Provides new shared-use paths (SUPs) on both sides, improving pedestrian and cyclist comfort and safety.

PROJECT COSTS

Estimated Project Delivery Cost
$24 million

JURISDICTION

Council District **6**
Precinct **1**

PROJECT CONTACT

transportation@fortworthtexas.gov

W Risinger Road

Technology Boluvard to Hemphill Street



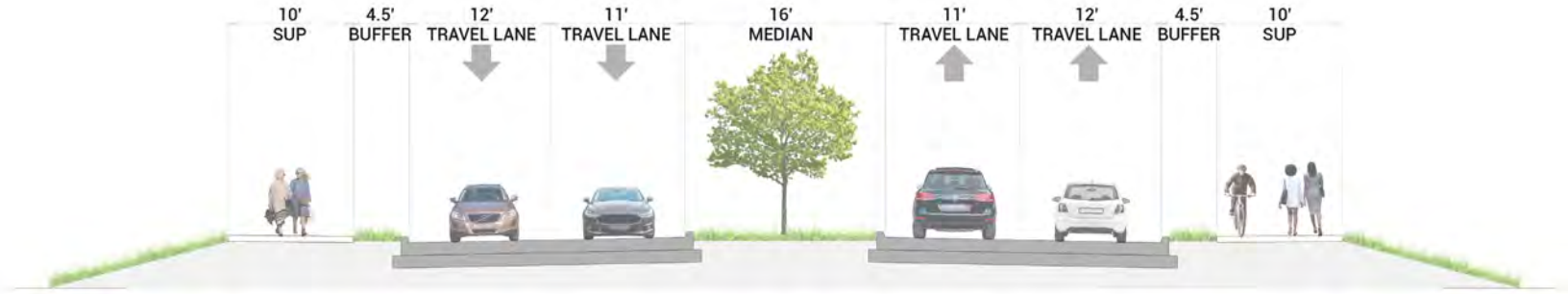
PROJECT PURPOSE

Risinger Road will be widened and reconstructed from a 2-lane undivided roadway to a 4-lane divided roadway between Hemphill Street and Technology Boluvard. This project will be constructed in two different phases, as bond funding is available. These upgrades are intended to enhance safety, relieve congestion, and support growth in one of Fort Worth's fastest-developing areas.

PROJECT OVERVIEW

Limits: Technology Boluvard to Hemphill Street
Length: ~0.50 miles
Proposed Cross Section:

» Two 11' to 12' travel lanes in each direction
» 68' median
» 10' shared-use paths on both sides
» 180-190' right-of-way



W RISINGER ROAD - PROPOSED TYPICAL SECTION

PROJECT DRIVERS

- This road segment connects to commercial corridors will serve as a System Link for the City of Fort Worth.
- Connects to existing developments to the west of the project and to future development adjacent to the project near I-35W.
- Shared Use Path (SUP) will deliver safer travel to pedestrians and cyclists on both sides of Risinger Road.
- The elevated section and the addition of the U-turns will decrease railroad disruption and increase traffic operations.

PROJECT COSTS

Estimated Project Delivery Cost
$48 million

JURISDICTION

Council District
10

Precinct
4

PROJECT CONTACT

transportation@fortworthtexas.gov

WJ Boaz Road

Boat Club Road (FM 1220) to 600 Feet East of Elkins School Road

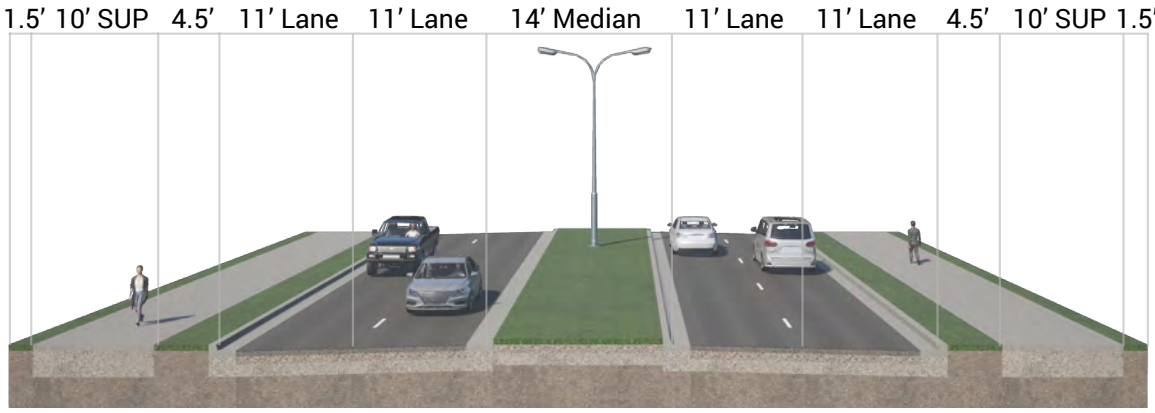


PROJECT PURPOSE

The project will widen the existing roadway to a four-lane divided roadway.

PROJECT OVERVIEW

Limits: Boat Club Rd (FM 1220) to 600 Feet East of Elkins School Rd
Length: ~1 mile
Proposed Cross Section:
» Two 11′ travel lanes in each direction
» 14′ Median
» One 10′ shared-use path on both sides
» 90′ right-of-way



WJ BOAZ RD - TYPICAL SECTION

PROJECT BENEFITS

- Increases traffic capacity, optimizes traffic flow, and reduces congestion on parallel roadways.
- Trails and sidewalks support walking, biking, and accessibility to local destinations.
- Drainage improvements (culvert upgrades, ditch elimination) mitigate flooding risks.

PROJECT COSTS

$49.4 million
(FY 2025 $)

JURISDICTION

Council District
2, 7

Precinct
4

PROJECT CONTACT

transportation@fortworthtexas.gov

WJ Boaz Road

Boat Club Road (FM 1220) to 600 Feet East of Elkins School Road

PROSPECTIVE PARTNERS

- Tarrant County
- City of Fort Worth (2022 Bond)



ENVIRONMENTAL CONSIDERATIONS

» **Aquatic Resources:**
The project area is located within the 100-year floodplain associated with Marine Creek.

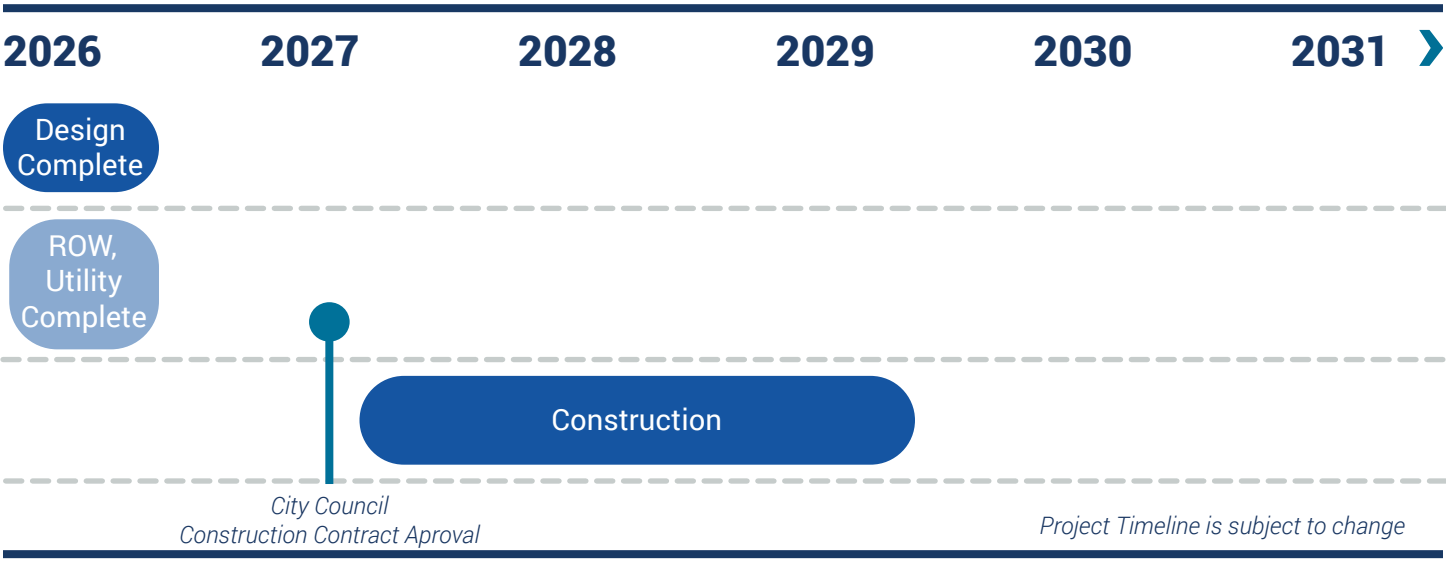
PROJECT COMPLEXITY

The top challenges include floodplain present, ROW and utility relocation risks.



Medium

PROJECT TIMELINE



APPENDIX I

TRANSPORTATION ENGINEERING MANUAL EQUIVALENCY TABLE

Transportation Engineering Manual Equivalency Table

This appendix establishes an interim framework to support implementation of the MRN while maintaining continuity with existing design standards and review processes in the TEM until updates to the TEM are adopted.

Design Standards Equivalency Table

The Master Thoroughfare Plan street type classifications used in the TEM shall have the corresponding MRN function classifications set forth in the table below.

Transportation Engineering Manual Street Type Classification	Master Roadway Network Functional Classification
System Link	Principal Arterial (Non-TxDOT)
Commercial Connector	Major Arterial
Neighborhood Connector	Minor Arterial
Collector	Major and Minor Collector
Local Street	Standard Local Street
Limited Local Street	Limited Local Street
Industrial Collector	Industrial Collector

APPENDIX J

CRITERIA FOR CITY ACQUISITION OF SURPLUS TXDOT RIGHT-OF-WAY

Criteria for City Acquisition of Surplus TxDOT Right-of-Way

Purpose

This memo establishes the criteria the City of Fort Worth will use to evaluate roadways proposed for transfer from the Texas Department of Transportation (TxDOT) to the City for ownership, operation, and maintenance.

Scope and Automatic Exclusions

The following roadway classifications are automatically disqualified from consideration:

- Interstates and freeways
- U.S. and State Highways
- Expressways
- Frontage roads and access roads

Candidate roadways will be drawn from segments already under an active maintenance agreement with the City of Fort Worth.

Eligibility Criteria

To be considered for adoption, a roadway should meet all of the following:

- An active maintenance agreement with the City of Fort Worth.
- A Pavement Condition Index (PCI) score of 75 or above.
- Projected Average Annual Daily Traffic (AADT) below 75 percent of roadway capacity.
- Construction and maintenance consistent with City of Fort Worth standards, including pavement section, curb and gutter, drainage, and right-of-way width.
- Available condition data for stormwater assets within or crossing the right-of-way, including pipes, inlets, culverts, and any associated bar ditches.

Disqualifying Conditions

A candidate roadway should not have any of the following:

- Designation as a freight corridor.
- Designation on the High Injury Network.
- Significant infrastructure assets such as bridges, culverts, channels, or railroad crossings.

- A history of hazardous road overtopping.
- Prior reports of vehicle flooding or water rescues associated with roadway flooding.
- Stormwater leaving the right-of-way and impacting adjacent private property under the 100-year event.
- Jurisdictional complexity (e.g., the roadway crosses multiple municipalities).
- Permitting or easement complexity, including utility easements that constrain the roadway or its maintenance.
- Historic designation of the road, bridge, or associated structures.
- A planned reconstruction or widening within the next 10 years.
- Alternative pavement or subbase materials such as brick, gravel, or open bar ditches.

Currently Ineligible Roadways

Based on the criteria above, the following roadways are not eligible for consideration: I-20, I-30, I-35, US 287, US 377, SH 81, SH 114, SH 121, SH 170, SH 180, SH 183, SH 199, SH 360, SH 580, Spur 280, Chisholm Trail Parkway, FM 156, FM 1187, and Main Street.

Implementation

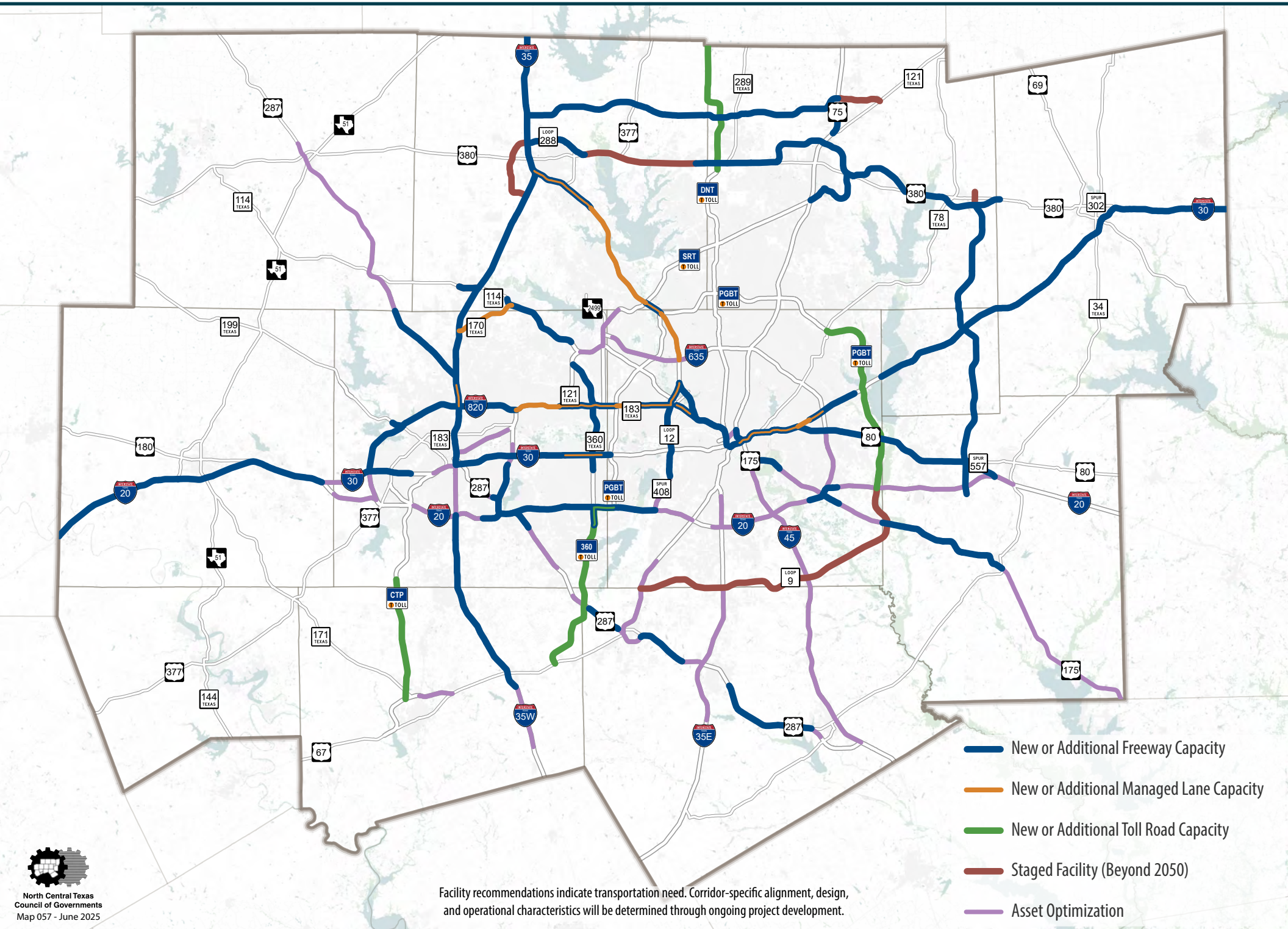
Detailed thresholds, condition-assessment standards (including PACP scoring for stormwater systems, grading and erosion expectations for bar ditches, and inlet condition checks), and the methodology used to determine whether a specific roadway passes or fails each criterion will be maintained in a separate working document. This approach keeps the MTP language at a policy level so that operational details can be refined without requiring an M&C amendment.

APPENDIX K

NCTCOG MOBILITY 2050 MAP PACKET

Major Roadway Recommendations

MOBILITY 2050



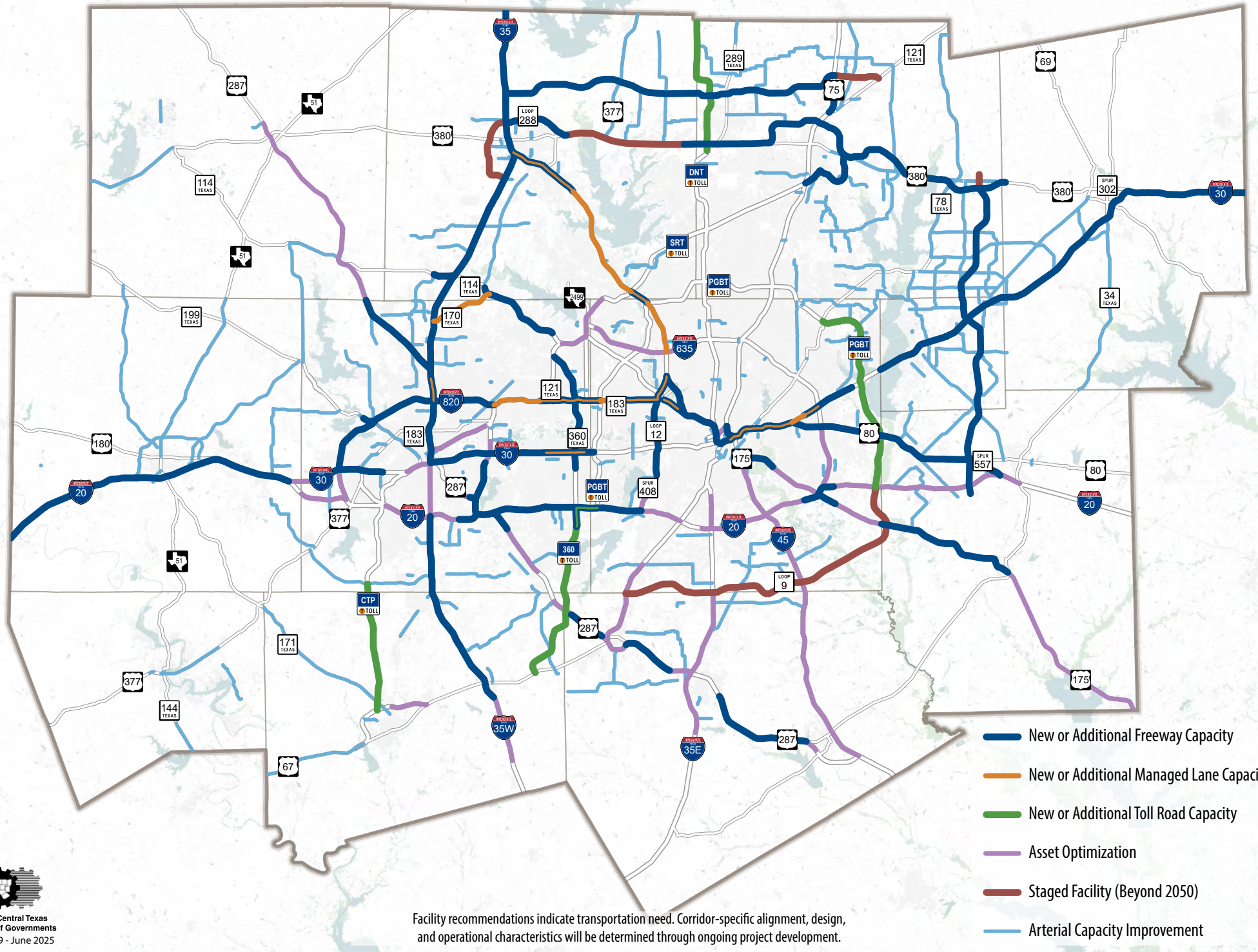
Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics will be determined through ongoing project development.

North Central Texas Council of Governments

Map 057 - June 2025

Roadway Recommendations

MOBILITY 2050



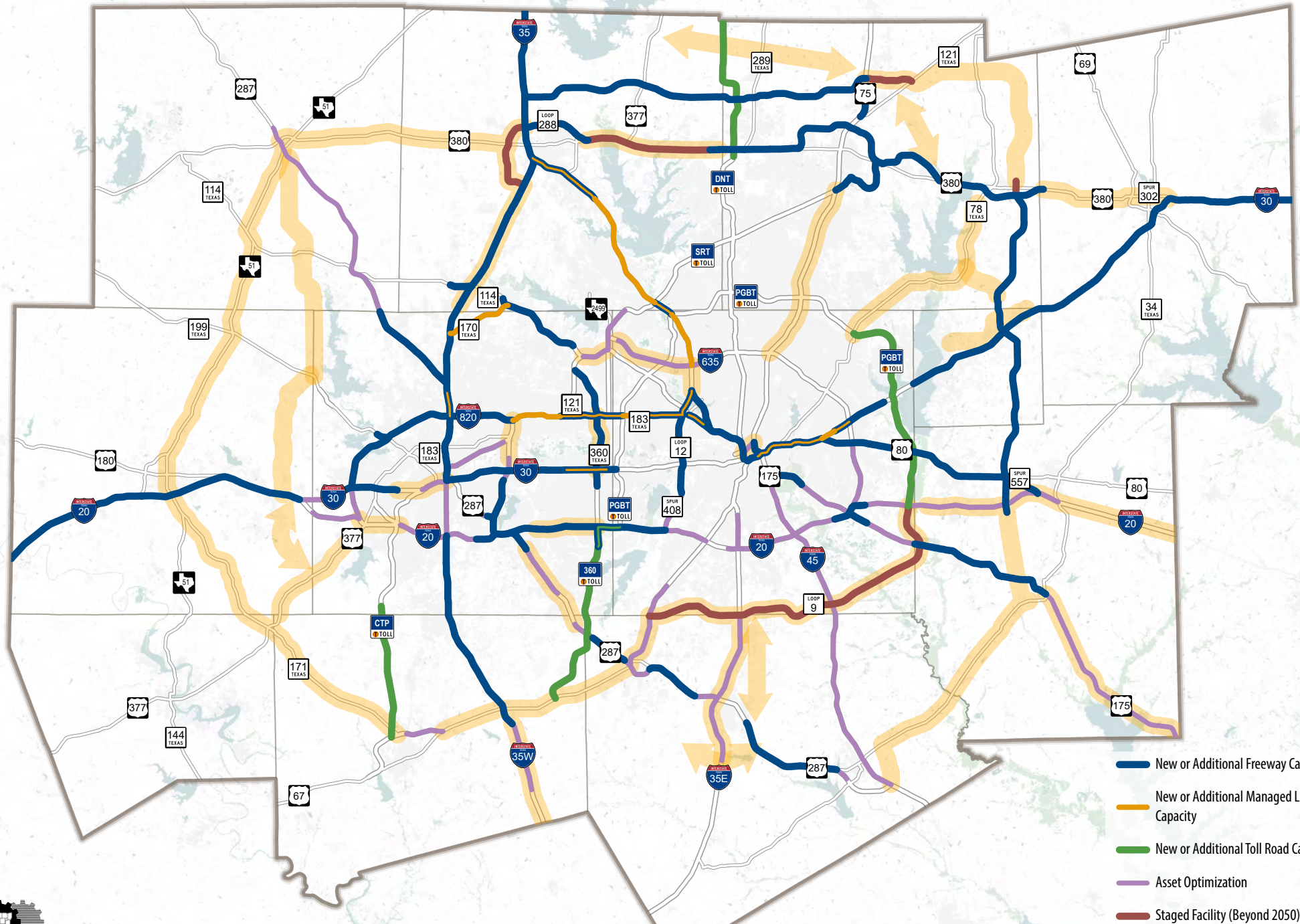
North Central Texas Council of Governments

Map 119 - June 2025

Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics will be determined through ongoing project development.

Major Roadway Recommendations and Roadway Corridors for Future Evaluation

MOBILITY 2050



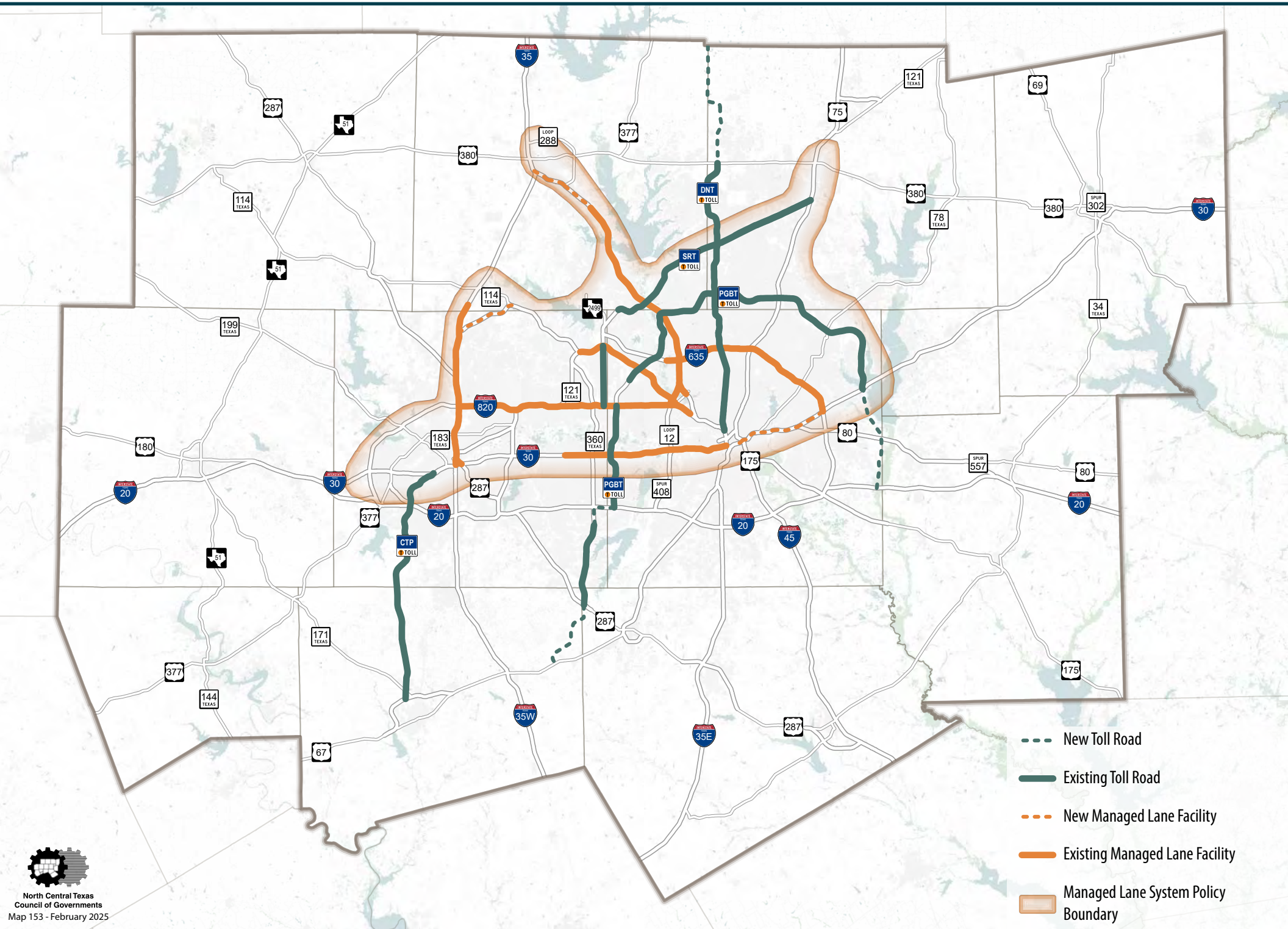
Denoted Roadway Corridors for Future Evaluation illustrate needs for further analysis to determine potential capacity improvements along identified corridors, including review of alternative locations and parallel capacity.

North Central Texas Council of Governments

Map 122 - June 2025

Tolled Facilities with Managed Lane Policy Boundary

MOBILITY 2050

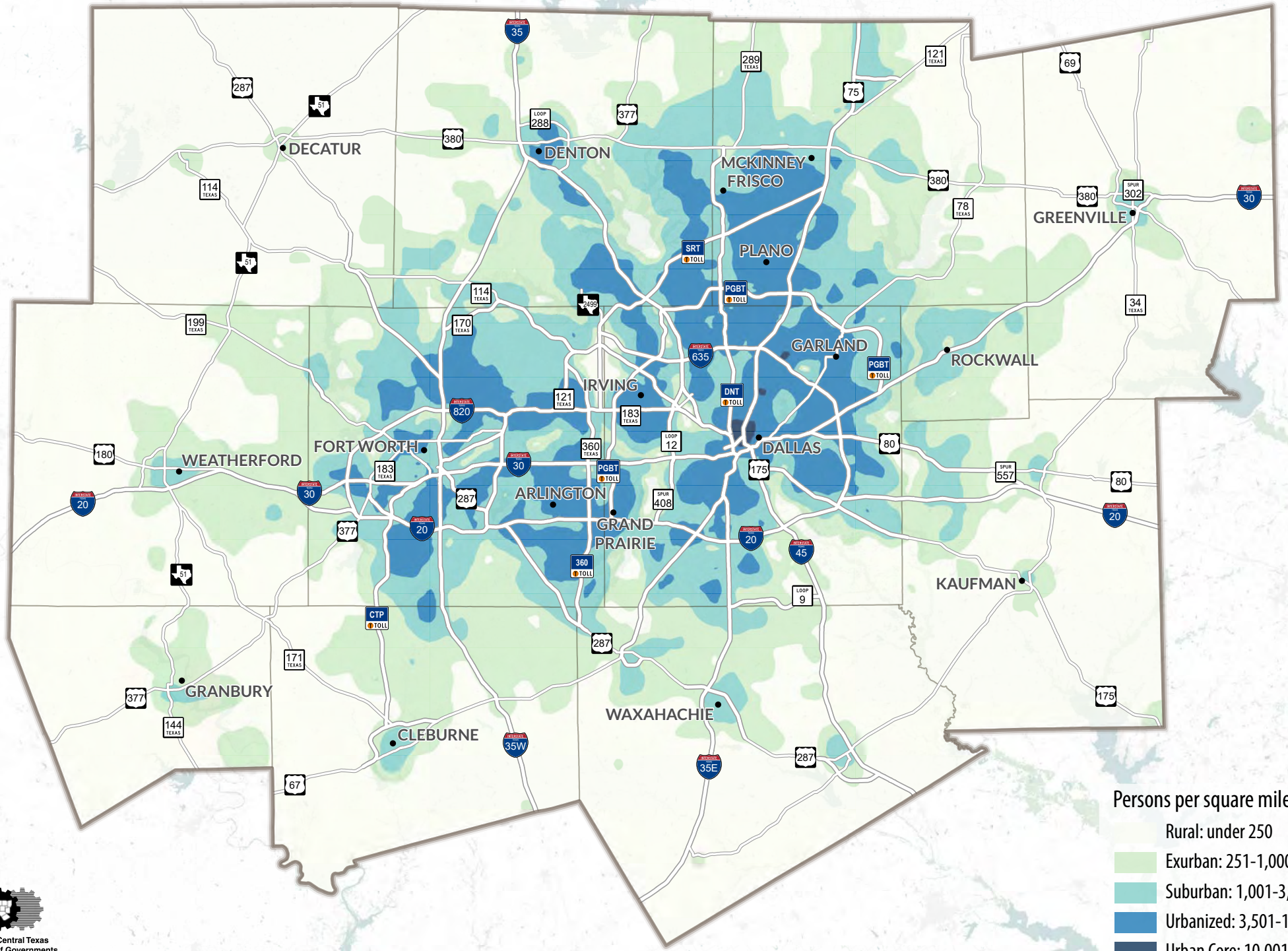


North Central Texas Council of Governments

Map 153 - February 2025

Population Density - 2026

MOBILITY 2050



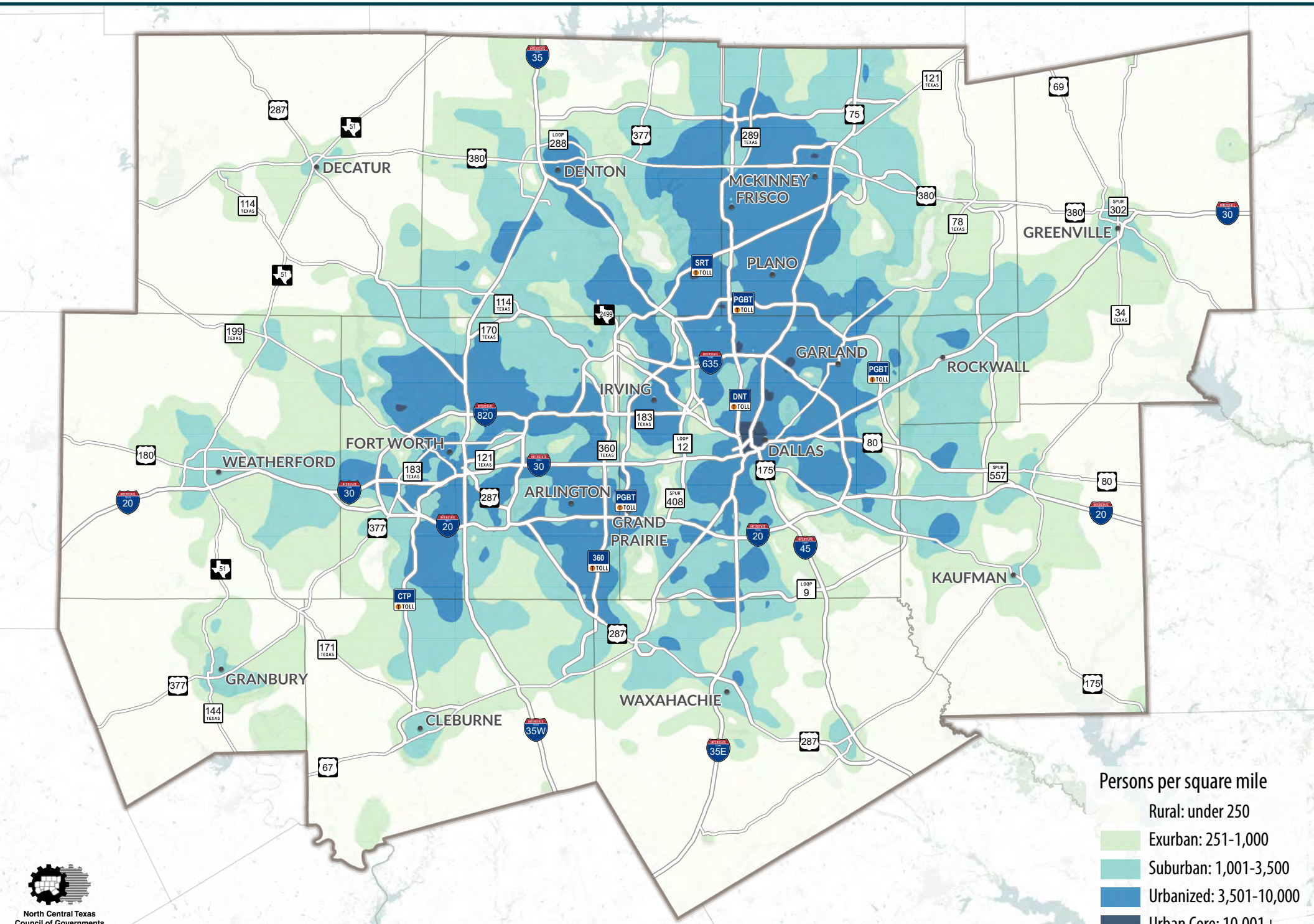
North Central Texas Council of Governments

Map 021 - March 2025

Density is calculated as the number of persons (population) divided by square miles.

Population Density - 2050

MOBILITY 2050



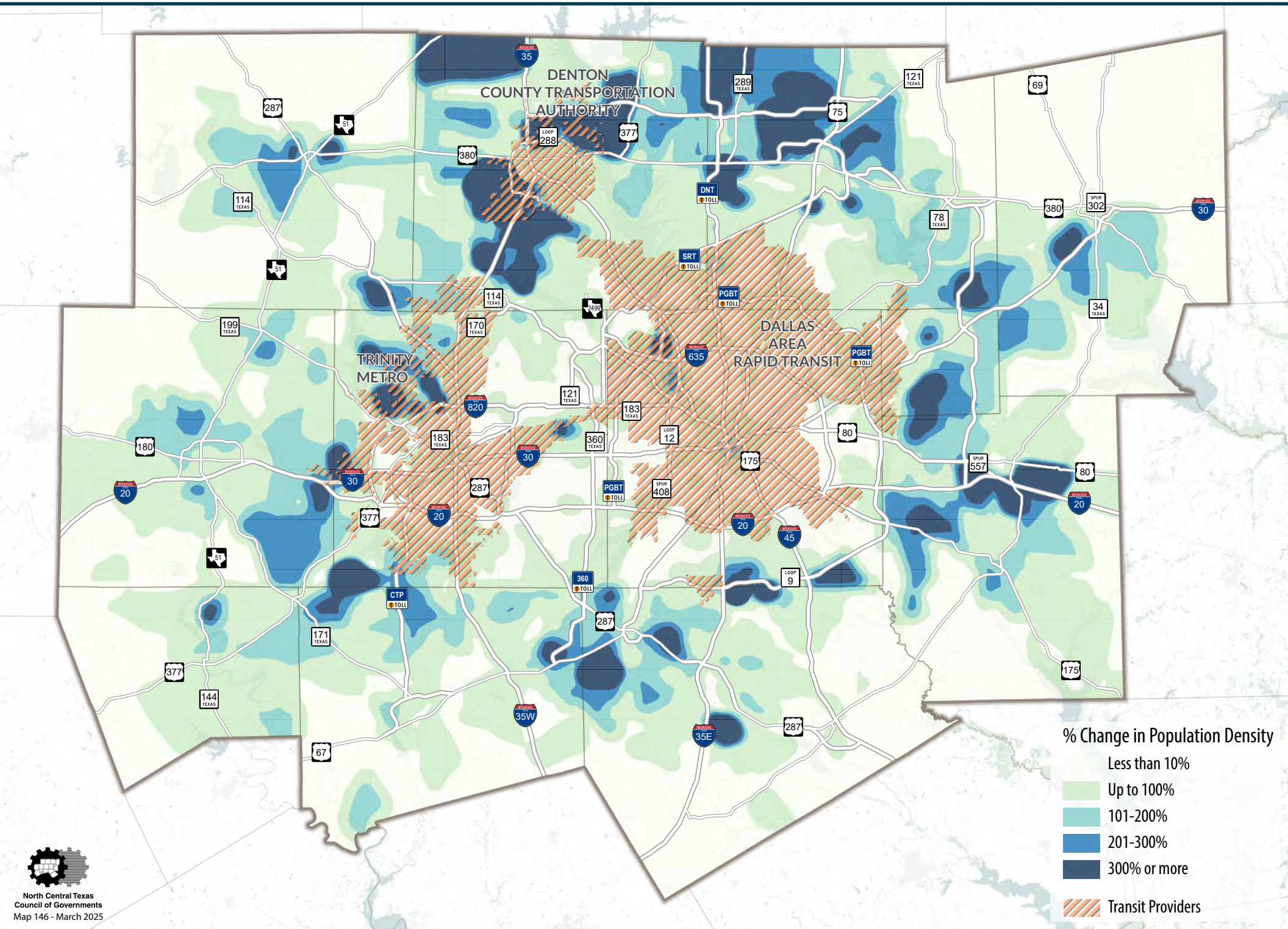
North Central Texas Council of Governments

Map 022 - March 2025

Density is calculated as the number of persons (population) divided by square miles.

Population Density Change and Transit Authority Areas

MOBILITY 2050

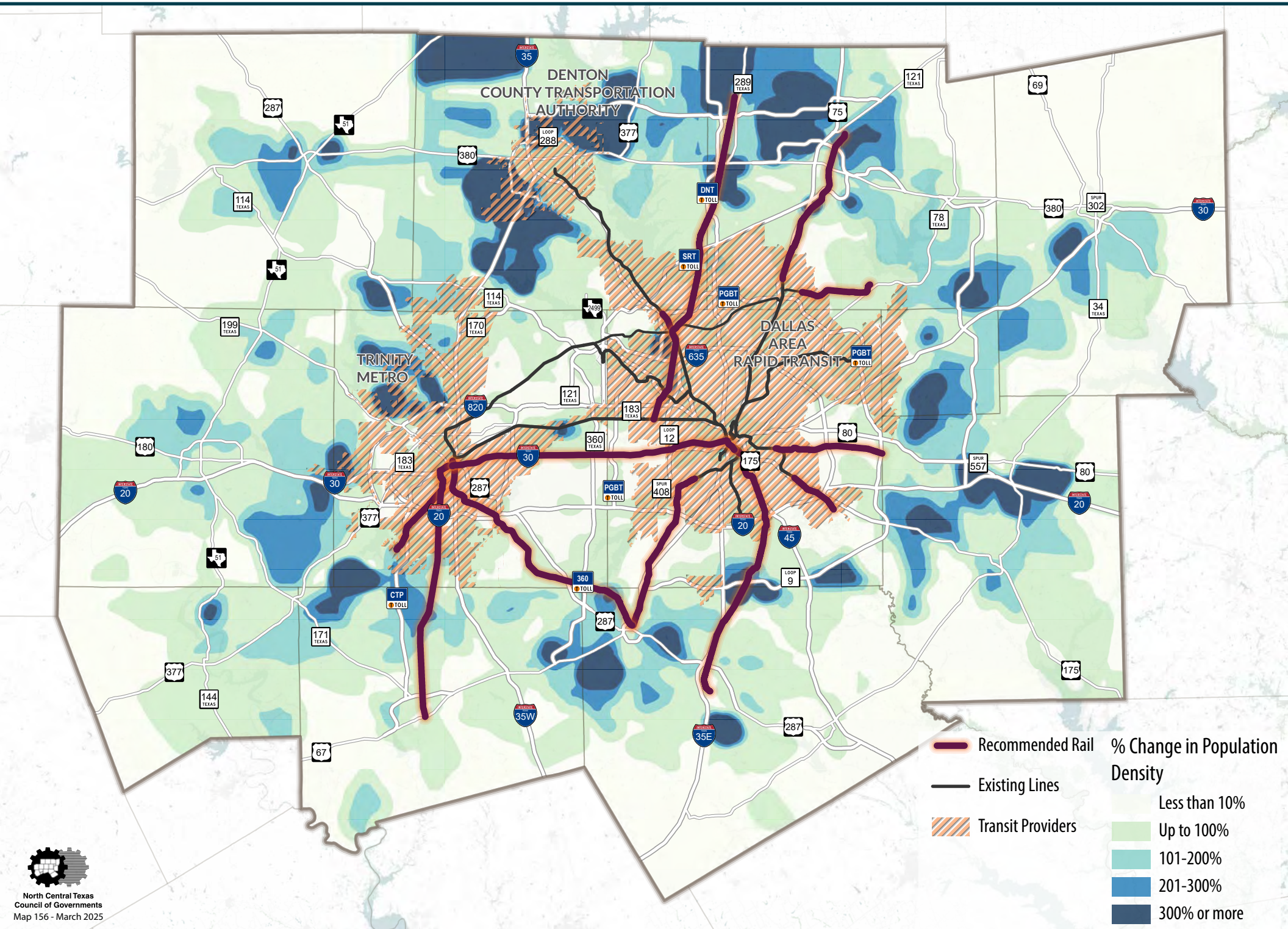


North Central Texas Council of Governments

Map 146 - March 2025

Population Density Change and Transit Recommendations

MOBILITY 2050

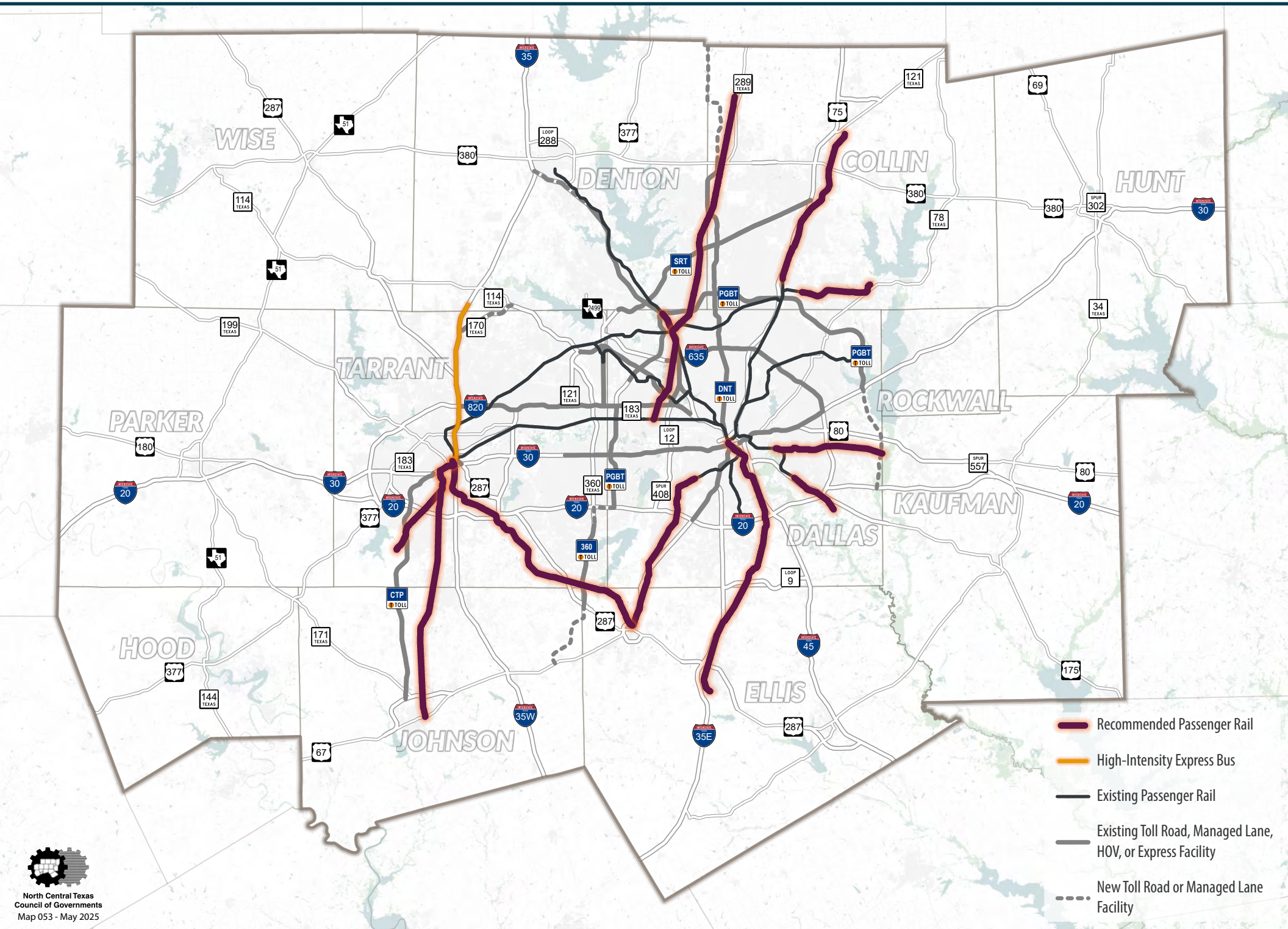


North Central Texas Council of Governments

Map 156 - March 2025

Major Transit Corridor Recommendations

MOBILITY 2050

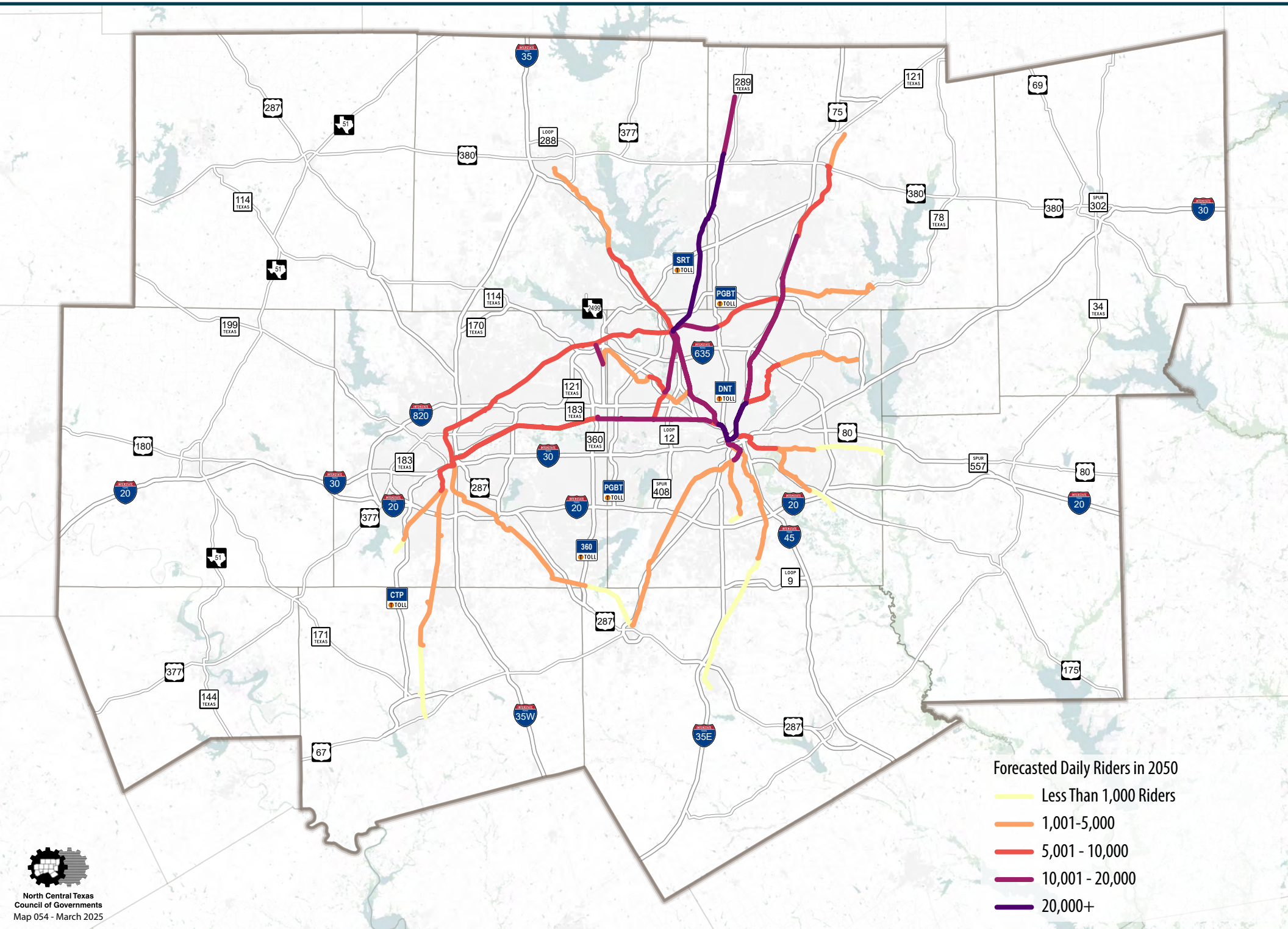


North Central Texas Council of Governments

Map 053 - May 2025

Ridership on Recommended Rail Transit Corridors

MOBILITY 2050

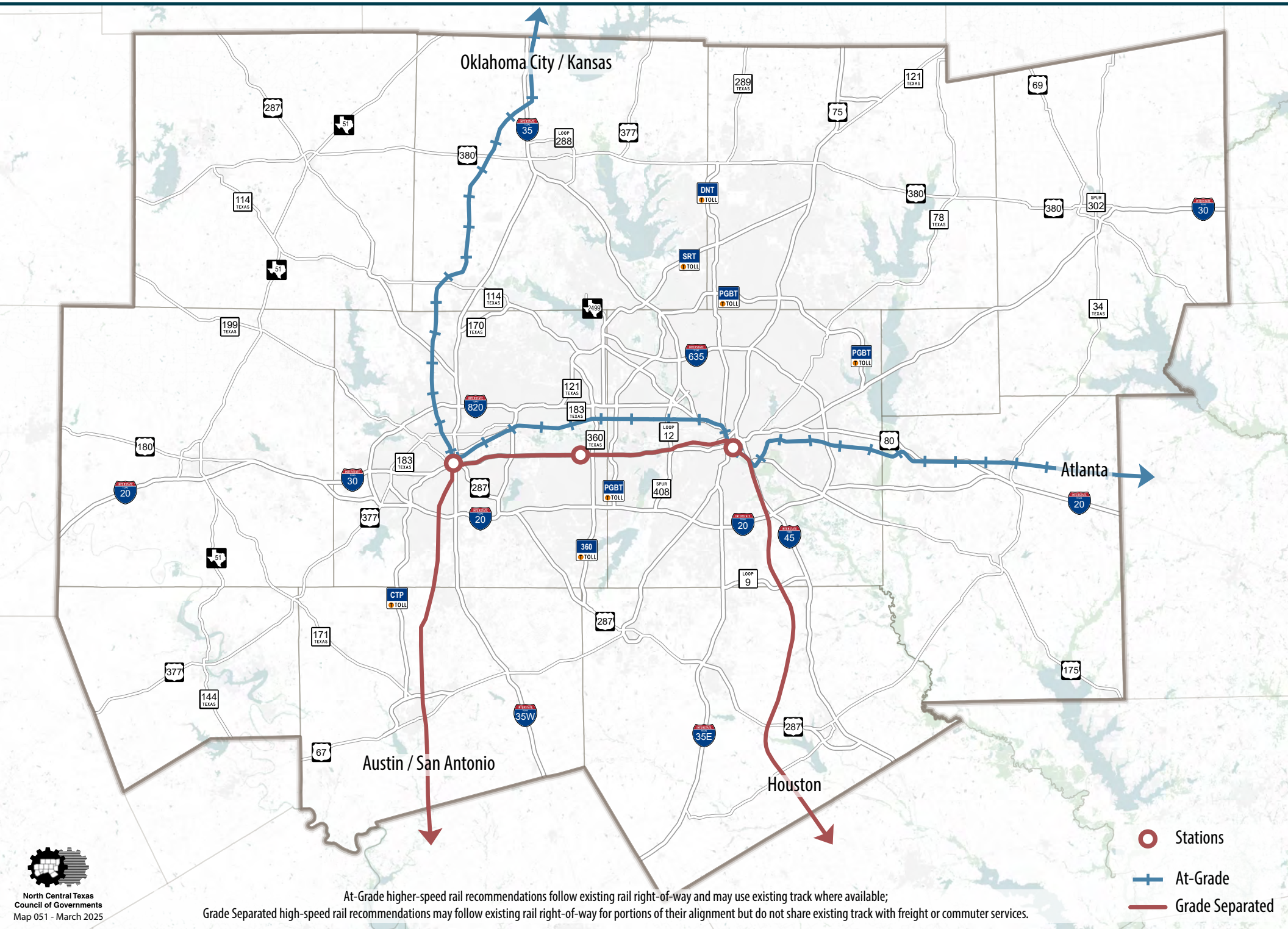


North Central Texas Council of Governments

Map 054 - March 2025

High-Speed Rail

MOBILITY 2050

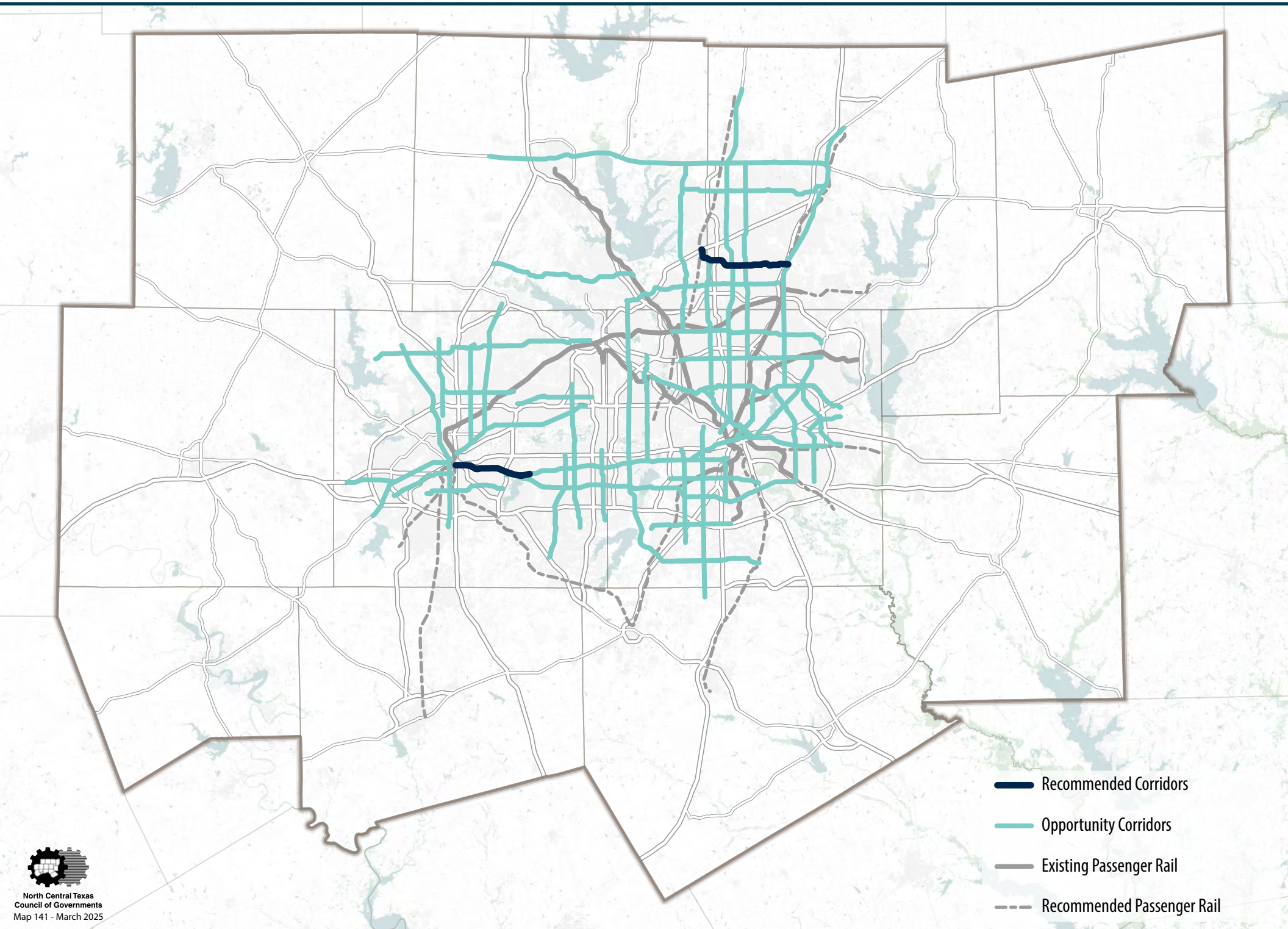


North Central Texas Council of Governments
Map 051 - March 2025

At-Grade higher-speed rail recommendations follow existing rail right-of-way and may use existing track where available;
Grade Separated high-speed rail recommendations may follow existing rail right-of-way for portions of their alignment but do not share existing track with freight or commuter services.

Local Technology Corridors

MOBILITY 2050

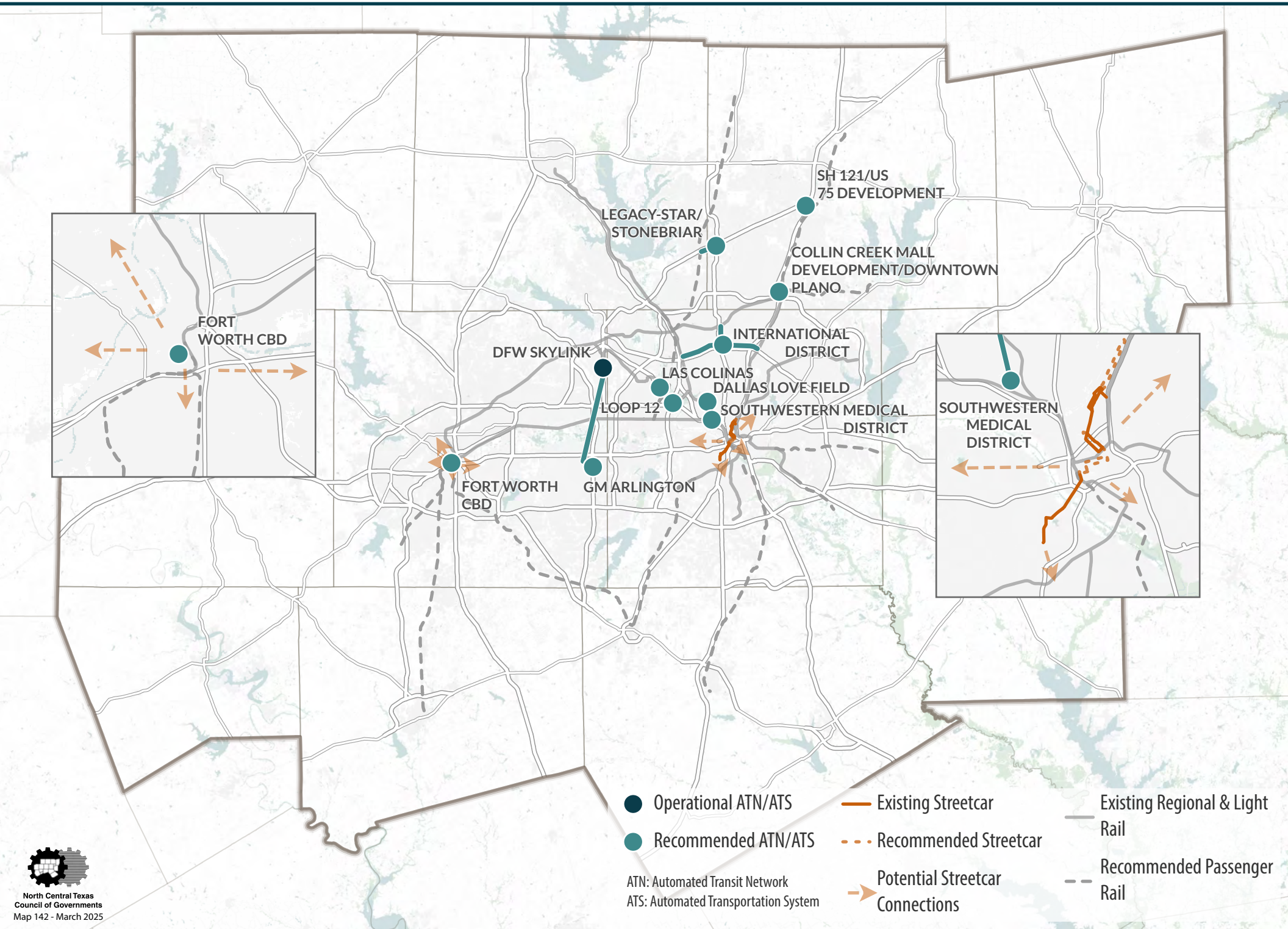


North Central Texas Council of Governments

Map 141 - March 2025

Local Fixed Guideway Transit Recommendations

MOBILITY 2050

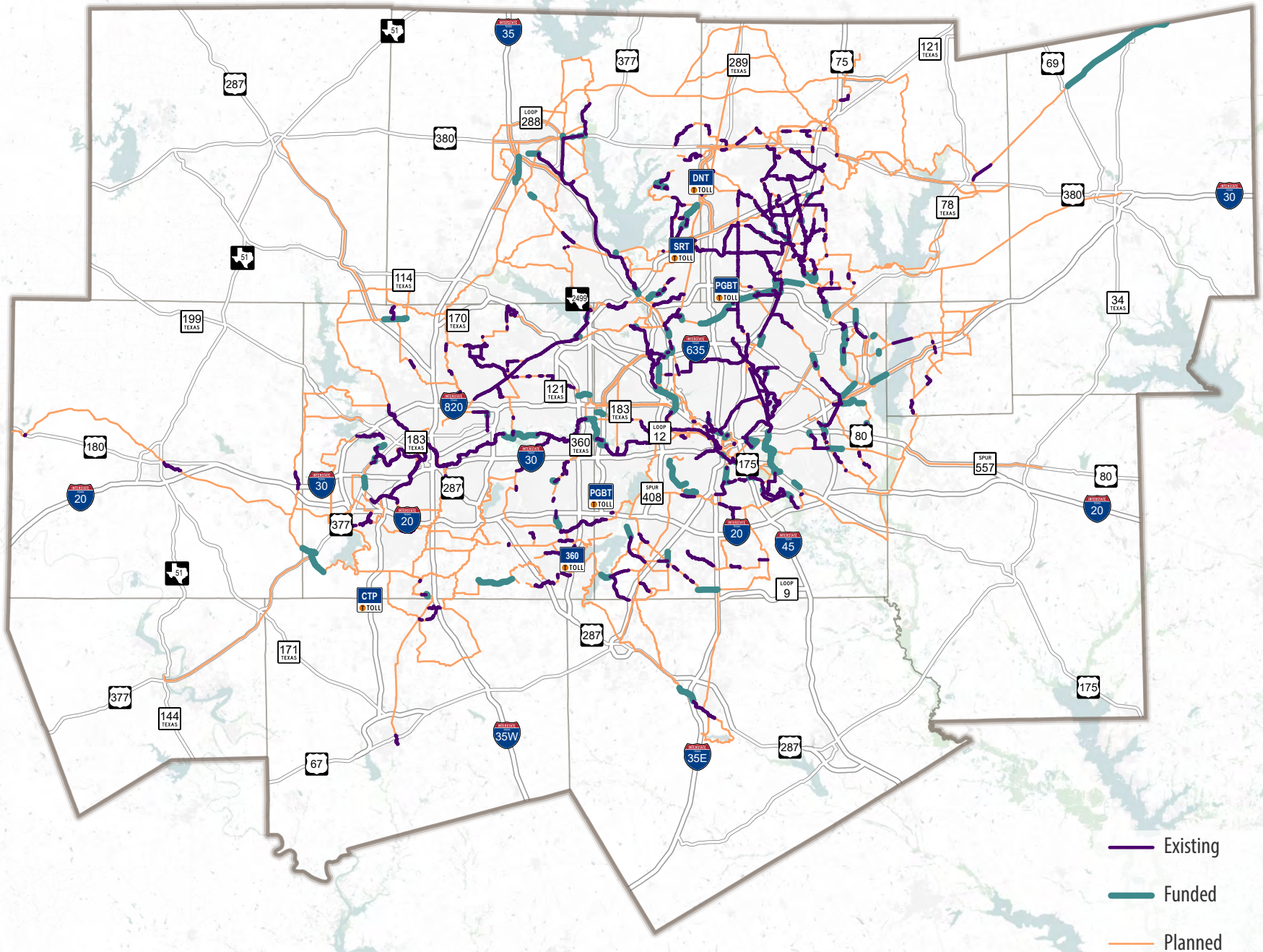


North Central Texas Council of Governments

Map 142 - March 2025

Regional Veloweb

MOBILITY 2050



Existing 576 Miles

Funded 124 Miles

Planned 1,579 Miles

Total 2,279 Miles

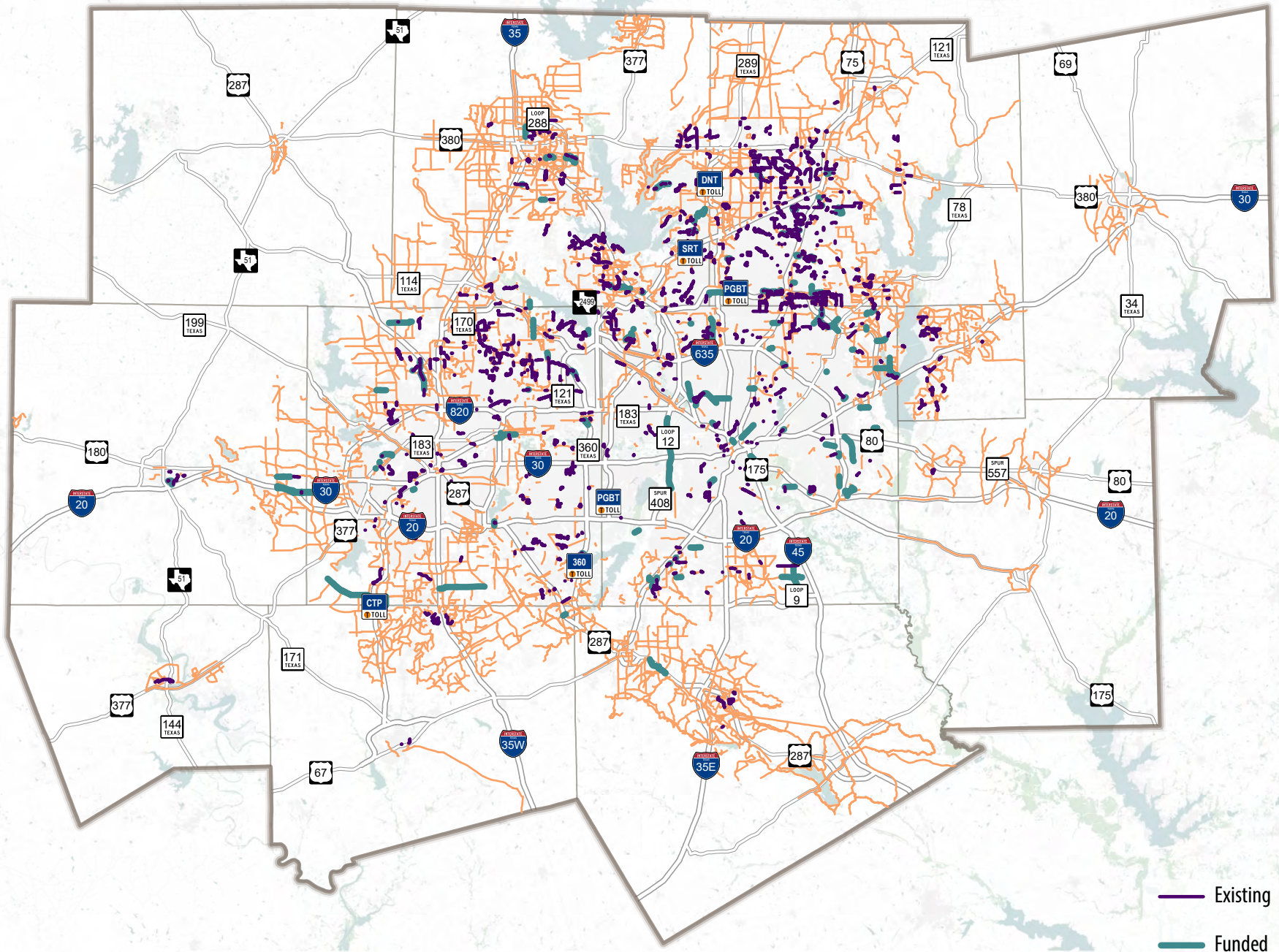
Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics for the Regional Veloweb system will be determined through ongoing project development.

North Central Texas Council of Governments

Map 050 - June 2025

Community Shared-Use Paths

MOBILITY 2050



Existing	522	Miles
Funded	113	Miles
Planned	3,868	Miles
Total	4,502	Miles

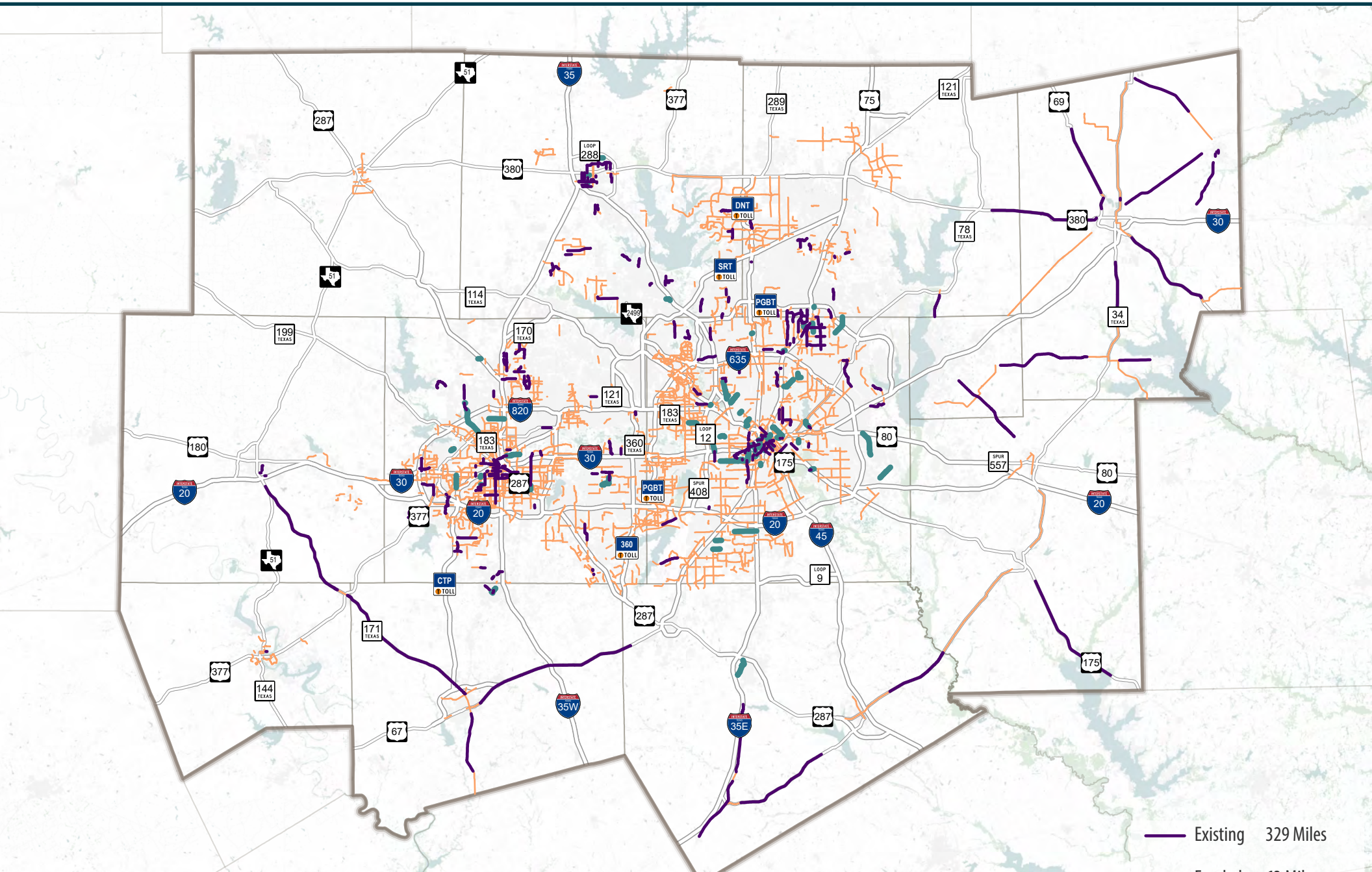
- Community Shared-Use Paths supplement the Regional Veloweb network. These paths do not include recreational paths/loops, private paths, equestrian or nature trails, or wide sidewalks less than 10 feet in width.
- Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics will be determined through ongoing project development.
- Community Path facility mileages are based on linear miles.

North Central Texas Council of Governments

Map 051 - June 2025

On-Street Bikeway Network

MOBILITY 2050



- On-street bikeways in the urbanized area include: separated or protected bike lanes/cycle tracks, bike lanes, marked shared lanes, and marked bicycle boulevards. On-street bikeways in the urbanized area do not include: signed bike "routes," signed "share the road," unmarked wide outside lanes, or signed wide shoulders.
- The use of wide shoulders is included on various roadways linking rural communities outside of the urbanized area.
- Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics for the network will be determined through ongoing project development.
- On-street bikeway facility mileage is based on centerline miles.

North Central Texas Council of Governments
Map 052 - June 2025